

Nyheder i WinCC Unified V19



SIEMENS

Dagens værter

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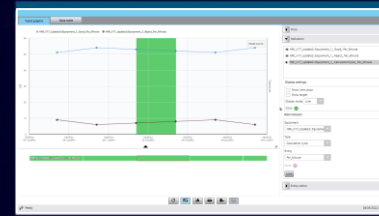


SIEMENS

Agenda

- WinCC Unified-familien er blevet endnu større
- Fra lille til stor eller omvendt
- Et udpluk af nye features
- Simple Alarm View - "keep it simple"
- Audit overblik
- Standardisering med Faceplates
- Corporate Designer - sæt dit eget præg
- Bring livedata ud i processen

The WinCC Unified Family



PC



Comfort Panel
7" – 21,5"



Basic Panel
4" – 12"



View of Things

WinCC Unified Basic



MTP 1200

1,280 x 800

12.1"

MTP 1000

1,280 x 800

10.1"

MTP 700

800 x 480

7"

MTP 400

800 x 480

4.3"

Unified Basic Panels

Higher Performance

	Basic 2nd Gen. Panel	Unified Basic Panel
PLC Connections	4	8
Tags	800	1,000
Alarms	430	2100
Archive	2	10
Logging Tags	10	50
Scripts	--	50
Trends	35	35
Trends per Trend Control	4	5
Text/Graphics List	300/100	300/100
Pictures		
- Objects per image	600	600
- Tags per image	100	300



- ✓ Increased quantity structure compared to Basic 2nd Gen Panel
- ✓ Java Scripting
- ✓ Much higher resolution

Unified Basic Panels

Connectivity



100 Mbit/1 Gbit

Unified Basic Panels

Connectivity



S7/S7+ Communication
PN Basic Services
(Assign name, IP,..)
Project Download above
PN

Unified Basic Panels

Connectivity



Project download and firmware
update above Ethernet
Network Access
Integrated 3Rd Party PLC
(e.g. Mitsubishi, Allen-Bradley)
or via CSP)

Communication Support Packages

[SIOS \(109779920\)](#)

Unified Basic Panels

Remote control



1x Client Operate included (not extendable)

E.g. remote from PC

HTML5

HTTPS://

Unified Basic Panels

Connectivity



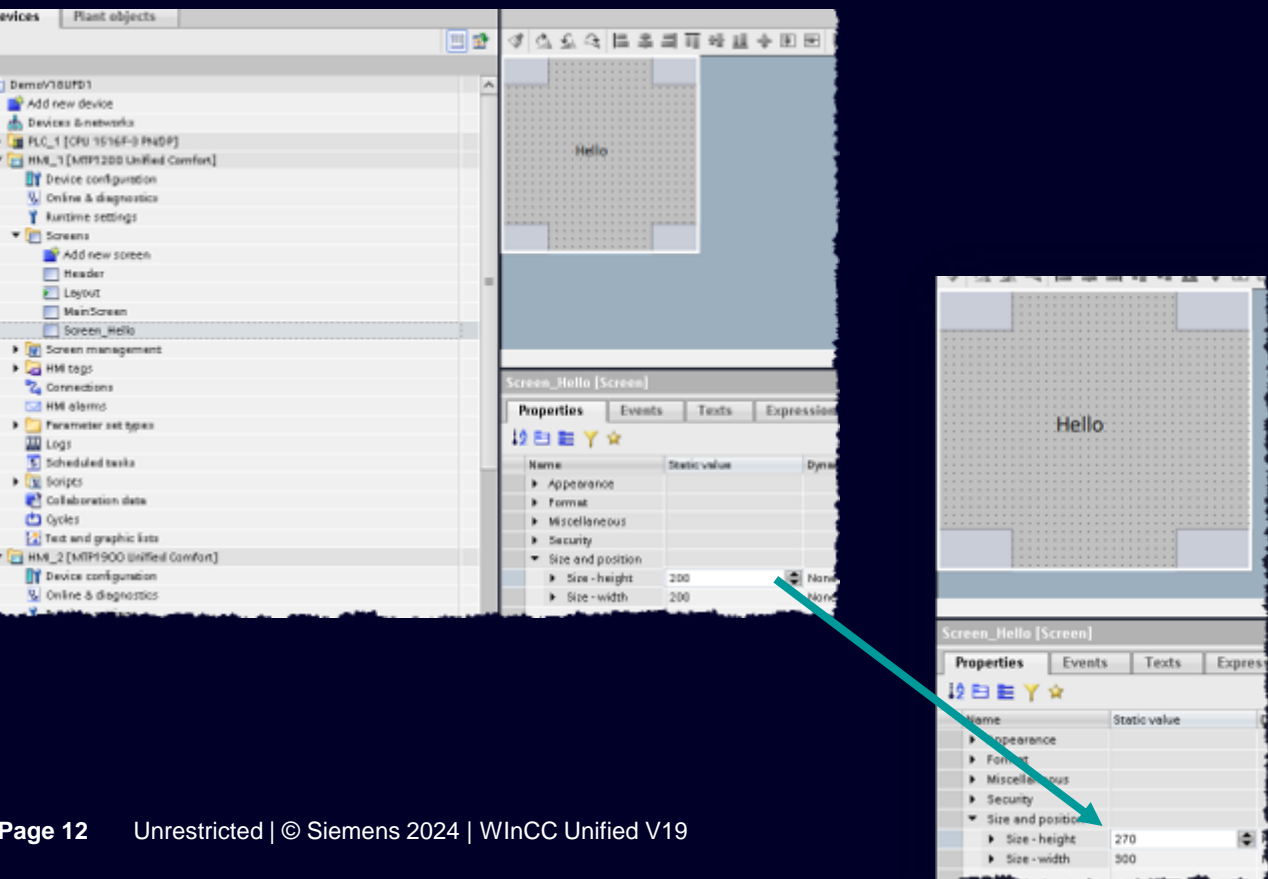
USB 2.0
Support USB Hardware

Unused ports can be disabled

Resize screen to device dimensions

Screen Engineering

- Unified Basic Panel ✓
- Unified Comfort Panel ✓
- WinCC Unified PC ✓



Upscale or downscale screens to fit the new configured display

Device Unified	MTP1200		Factor Calculation		MTP1900 (after Resize Screen)	
	Width	Height	For Width	For Height	Width	Height
Resolution Pixel	1280	800	1,5	1,35	1920	1080
MainScreen	1280	550			1920	742
Header Screen	1280	250			1920	337
Layout Screen	1280	800			1920	1080
Screen_Hello	200	200			300	270

