TIA Portal V17 – WinCC nyheter

siemens.com/wincc-unified-system

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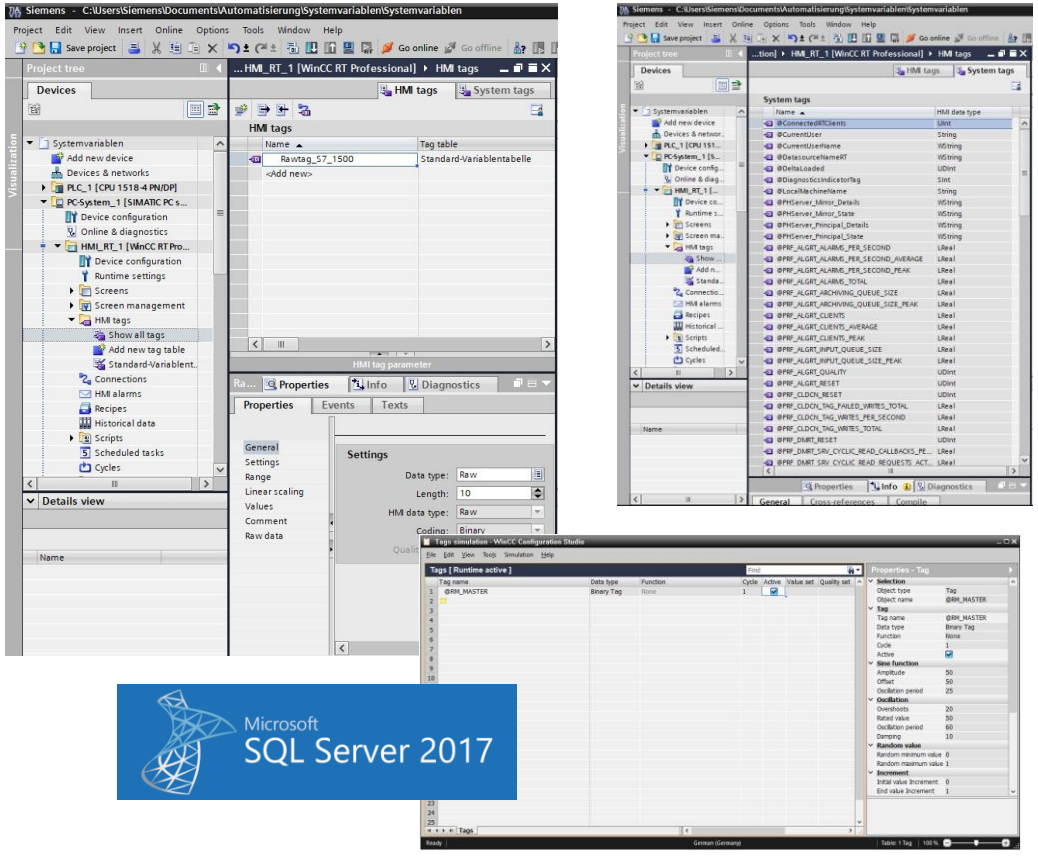
WinCC – Innovations
WinCC Professional V17



New functions for WinCC RT Professional

Communication

- Raw Data for S7-1500
- New system tags

Additional

- New SQL Server 2017
- Stop runtime via command line
- TIA Design for tag simulation

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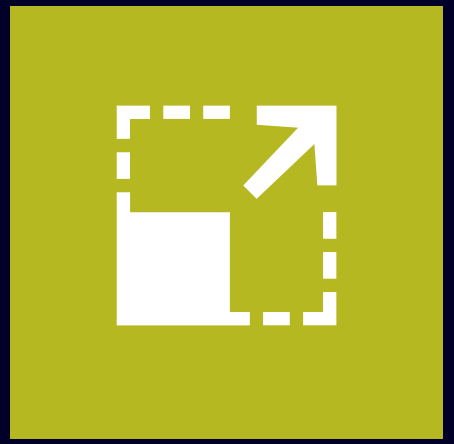
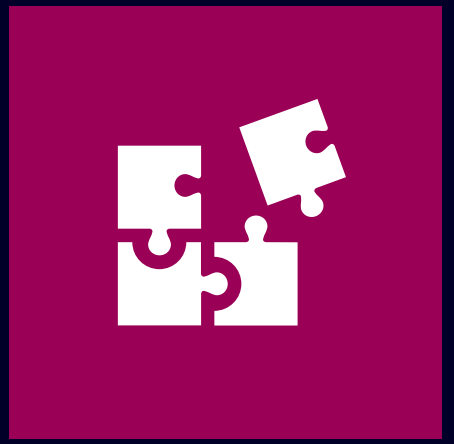
SIMATIC WinCC Unified System
The DNA for the future of visualization

Technology



Scalability

Everywhere



Integration

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SIMATIC WinCC Unified System

Platform

SIMATIC WinCC Unified
View of Things
S7-1500

SIMATIC HMI
Unified Comfort Panels

SIMATIC WinCC Unified
PC

Engineering

Engineering (in TIA Portal)

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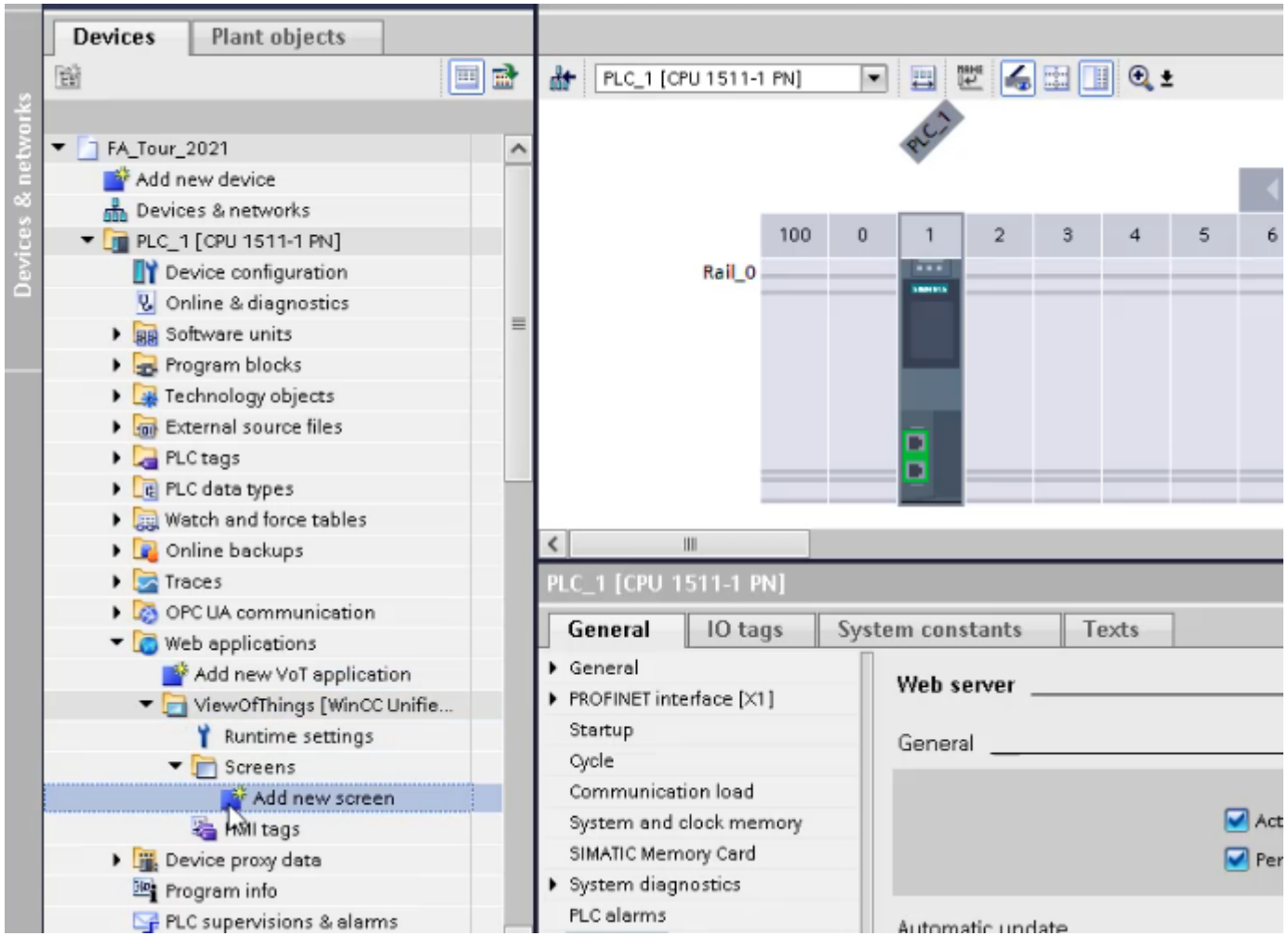
WinCC Unified View of Things V17
Functional Overview



- Basic objects & Elements
  (e.g. I/O field, button, gauge)
- Graphics (incl. Dynamic SVG) as well as Screen Windows to build screen architecture
- Basic Scripting functionality with JavaScript in screens
- User Management with the S7-1500 Webserver