Runtime one-click simulation

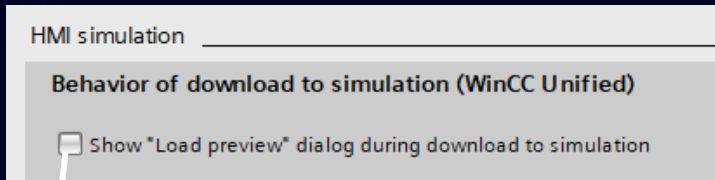
Unified Basic Panel ✓

Unified Comfort Panel ✓

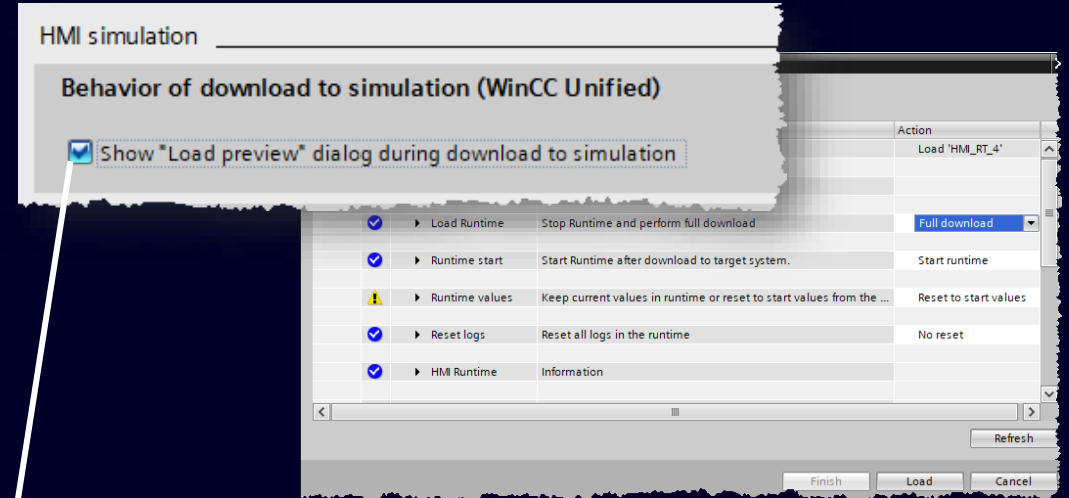
WinCC Unified PC ✓



Simulation



Simulation starts directly after compiling in a new browser tab.



Display load dialog is shown after compiling. Simulation will not open a new browser tab.

**See the engineering results in an easy and fast way with simulation in only one click.
If a specific screen is selected, it will be displayed.**

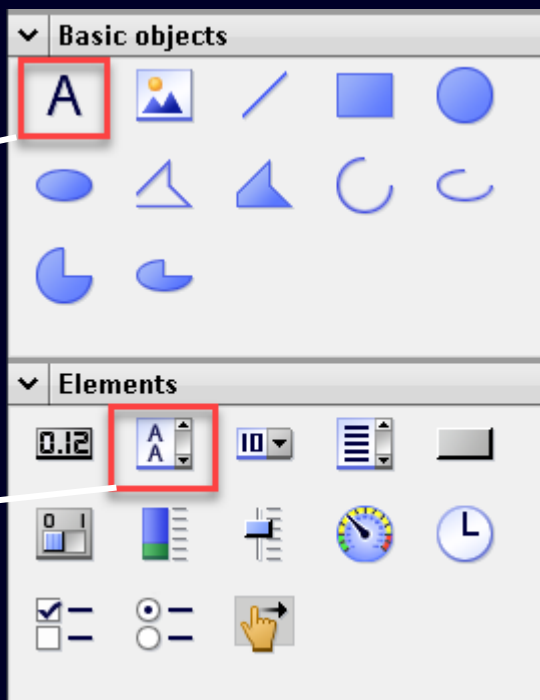
New screen item: Text

Screen Engineering

Unified Basic Panel ✓

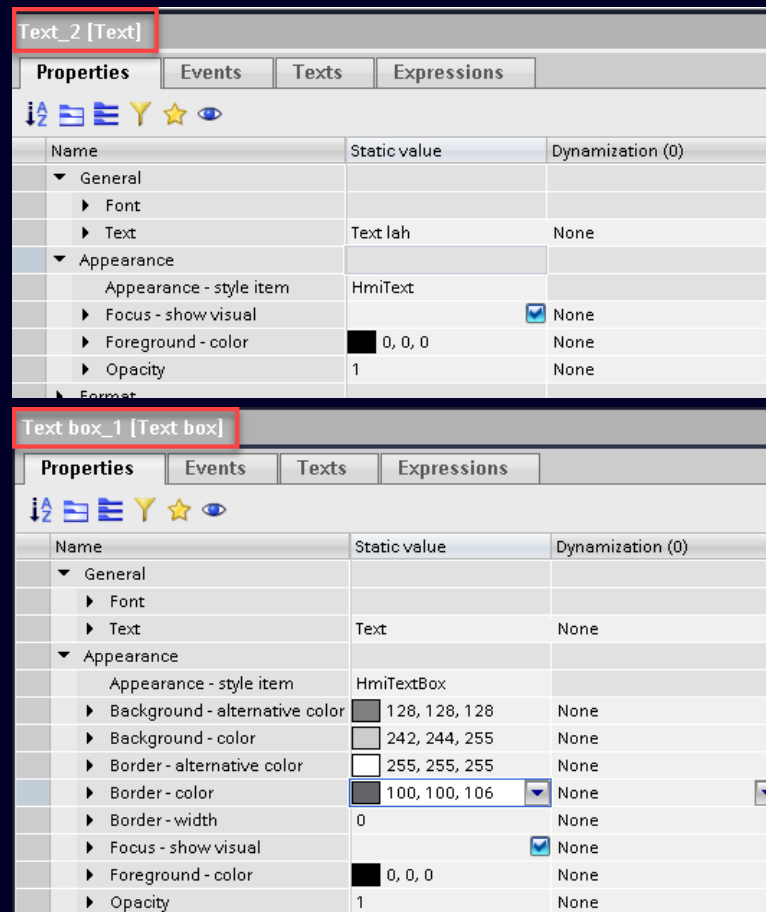
Unified Comfort Panel ✓

WinCC Unified PC ✓



Text

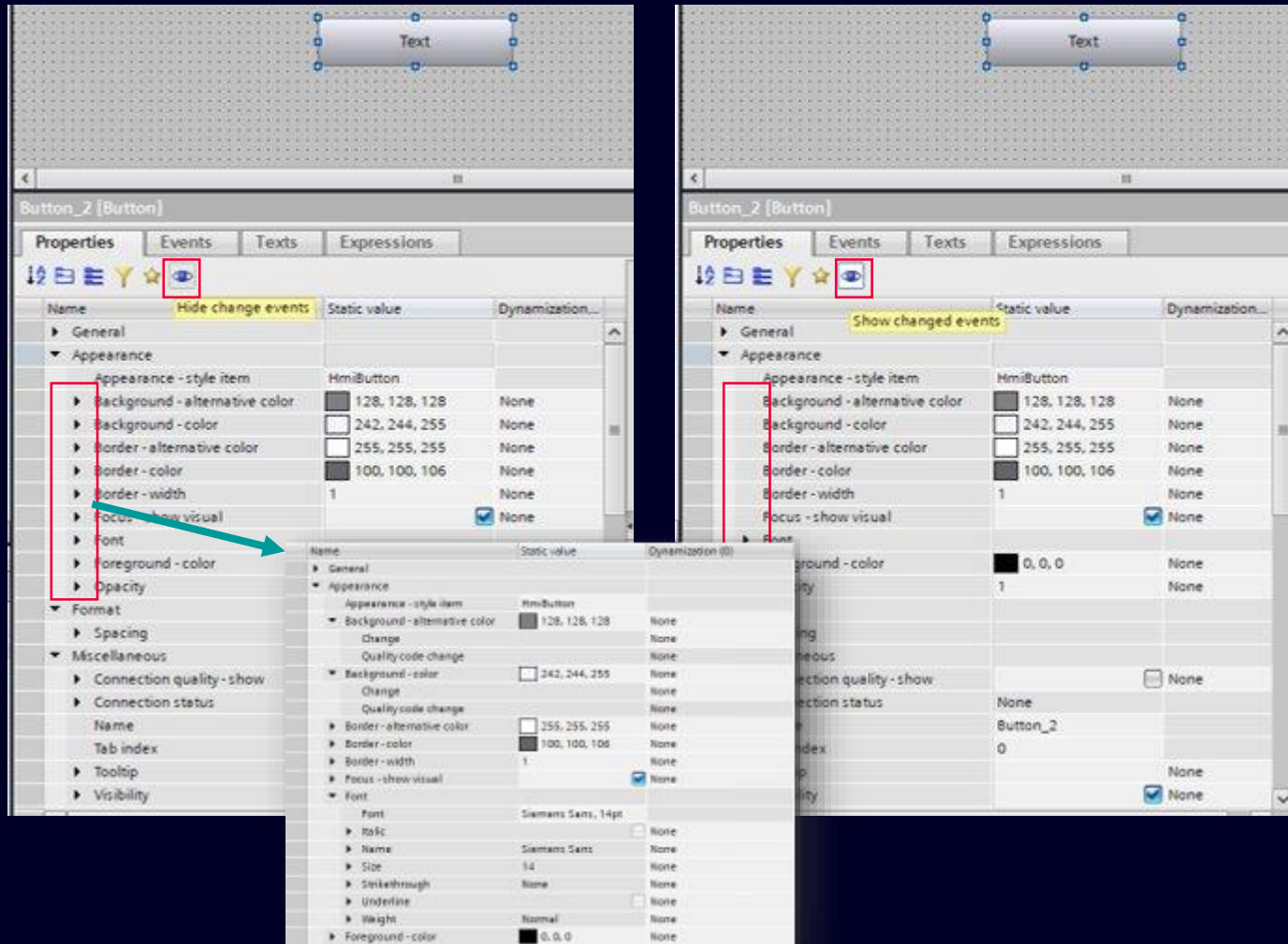
Text box



The Text item is simplified and optimized for better performance

Screen items properties "another filter"

Screen Engineering



Hide or show changed events

- Simplifies the properties view and makes it easier to work

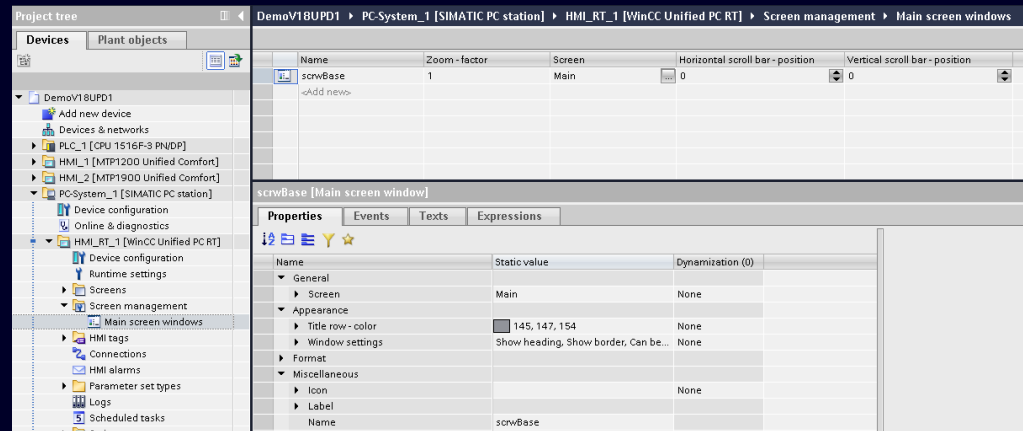
Configurable main screen

Screen improvements:

Unified Basic Panel ✓

Unified Comfort Panel ✓

WinCC Unified PC ✓



A main (root) screen window can be configured
Zoom and scroll for top-level screen window, define...

- Zoom factor at screen change
- Position and visibility of scroll bars
- Scroll behavior of the top-level screen window

React on property changes of main screen window like:

- Zoom factor
- Scroll positions
- Size of browser window changes

Dynamize the base screen via PLC tag

- trigger the screen change via number

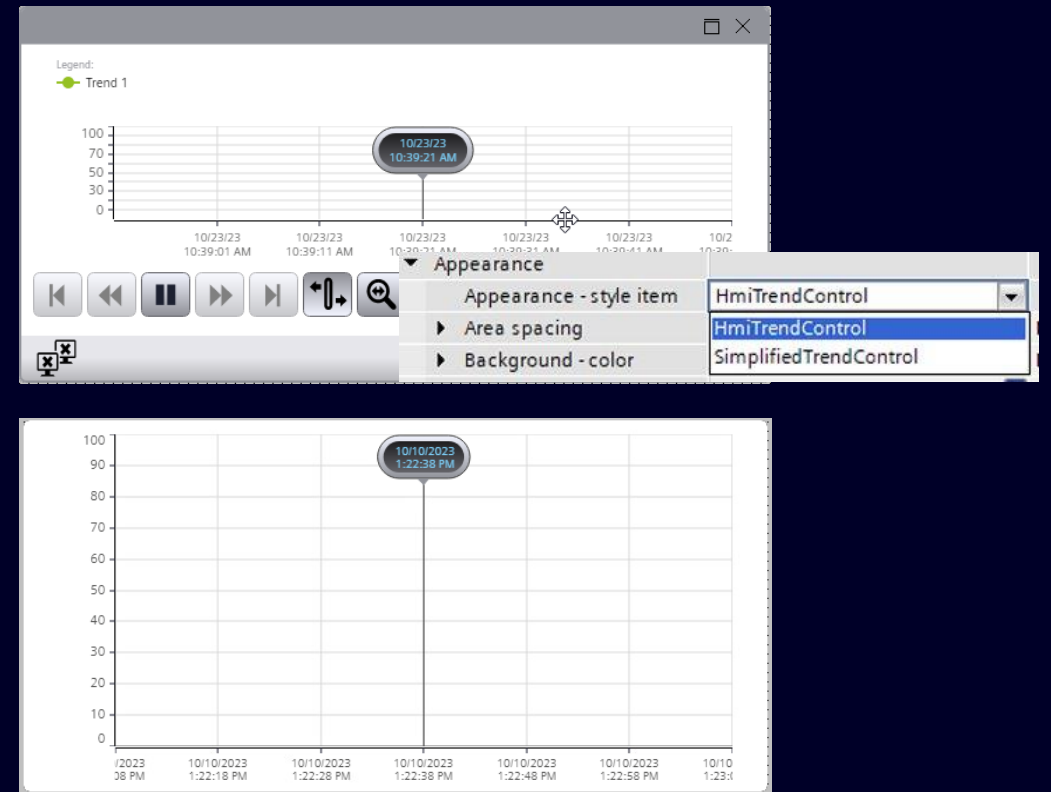
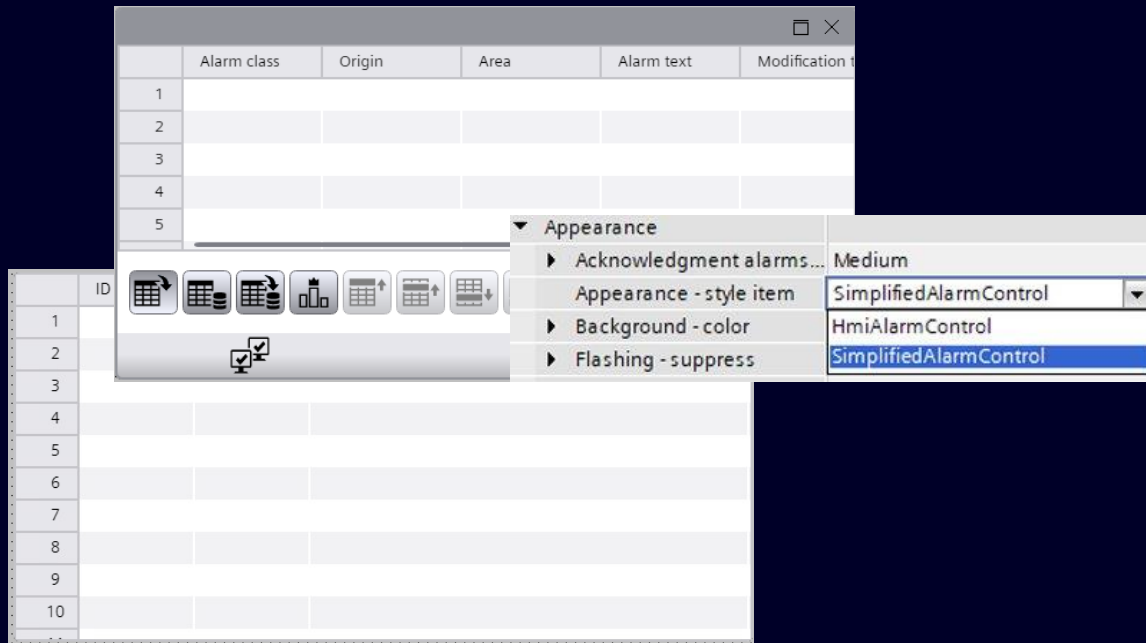
Trend and Alarm Control: Simplified view