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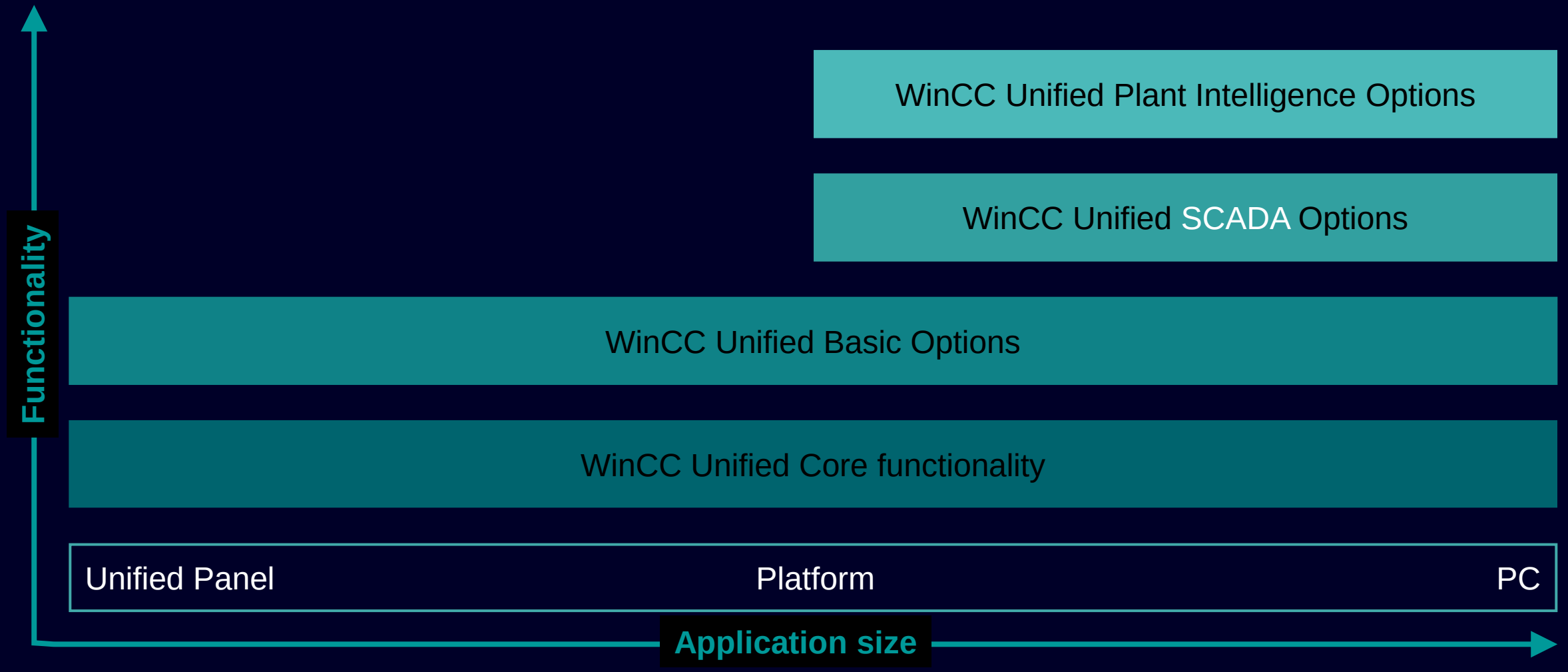
Scalable from Panel to SCADA



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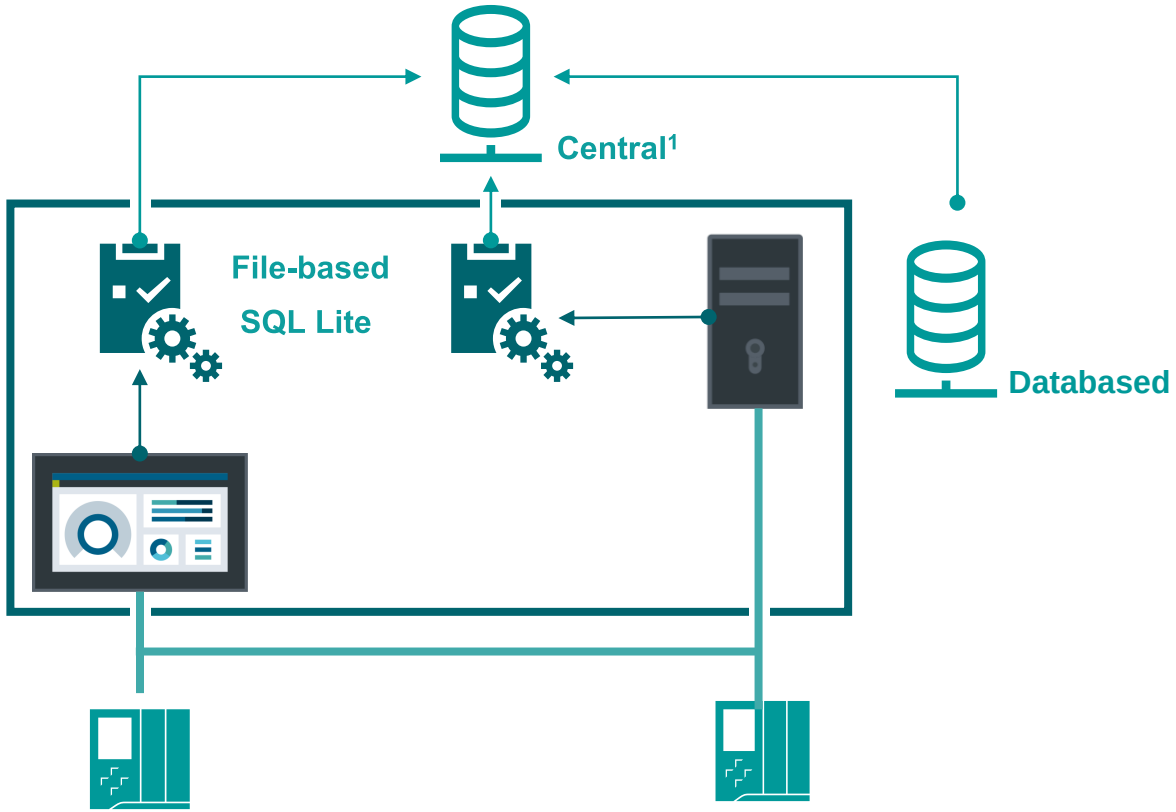
WinCC Unified V17 – Logging
Scalable logging concept

Unified Comfort Panel ✓ **PC** ✓



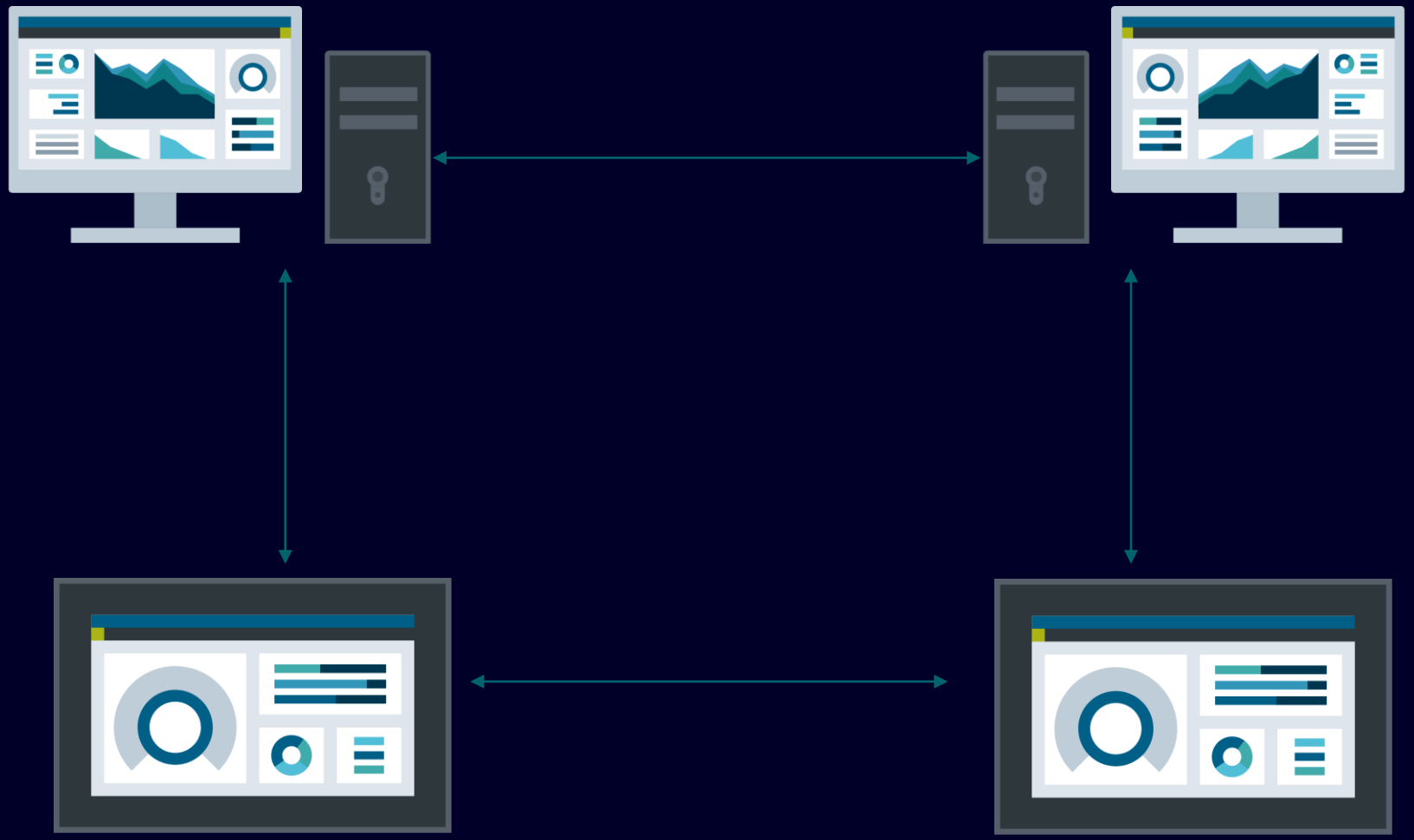
Unmanaged file-based data archive for **small to medium applications** up to 5,000 Logging Tags

Changeover to databased logging (optional) possible due to identical logging structures

Planned

Central logging as overall plant archiving solution (optional)

WinCC Unified – Collaboration



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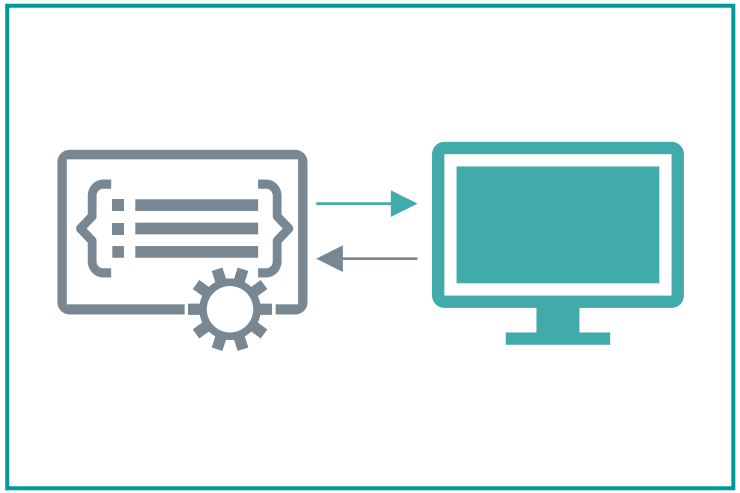
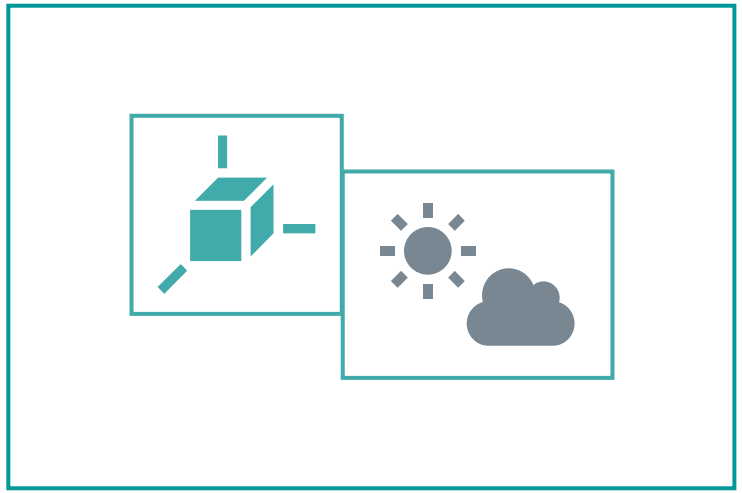
WinCC Unified – Integration platform –
Connect and integrate 3rd party tools



Open Pipe
Data Interface

Server sided data interface for online tags and alarms. Independent from programming language. Can be used to connect several software tools to WinCC Unified.