Screen Engineering

Unified Basic Panel ✓

Unified Comfort Panel ✓

WinCC Unified PC ✓



Simplified look to improve screen space utilization.
Set by default in Unified Basic Panels.

‘ExecuteToolBarButton’

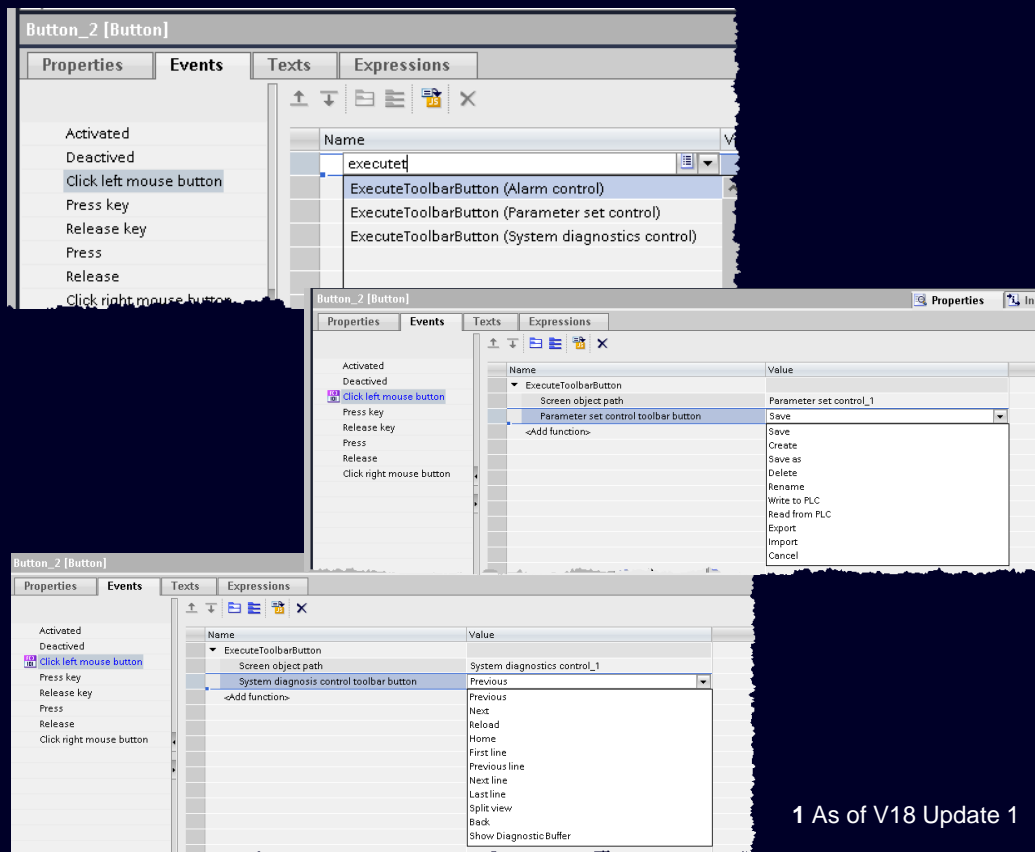
System function improvements:

NEW

Unified Basic Panel ✓

Unified Comfort Panel¹ ✓

WinCC Unified PC¹ ✓



1 As of V18 Update 1

Create own screens and execute control functions via “own buttons”

Trigger toolbar functions via external buttons

Alarm control

- Single Acknowledgement
- Group Acknowledgement

Parameter Control

- Save, Create, Save As
- Delete, Rename
- Write to PLC, Read from PLC
- Export, Import, Cancel

System diagnostics control

- Previous, Next, Reload, Home,
- First line, Previous line, Next line, Last line
- Split view, Back, Show diagnostics buffer

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Siemens - D:\V19Demoer\Unified Training_V19\Unified Training_V19

Project Edit View Insert Online Options Tools Window Help

Save project Go online Go offline Search in project

Project tree Unified Training_V19 > MTP1000 [MTP1000 Unified Comfort] > Screens > 20_Messages_Simple

Devices Plant objects

Unified Training_V19

- Add new device
- Devices & networks
- PLC_1 [CPU 1513F-1 PM]
- HMI_1 [MTP700 Unified Basic]
- HMI_2 [MTP1200 Unified Comfort]
- MTP1000 [MTP1000 Unified Comfort]
 - Device configuration
 - Online & diagnostics
 - Runtime settings
 - Screens
 - Add new screen
 - 00_CopyTemplate
 - 10_Application
 - 10_Design
 - 10_Set TIME
 - 20_Messages
 - 20_Messages_Simple
 - 21_Trend_Simple
 - 30_Settings
 - FP
 - Screen_1
 - 00 - Resolution independent
 - 01 - Screenlayout
 - 02 - Screens
 - 03 - Popup screens
 - 04 - Grouped objects
 - Screen management
 - HMI tags
 - Connections
 - HMI alarms
 - Parameter set types
 - Logs
 - Scheduled tasks
 - Scripts
 - Collaboration data
 - Cycles
 - Test and graphic lists

20_Messages_Simple [Screen]

Properties Events Texts Expressions

Name	Static value	Dynamization (0)
<Search>	All	All
Appearance		
Background - alt...	235, 235, 235	None
Background - co...	205, 211, 215	None
Background - fill...	Solid	None
Format		
Miscellaneous		
Background gra...		None
Display name		None
Layers	32 items	
Name	20_Messages_Simple	
Offset left	0	None
Offset top	0	None
Screen number	0	
Security		
Size and position		

Portal view Overview 20_Message... 21_Trend_Si...