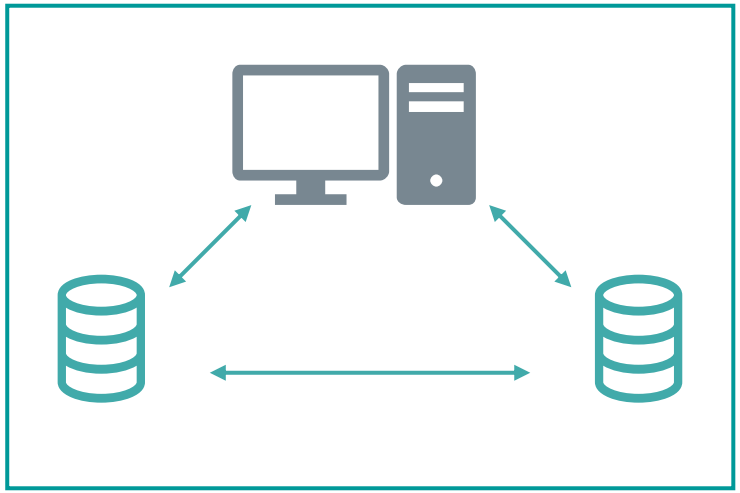


Custom Web Control
Container for Web Content

Add custom UI controls (e.g., 3D Viewer) or visualize and exchange data of 3rd party services (e.g., weather data). Can be used to get access to sensors of mobile clients (e.g., camera, GPS).

Application example

SIOS (109779176)

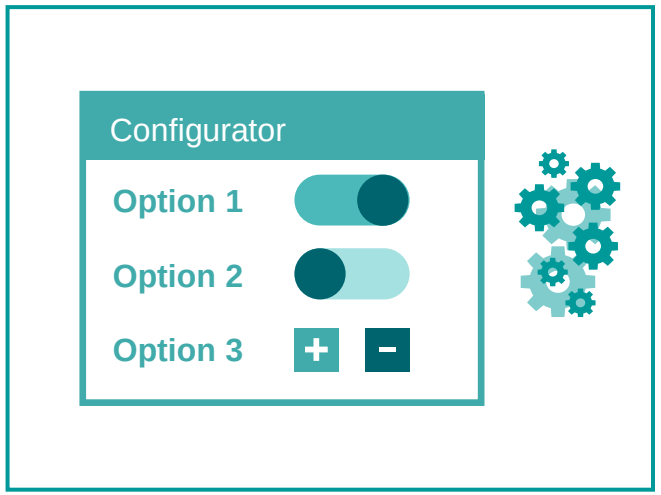


Runtime Openness
Data Interface (PC Systems)

Server sided data interface for online and historical tags and alarms with .net or C++ programming.

Exchange huge amounts of data with Databases or IT systems.

WinCC Unified – Automated Engineering –
Higher quality in less time using a TIA Portal Openness



Individual solution
Create, modify, validate or analyse WinCC Unified Projects with a .net programming language to fasten Engineering.

TIA Portal
Create projects automatically from scratch or get access to existing configurations using TIA Portal Openness.

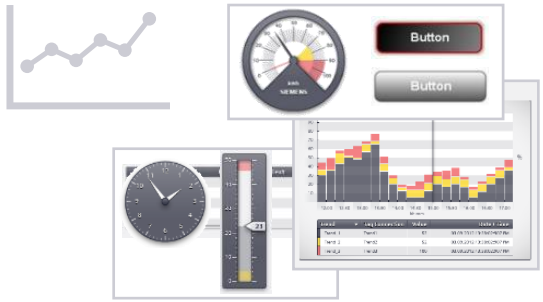
Projects
Create individual project configurations within seconds. Reduce risk and save time.

Engineering automation is the power booster for your workflow.

SIMATIC Visualization Architect (SiVArc)
Simple, quick and flexible creation of HMI projects in the TIA Portal

PLC program

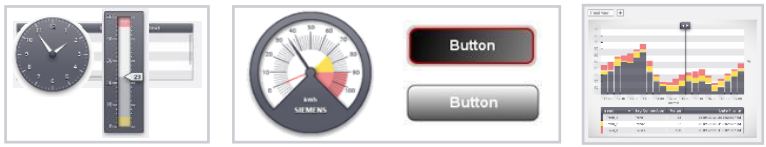
HMI library



SiVArc

Rules for generation

- Screens and screen objects
- Tags and tag tables
- Text lists
- Alarms



Automatic generation

Visualization

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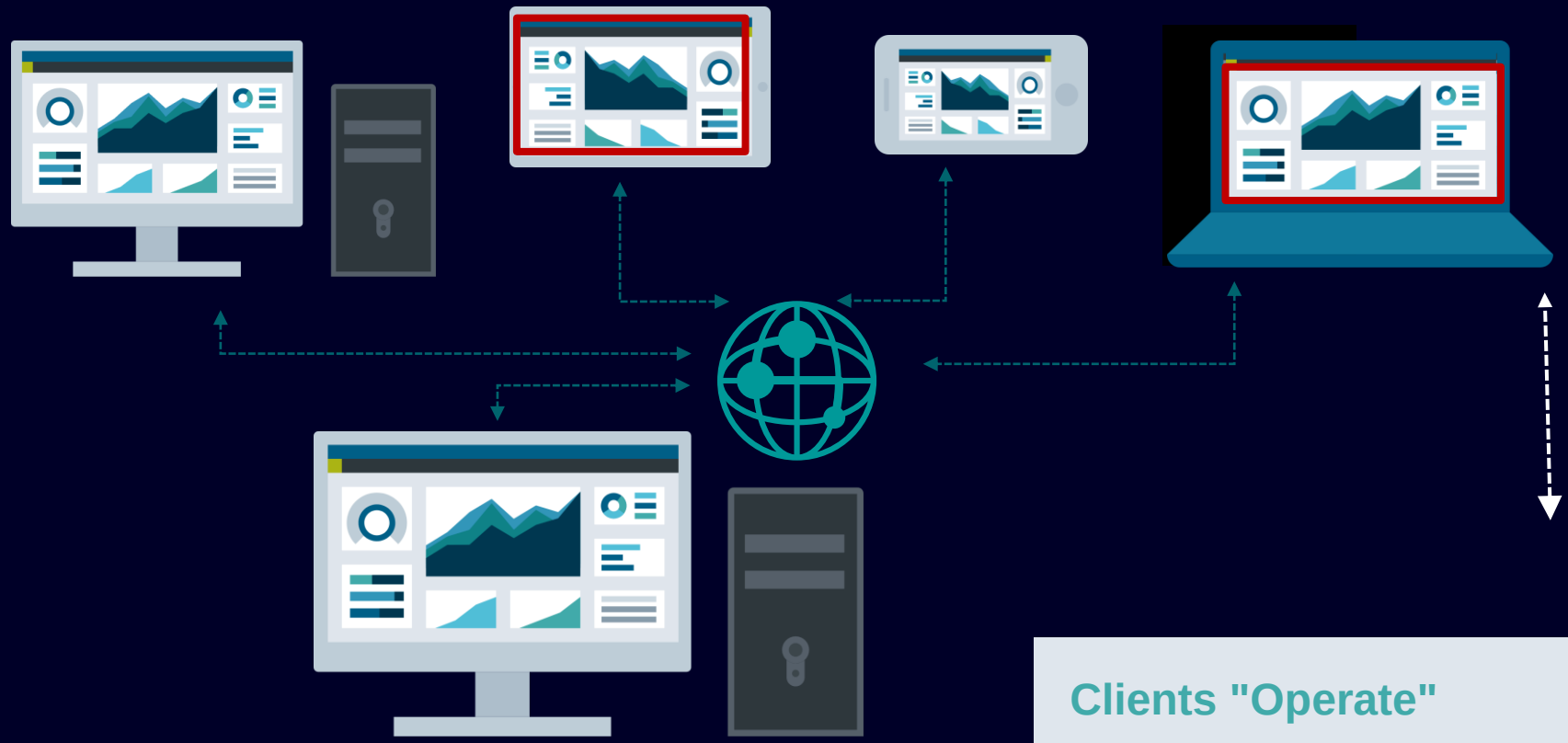
Remote Control



Clients "Operate"

Clients "Monitor"