Portal

Options

HmiAlarmControl

Basic objects

Elements

Controls

My controls

Audit Viewer Reports

Graphics

Dynamic widgets

Project Unified Training_V19 opened.

09.16 06/02/2024

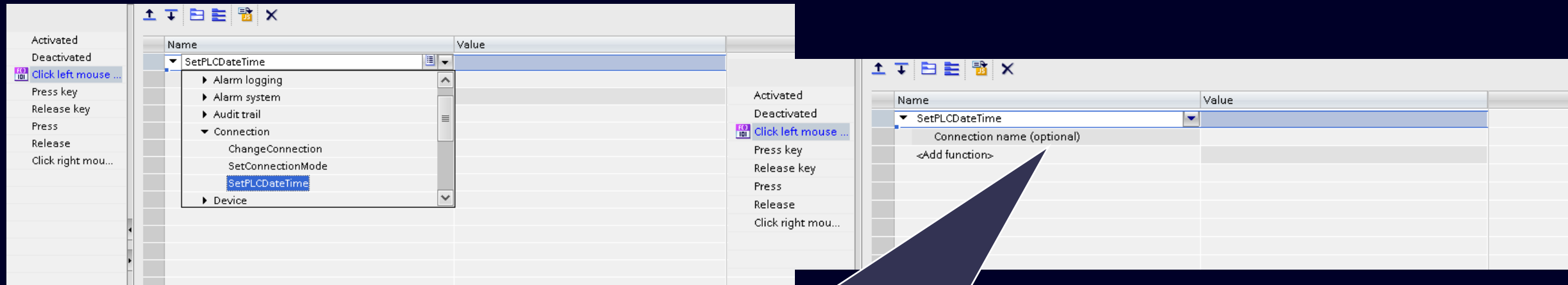
'SetPLCDateTime'

New System Function:

Unified Basic Panel ✓

Unified Comfort Panel ✓

WinCC Unified PC ✓



- Parameter connection:
- Type: S7- 1200/1500 Connection
 - Optional: if undefined in the script, means all Connections

Transfers the date and the time of the HMI device to the S7-PLC (S7-1200/1500), so it synchronizes the date and the time of the HMI device.

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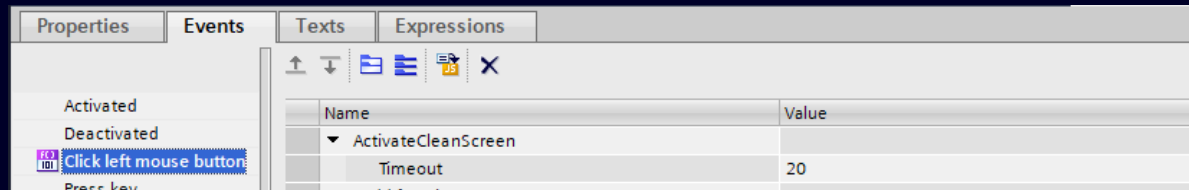
'ActivateCleanScreen'

New system function:

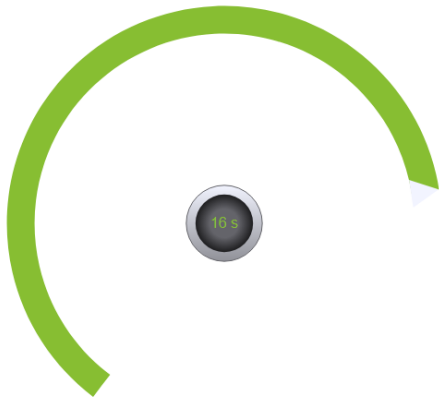
Unified Basic Panel ✓

Unified Comfort Panel ✓

WinCC Unified PC ✓



Clean screen



Blocks the touch input during the cleaning of the screen

- Full screen overlay is displayed to avoid unintended operation. On UCP touch is blocked so the bottom toolbar does not appear.

Audit: Electronic records and signatures according to legal requirements

Screen Engineering ✕

Unified Basic Panel ✕

Unified Comfort Panel ✓

WinCC Unified PC ✓

WinCC Unified Audit Enhanced



WinCC Unified Audit Basis



WinCC Unified Audit Enhanced

- Incl. “WinCC Unified Audit Basis”
- Double electronic signature
- Functionality according to enhanced SCADA requirements

WinCC Unified Audit Basis – Audit Trail

Log & Detection of manipulation, Records for Tags, Confirmation and comments, Audit Trails reports

- User Management (Login/Logout)
- Audit Trail viewer for direct analysis
- Single electronic signature
- Restore of Database segments