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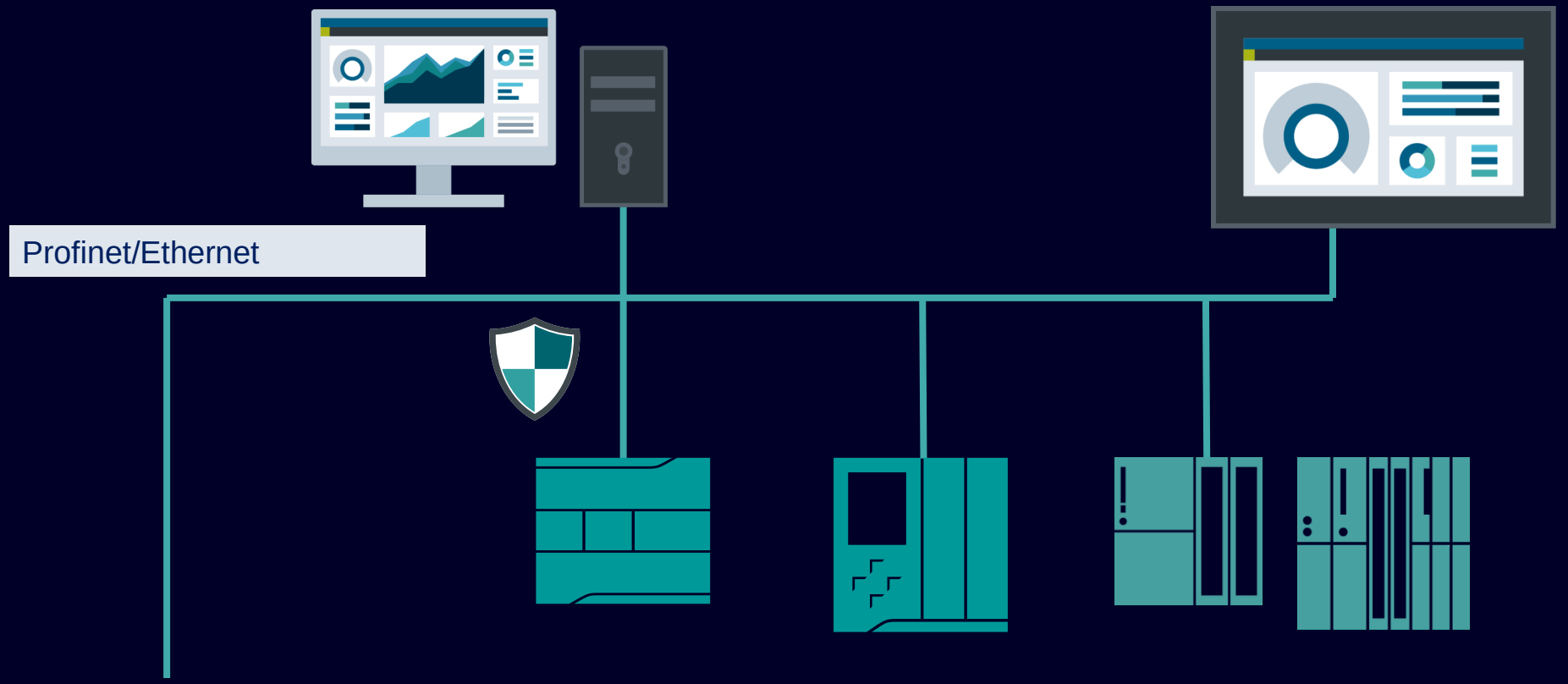
Connectivity



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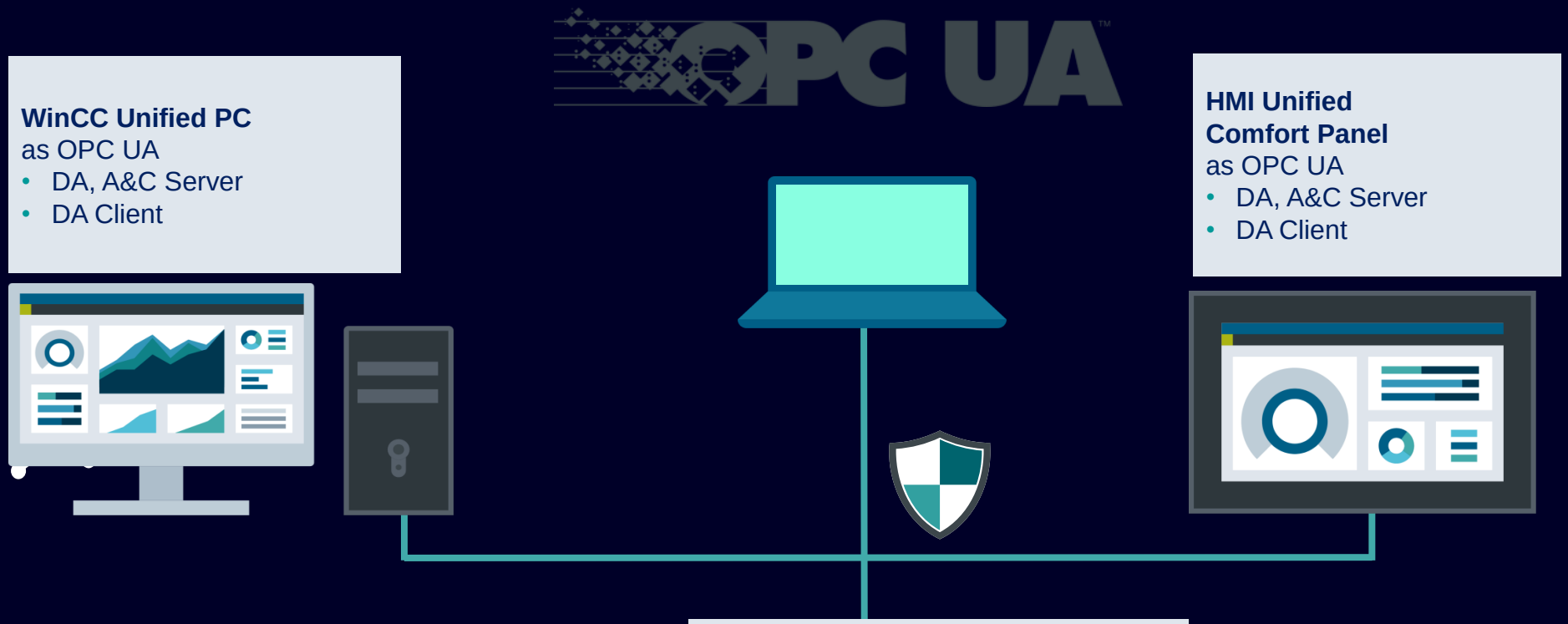
OPC UA



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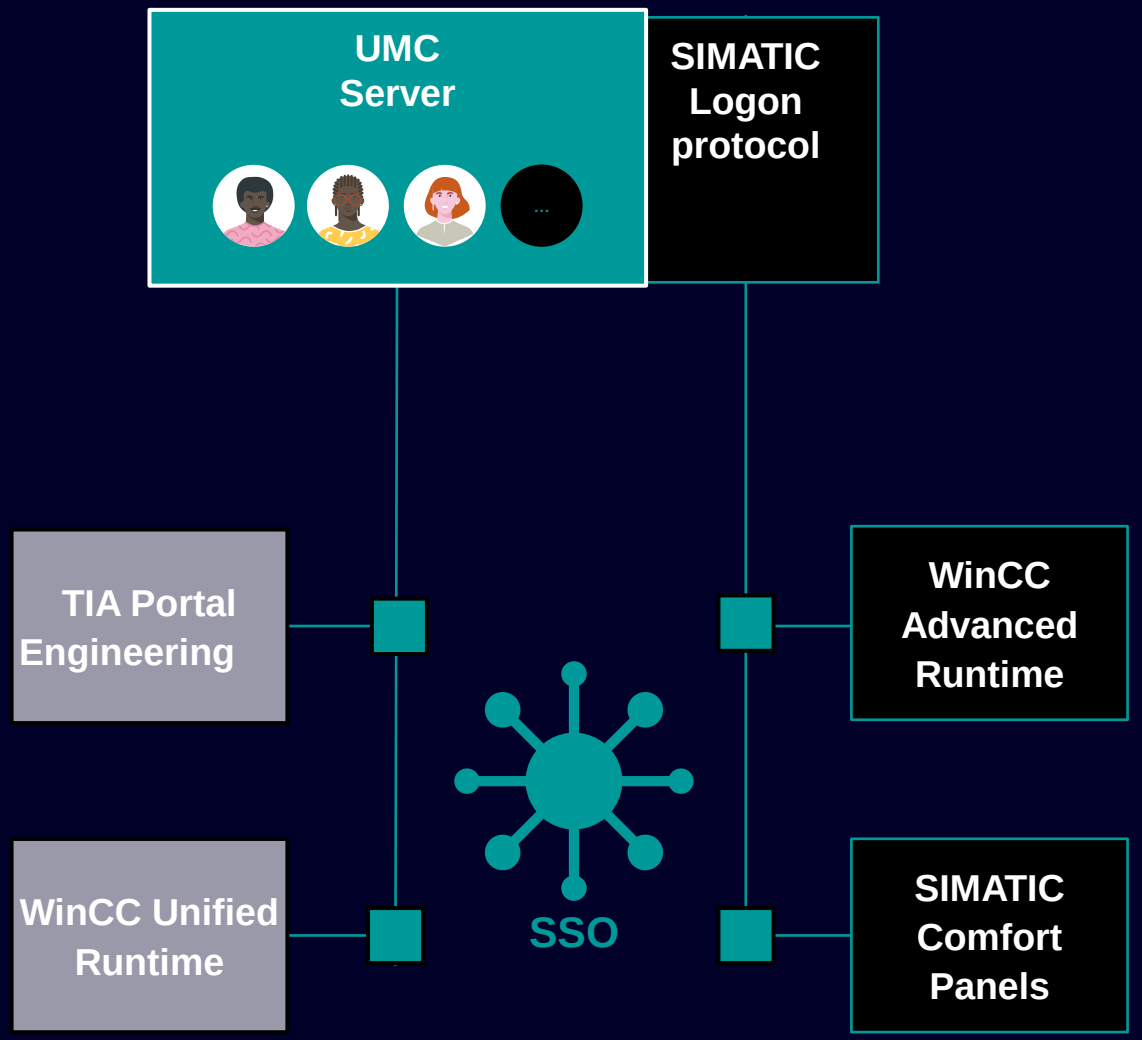
Central user management - UMC



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SIMATIC WinCC Unified – Audit Basis
Trace process operation

Unified Comfort Panel ✓ PC ✓

Create Audit Trails
for changes of process tags

Trace manual or automated changes via script as well as the reason of change

Detect manipulation
for high level of data security

Use WinCC Unified Logging to create Audit Trails using secured communication including manipulation detection

Audit Reports
for evaluation

Use WinCC Unified Reporting in order to document audit trail details as well as hints in case of manipulations.