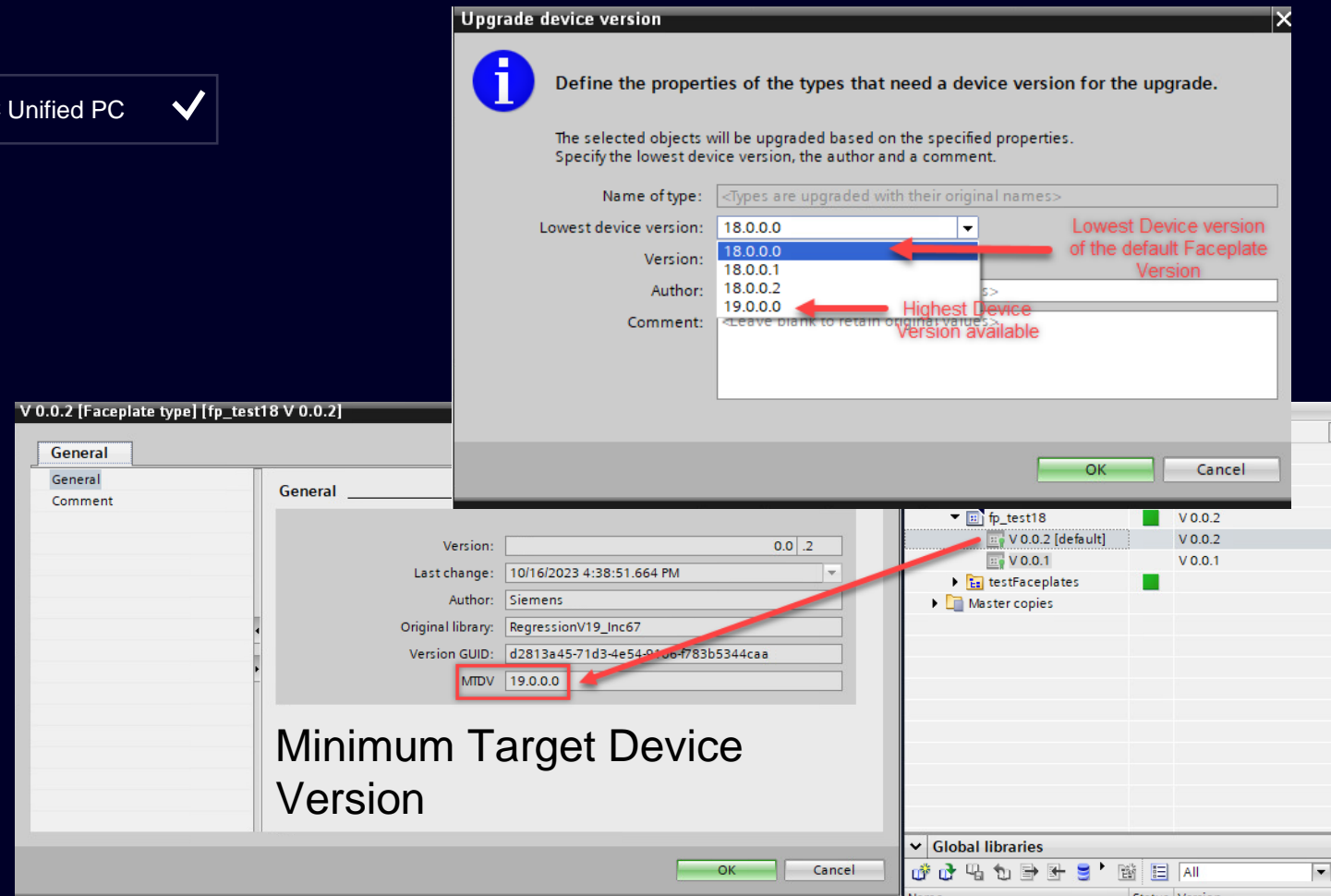
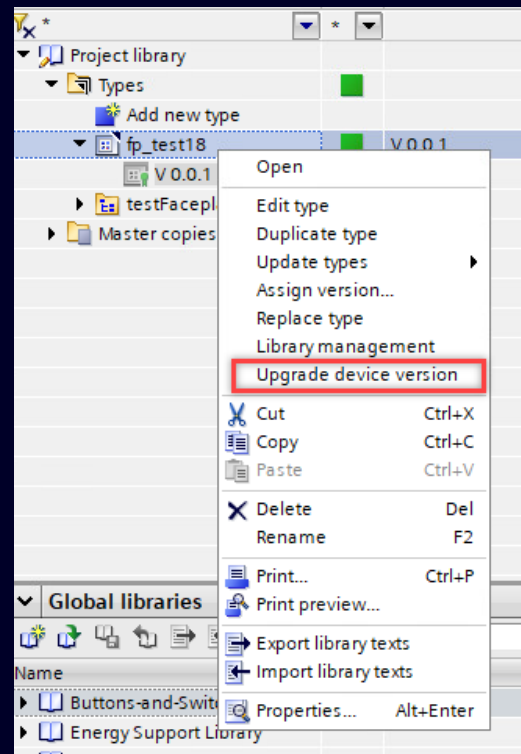
Faceplates: Update V19 of MTDV Version

Standardization

Unified Basic Panel ✓

Unified Comfort Panel ✓

WinCC Unified PC ✓



Update the Device Version of the Default faceplate version

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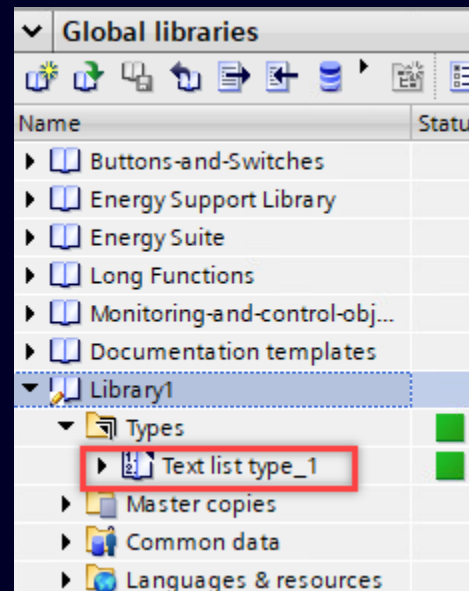
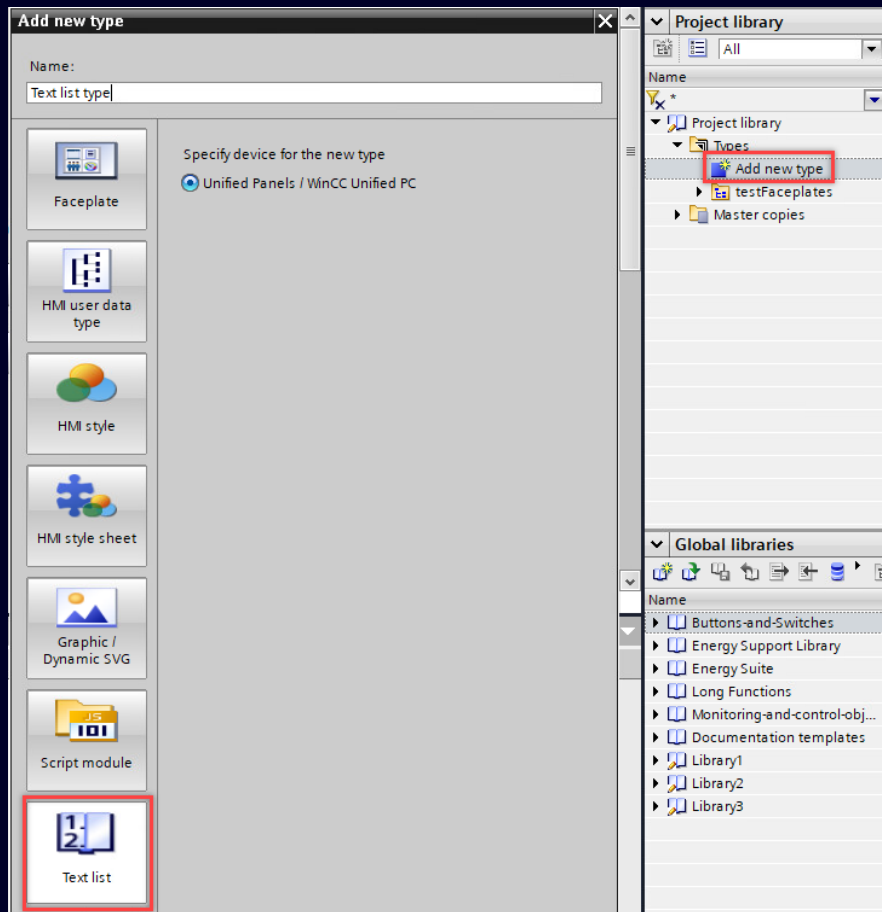
Faceplates: Text Lists as library type

Standardization

Unified Basic Panel ✓

Unified Comfort Panel ✓

WinCC Unified PC ✓



Text lists can be referenced from:

- Screens: Symbolic IO
- Faceplate Versions
- Scripts
- Script Modules
- Script Types
- System functions