SIMATIC WinCC Unified System –
News with TIA Portal V17 at a glance

Engineering in TIA Portal
Extension for screen editor, faceplates, Management of Objects in Libraries (incl. Versioning).

OPC UA Connectivity
Support OPC UA DA Client and Server, OPC UA A&C Server.

Extensions of Options
- Parameter control: e.g., UDT in UDT or multilanguage support.
- Audit Basis:Traceability via Audit Trails
- Alarms for Collaboration

Available with TIA Portal V17
(incl. V17 Update 1)

Modern User Interface enhancements
Custom fonts, new flat styles (day/ night switch) and 2-Hand operation.

Enhancements for Diagnosis
Easy access to diagnostic information (diagnosis buffer) of SIMATIC PLCs and support of Software Controller.

Enhancements for User Management
Configure individual function rights and integration to central user management (UMC).

TIA Portal options
Support automated engineering with SiVArc as well as simulation with PLCSim or PLCSim Advanced.

SIMATIC HMI
Unified Comfort Panels

Powered by WinCC Unified

siemens.com/wincc-unified-system

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Multitouch panels from 7" to 22"

MTP 700

7.0"

MTP 1000

10.1"

MTP 1200

12.1"

MTP 1500

15.6"

MTP 1900

18.5"

MTP 2200

21.5"

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Multitouch gestures

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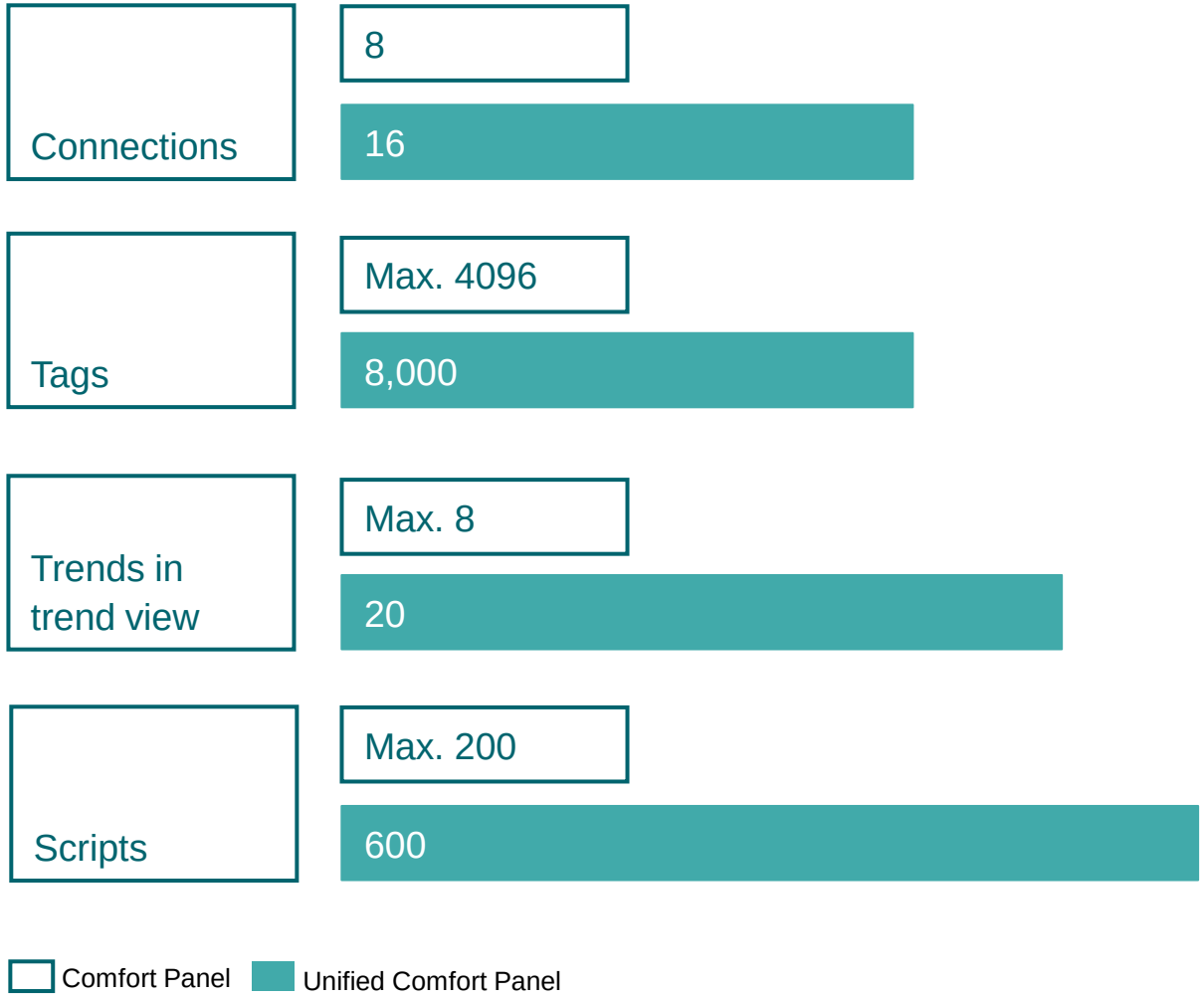
SIMATIC HMI Unified Comfort Panel –
Significantly increased quantity structure for more complex applications



Increased quantity structure from 7" to 22".

Doubled quantity structure compared to Comfort Panel.

Differentiation only for tags, objects per screen and trend areas per trend view.

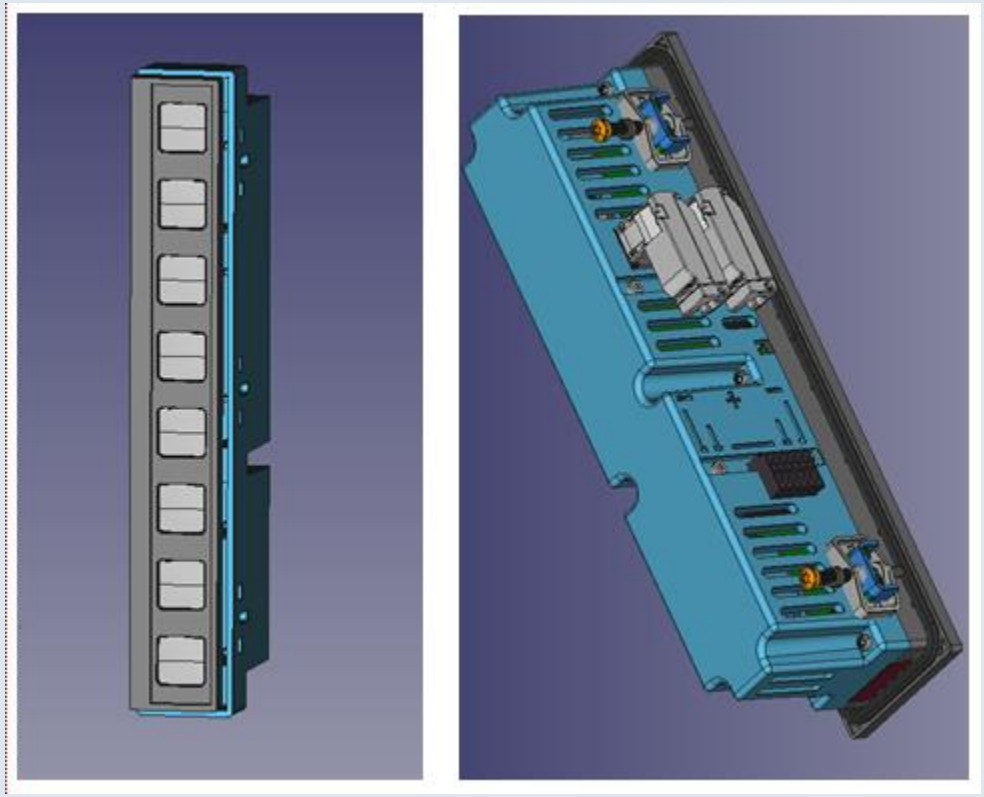
SIMATIC HMI Unified Comfort Panels Portfolio

Comfort Panels
12 devices (Key and touch)

Unified Comfort Panels
6 devices (Multitouch)

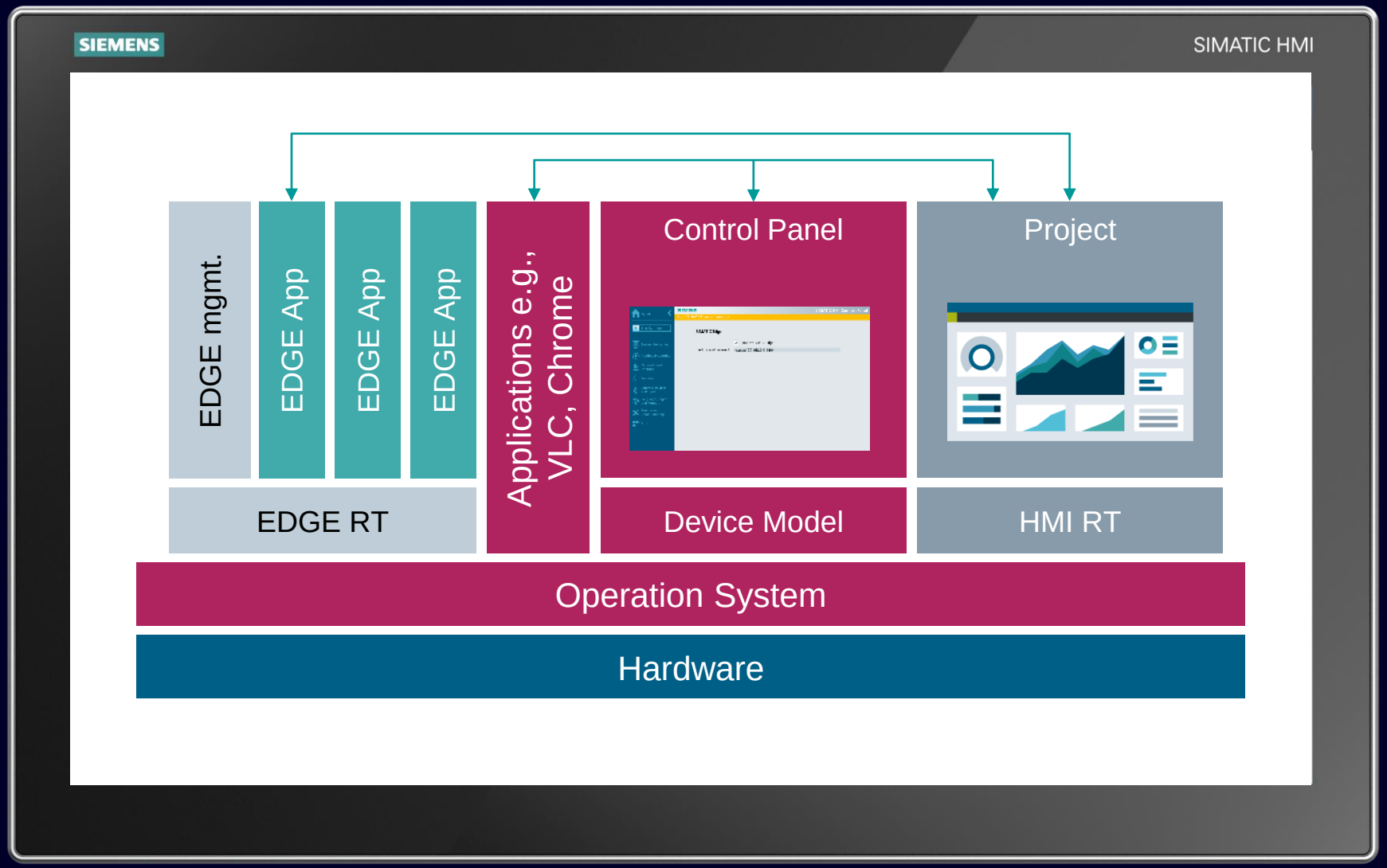
KP8 LX finns då man behöver knappar till Unifiedpanelerna
https://support.industry.siemens.com/cs/ww/en/view/109784141

SIMATIC HMI Unified Comfort Panels
KP8 LX



KP8 LX finns då man behöver knappar till Unifiedpanelerna
https://support.industry.siemens.com/cs/ww/en/view/109784141

Unified Comfort Panels - System architecture



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Start adding features to your Unified Comfort Panels –
Supporting Materials for Industrial Edge

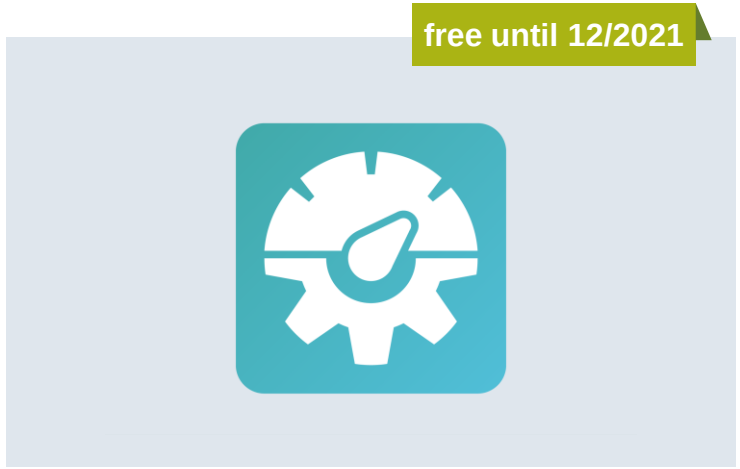
Getting Started

Examples (incl. Source Code) on how to write Edge Apps for the Unified Comfort Panels (e.g. MQTT, NodeRed,E-Mail)

More information in SIOS
(Entry-ID: 109778780)

Performance Insight App

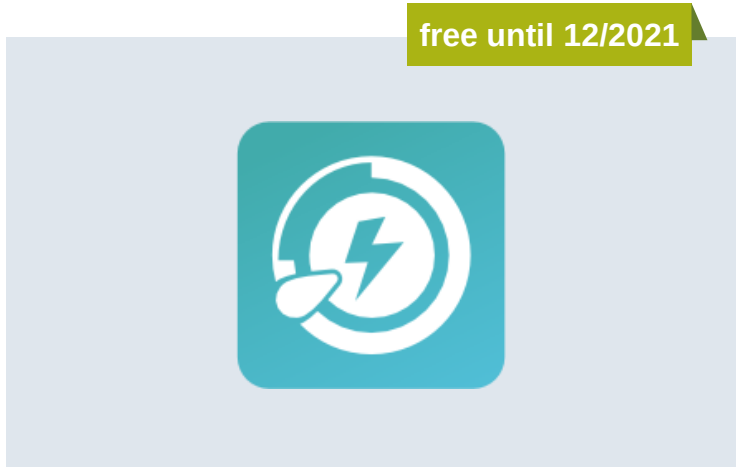
Performance Insight offers the possibility to analyze and optimize machines on the Unified Comfort Panel.



More information in SIOS
(Entry-ID: 109780761)

Energy Manager App

This app provides the local analysis of media consumption, costs and the corresponding CO_2 emissions



More information in SIOS
(Entry-ID: 109781236)

Unified Comfort Panels - Security integrated

Activate/Deactivate Hardware interfaces

- Mass storage (USB/SD)
- Ethernet/PROFINET (also via RT functions)

Activate/Deactivate applications

- All Applications can be deactivated
- EDGE is deactivated by default

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SIMATIC WinCC Unified PC Systems

siemens.com/wincc-unified-system

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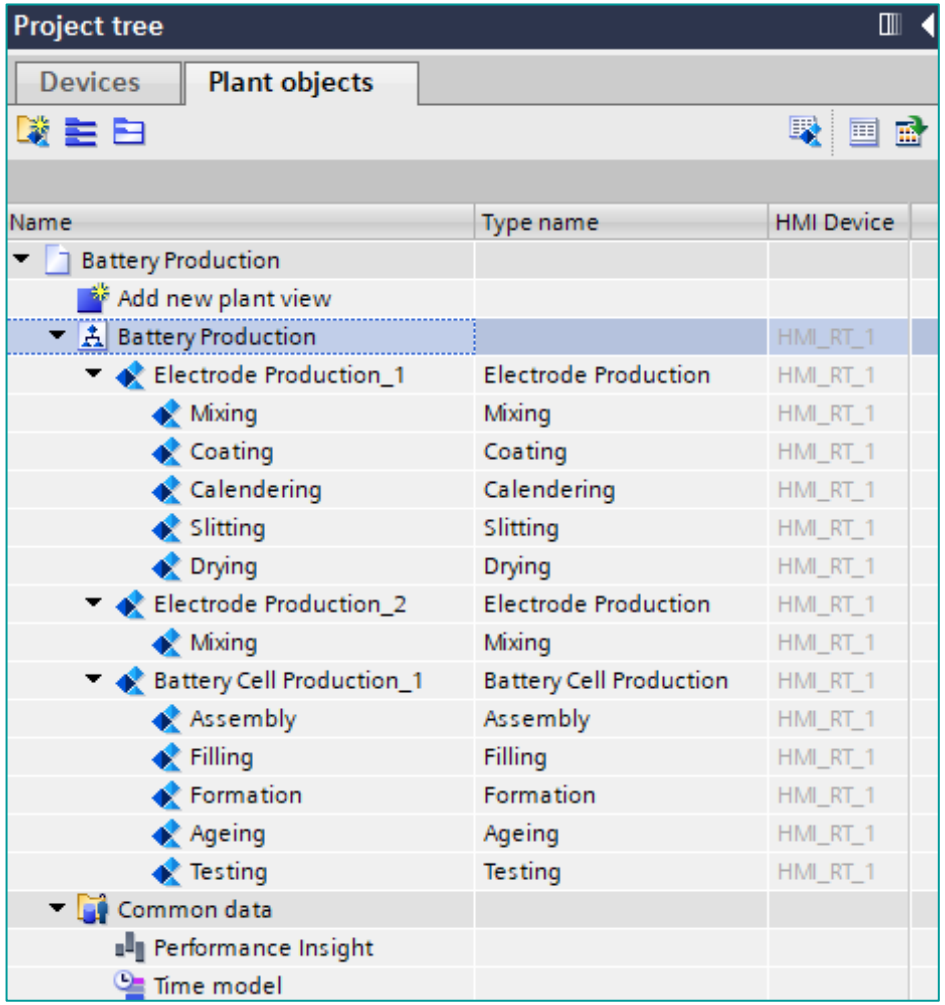
WinCC Unified - Technological Hierarchy
Object oriented plant modelling

Unified Comfort Panel ✕ PC ✓



Enable central changeability of all instances due to plant object type instance concept

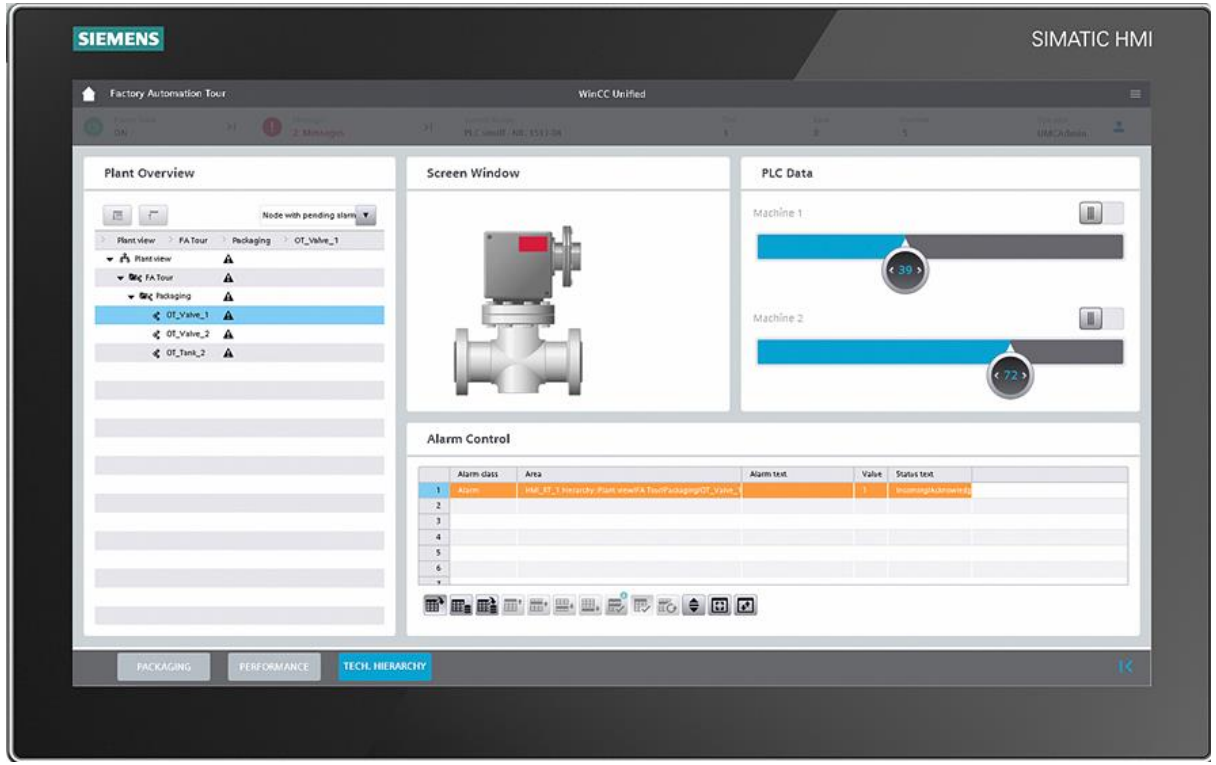
Reduced effort for engineering and maintenance (e.g., configuration of logging tags, alarms direct at the object)