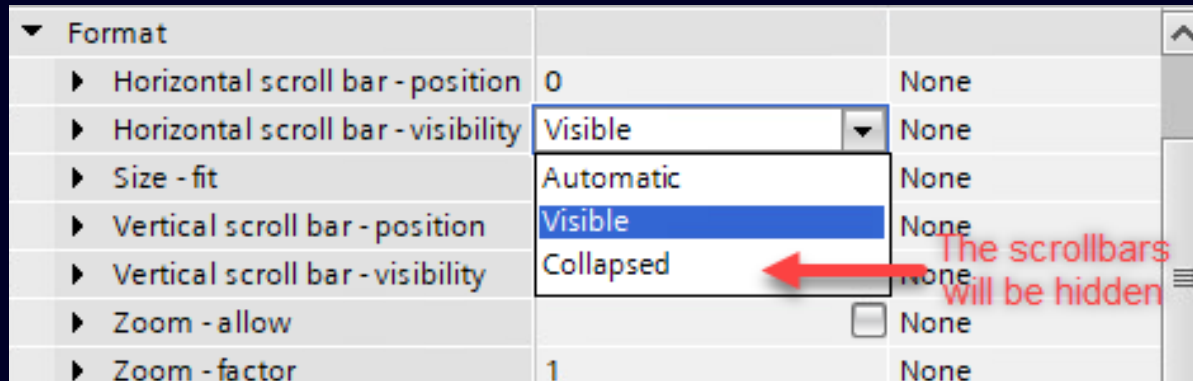
Faceplates: Scrollbars visibility

Standardization

Unified Basic Panel ✓

Unified Comfort Panel ✓

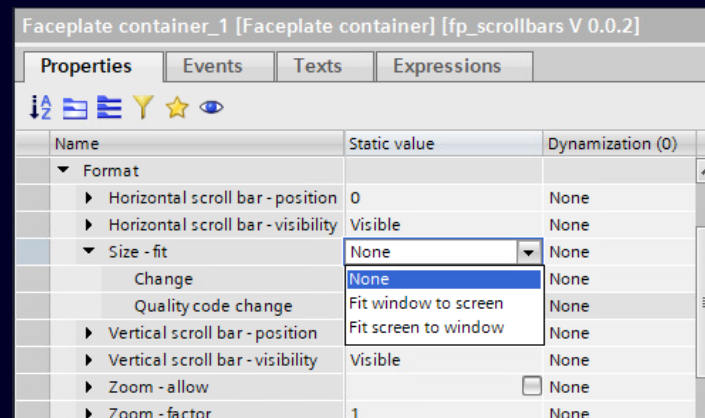
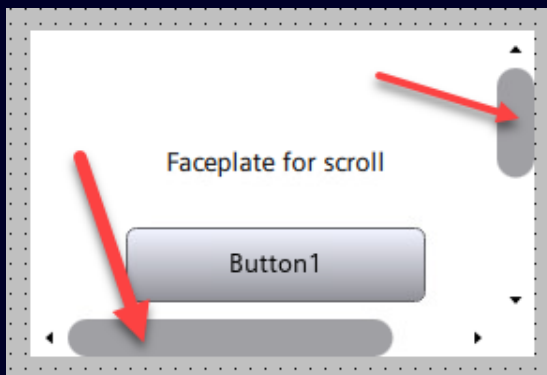
WinCC Unified PC ✓



New Features

Change the visibility settings for the scrollbars

Scrollbars are available when the faceplate container is smaller than the faceplate and the "size-fit" is not selected



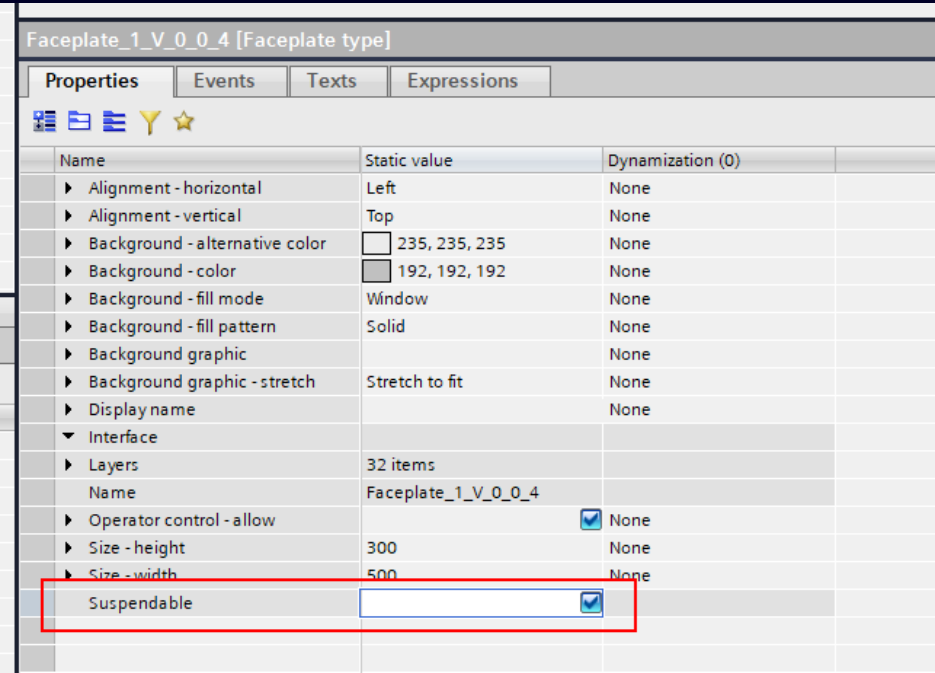
Faceplates: Performance improvement

Standardization

Unified Basic Panel ✓

Unified Comfort Panel ✓

WinCC Unified PC ✓



New 'Suspendable' setting:
performance improvements for screens with many
faceplates

Then cyclic scripts or scripts triggered by tag changes
are not executed when the faceplate is not visible