Reduced avoidable mistakes due to consistent model

Improved overview and maintenance due to plant model and object-oriented engineering

WinCC Unified – Technological Hierarchy
Object oriented plant operation

Unified Comfort Panel ✓ PC ✓



Easy orientation in the plant via technological hierarchy

Create screen navigation in no time with plant overview control

Fast overview the plant status based on hierarchical alarm propagation and filtering

Plant Intelligence Options for PC based system

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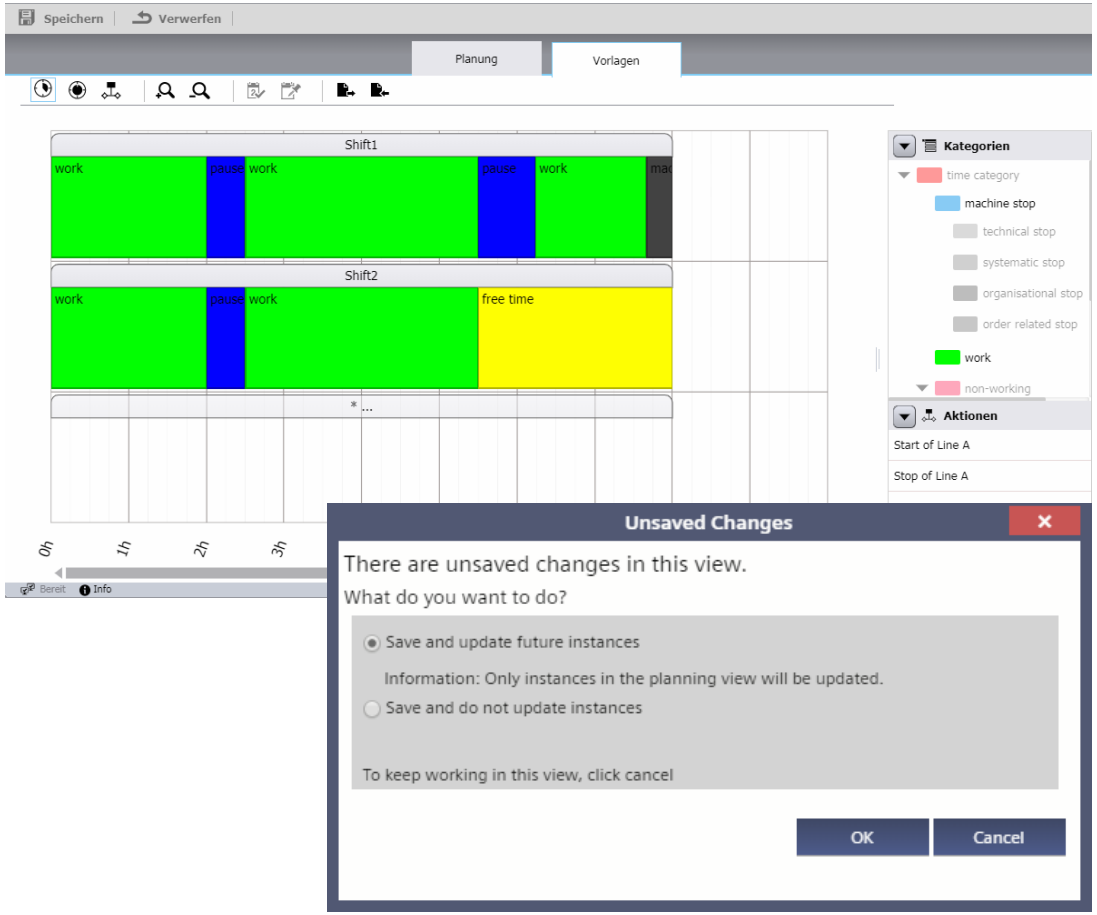
WinCC Unified V17 – Calendar
Calendar Control – Templates



Definition of reusable templates for time scheduling

Prepare standardized shifts e.g.:

- Template for whole days
- Template for shifts

Later adjustment of the scheduling,
which are already used in the shifts

Planning actions relative to a specific time period
for example: relative to the start of a shift:

- Switch on air conditioning 2 hours before
- Switch on light 30 minutes before
- Start machines 10 minutes before (startup time)

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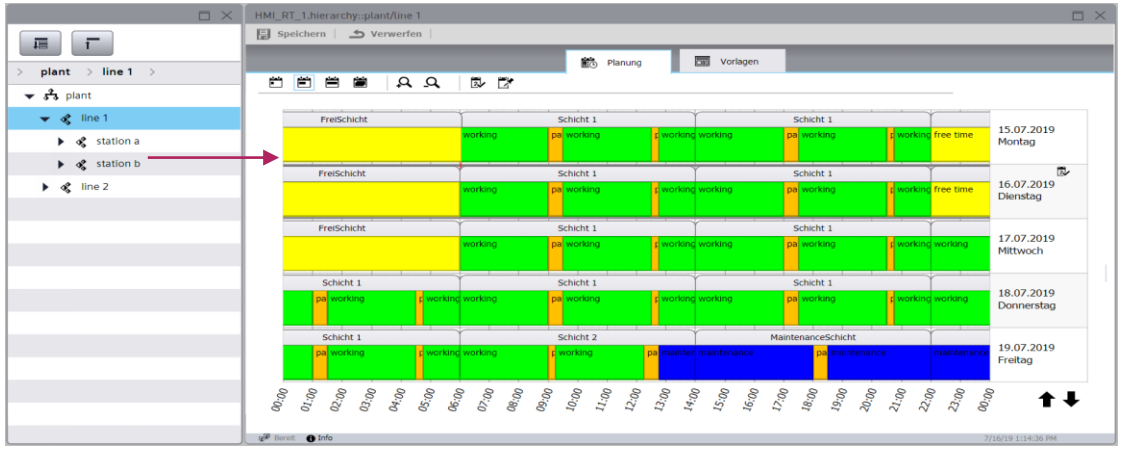
WinCC Unified V17 – Plant Intelligence options
Calendar

User interface in the screen
Plant View Control using the Calendar Control



Scheduling of shifts
for machines, plants and lines in the technological hierarchy

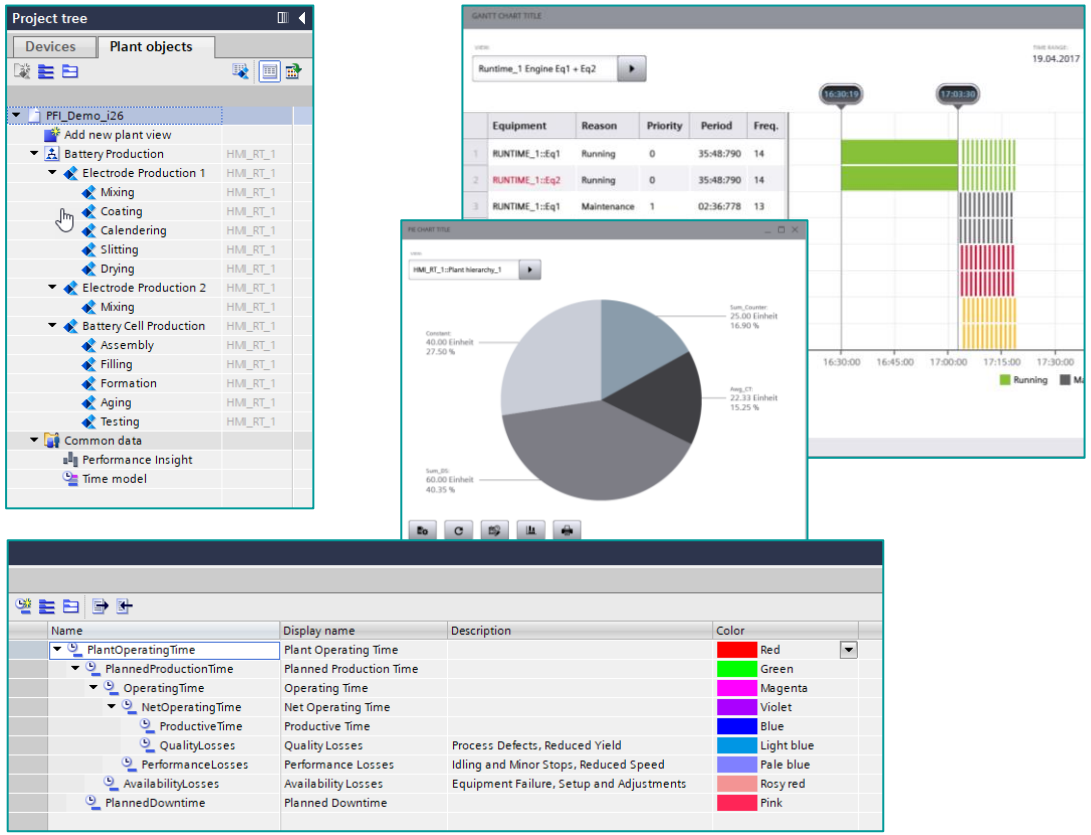
Management of working time and tasks
based on templates

Planning the production process and events in relation to operating times, e.g. definition of shifts

Reduced engineering effort
through modular and standardized object-oriented concepts

WinCC Unified V17 – Plant Intelligence options
Performance Insight

Unified Comfort Panel [1] ✗ | **PC** ✓



This option is based on the technological hierarchy

Global definition of KPI formulas
according to ISO22400

Wide range of controls
for display and analysis of KPIs

Object-oriented KPIs approach,
based on a technical hierarchi

Contextualization
regarding equipment, shift, order, material, etc.

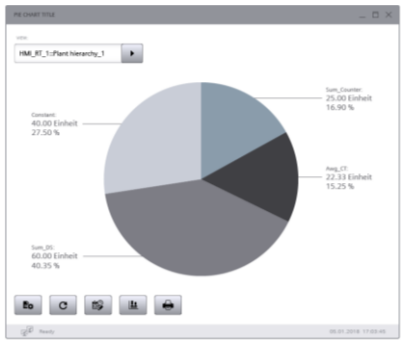
Excel based reporting
for KPIs and operands

WinCC Unified V17 – Performance Insight
Controls

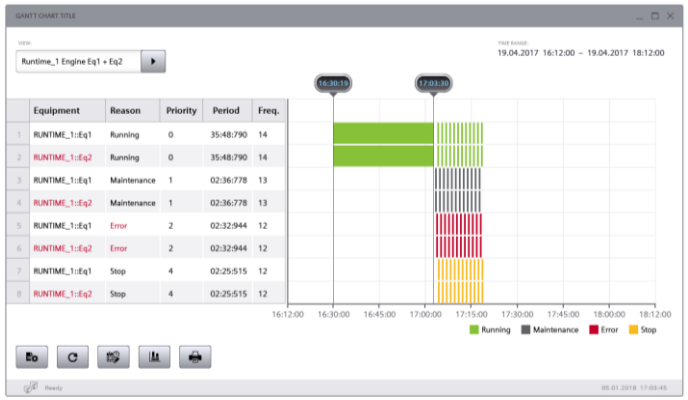
Unified Comfort Panel ✗ **PC** ✓

Bar Chart

Pie Chart



Gantt Chart



Display of KPIs and operands and their analysis as bar or pie chart e.g.

- production operand
- piece counter "good parts“
- KPI (quality)

Combined/multiline display of
machine status with duration
and frequency analysis
e.g. Downtime analysis of machines

Display **several time periods side by side**
(only performance analyzer)

Grouping KPI results by contextualization
e.g.only by shift

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Get started smoothly with the WinCC Unified System – Supporting Materials

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Ingenuity for life

Tutorial Center

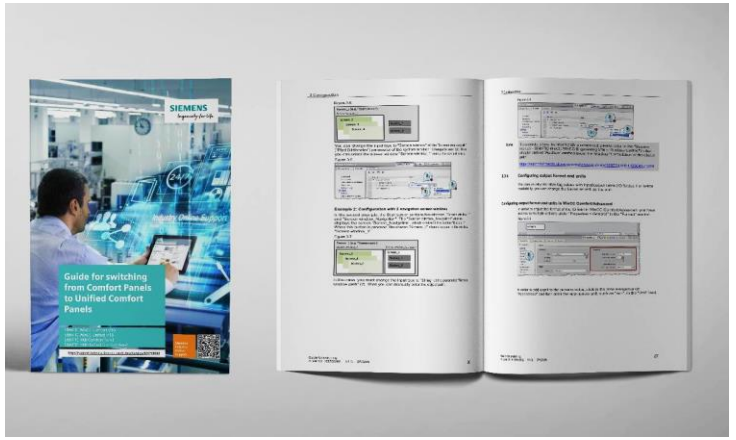
Video series for an easy start with the WinCC Unified System. Learn all the things you need to get started smoothly.

Template Suite

Ready to use screen templates for PC Systems and the Unified Comfort Panels in a free TIA Portal library incl. Wizard.

Switching Guideline

Everything you need know when you want to switch from an existing visualization to the WinCC Unified System



Find all the supporting materials for the WinCC Unified System at a glance
https://support.industry.siemens.com/cs/ww/en/view/109777887

Get started smoothly with the WinCC Unified System – Supporting Tools

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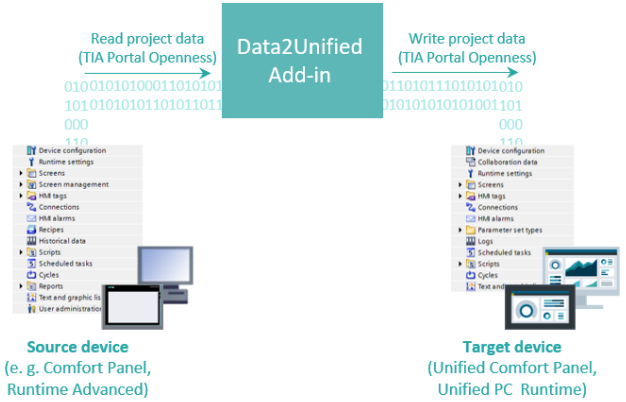
“Data2Unified” Add-in

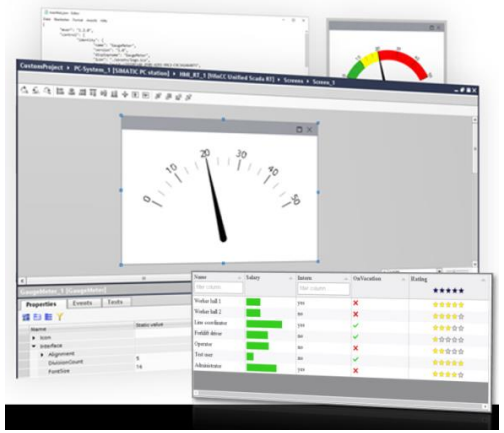
Convert your configuration contents into a WinCC Unified configuration.



SIOS (109770510)

Application examples

How to integrate a "Custom Web Control", e.g. Gauge or Custom Table Control



SIOS (109779176)

Demo Projects

for Unified Comfort Panels and PC systems (incl. PI Options)

SIOS (109776633)

SIMATIC WinCC Unified V17
License Compatibility Engineering - Existing customers

WinCC (TIA Portal) V17					WinCC Unified (TIA Portal) V17	
Engineering System valid for (V11..V17)	Comfort Panels	WinCC RT Adv.	WinCC RT Prof.		Unified Comfort Panels	Unified PC Runtime
WinCC Prof. (max)	✓	✓	✓ (max.)	→	✓	✓ **(100k)**
WinCC Prof. (4k)	✓	✓	✓ (4k)	→	✓	✓ (10k)
WinCC Prof.(512)	✓	✓	✓ (512)	→	✓	✓ (10k)
WinCC Advanced	✓	✓	✗	→	✓	✓ (10k)
WinCC Comfort[1]	✓	✗	✗	→	✓	✗

Timeline classic Siemens HMI

Comfort panel

Development stopped – Adaptations when needed
End of live planned earliest 1st October 2034
Phase out period of 10 years.

WinCC Advanced
WinCC Professional

Development breaking
Adaptation when needed
No date for phase out

WinCC V7

Production management efficiency

Development continues
No breaking
No date for phase out

2021 **2024** **2034**

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www.siemens.se/wincc-unified

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WinCC Unified panel starter kit – Kampanjpris året ut

Gäller alla storlekar av Unified-panelerna

SIEMENS

Webbinarium 3: TIA Portal V17 med Motion Control i fokus

Datum och tid: 10 december 10:00–10:45

Detta webbinarium kommer handla om nyheter inom Motion Control och drivteknik. Exempel på ämnen som kommer tas upp är:

- Support av hårdvara.
- Funktionsutökningar i Startdrive.
- Nyheter i Step 7 rörande Motion Control.
- Ny kraftfull T/TF CPU för krävande Motion Control.
- Safe Kinematics med nya spännande funktioner för att göra din robotapplikation ännu säkrare.
- Optimera din drive med one button tuning och för över reglerparametrar till teknologiobjektet.

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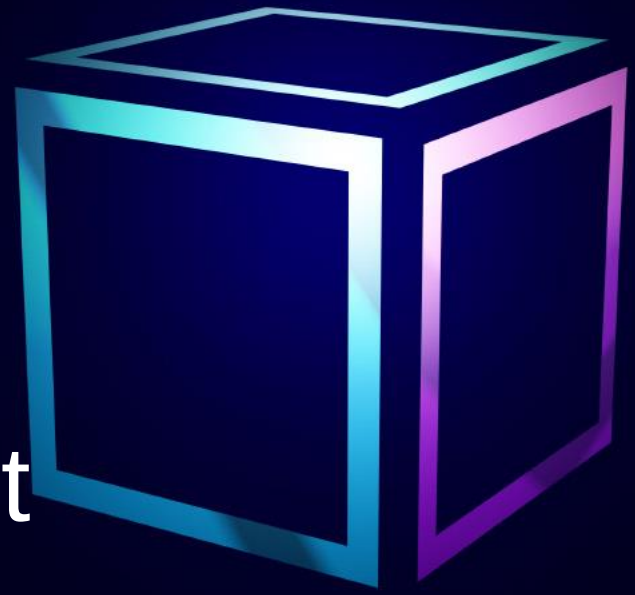
Fråga!

Vilka funktioner saknar du i WinCC Unified?

Skriv ditt svar i kommentarsfältet



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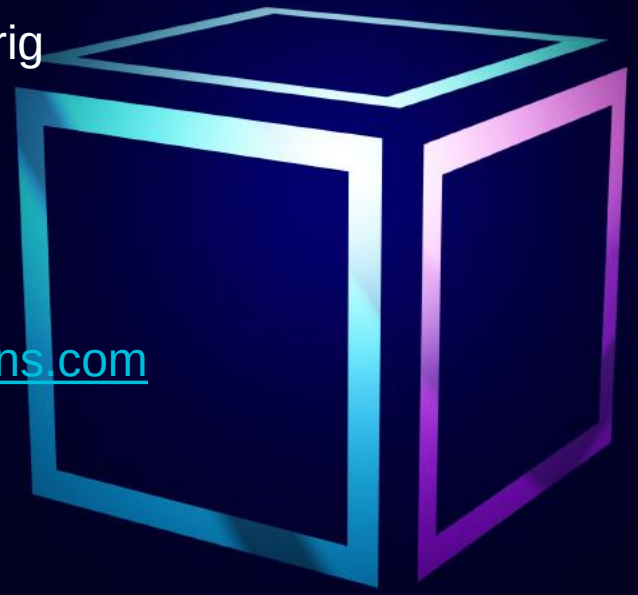
E-mail: jos.kleinwoud@siemens.com



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