Faceplate type can be marked as suspendable

Faceplate suspendable

Standardization

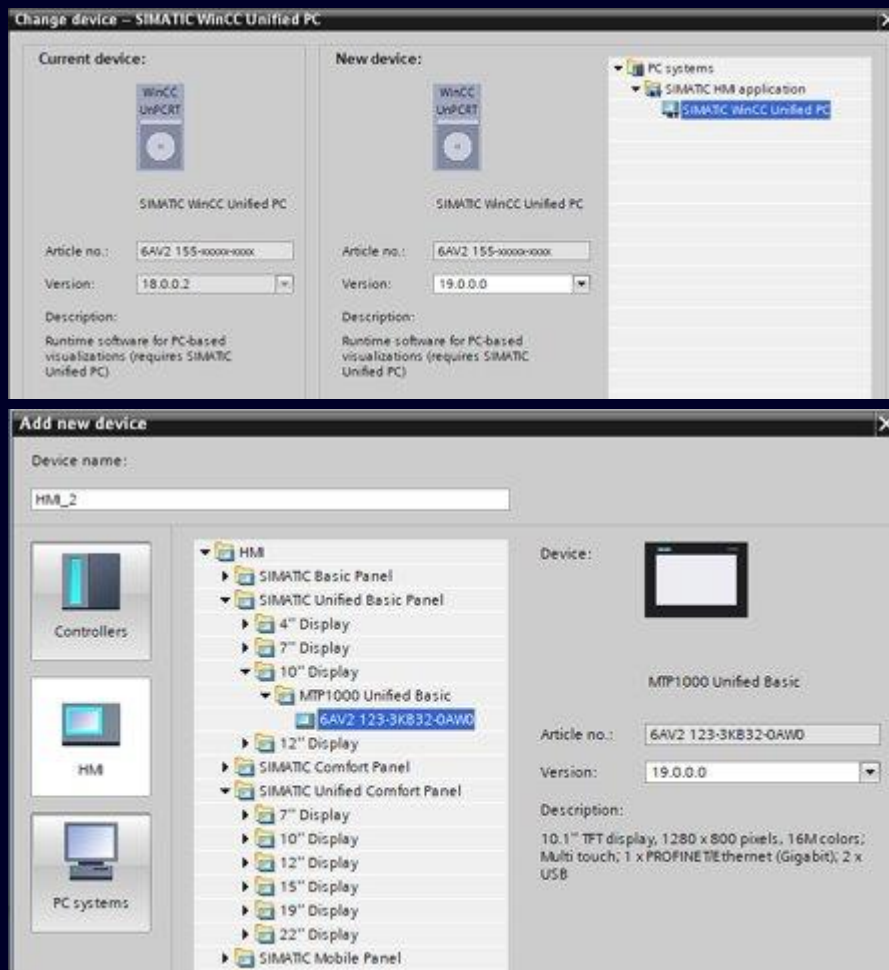
Situation	Suspendable flag	Cyclic scripts	Tag triggered scripts
Faceplate visible on screen	False	True	True
Faceplate visible on screen	True	True	True
Faceplate not visible	False	True	True
Faceplate not visible	True	False	False
Faceplate in invisible layer	False	True	True
Faceplate in invisible layer	True	False	False
Faceplate not in visible screen area (e.g. because of scrolling)	False	True	True
Faceplate not in visible screen area (e.g. because of scrolling)	True	False	False

New device versions

Unified Basic Panel ✓

Unified Comfort Panel ✓

WinCC Unified PC ✓



- ✓ PC Runtime
- ✓ Unified Comfort Panels
- ✓ Unified Basic Panels

New features only available in the corresponding device version

Upgrade the Unified devices

Upgrade Faceplates in library (if necessary)

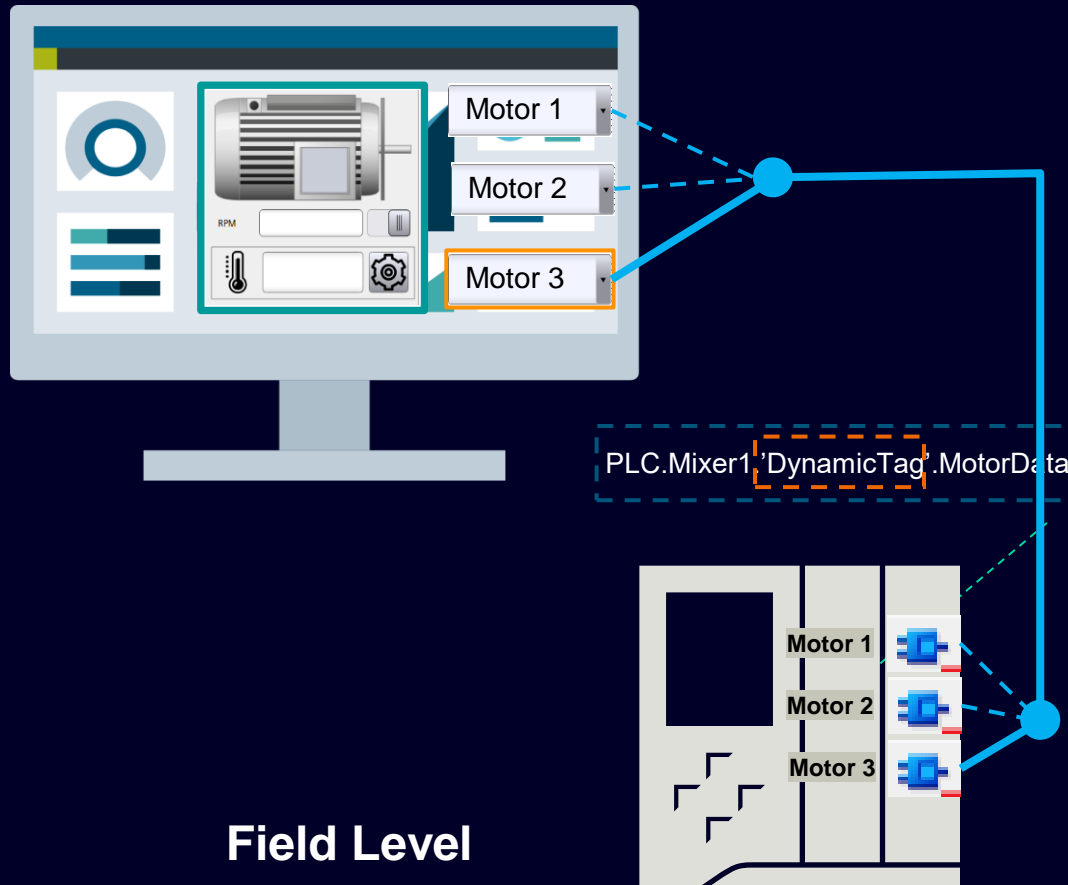
Faceplates: Dynamic data connections

Standardization

Unified Basic Panel ✓

Unified Comfort Panel ✓

WinCC Unified PC ✓



Field Level

Tag prefixes

Efficient Engineering, without Scripting

Variable parameters at the faceplate interface enable dynamic data connections without scripting

Standardization of faceplates with different or dynamic data connections

The tag parameters can be used to standardize faceplates and nested faceplates in an even more flexible or complex way.

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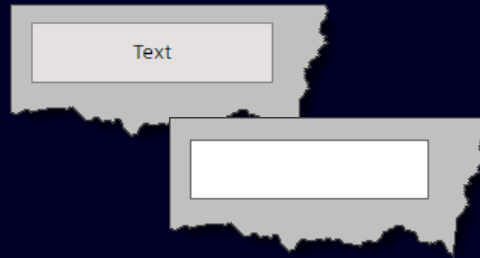
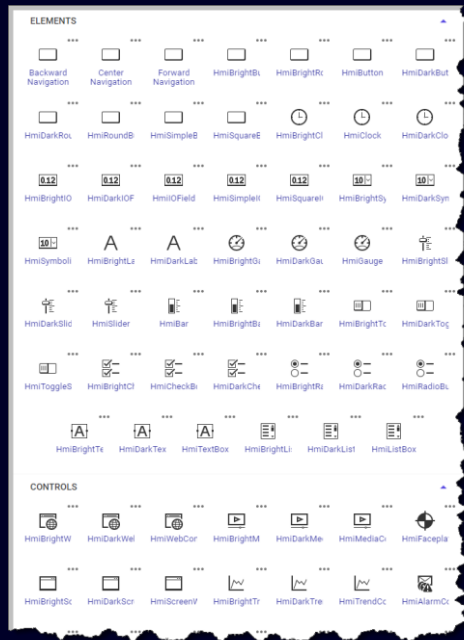
Corporate Designer

Fast, easy and distinctive UI

Unified Basic Panel ✓

Unified Comfort Panel ✓

WinCC Unified PC ✓



New Style Libraries

Corporate Designer offers a new style library. Elements and Controls are available in characteristic and frequently asked designs (e.g. curved corners).

User Defined Styles

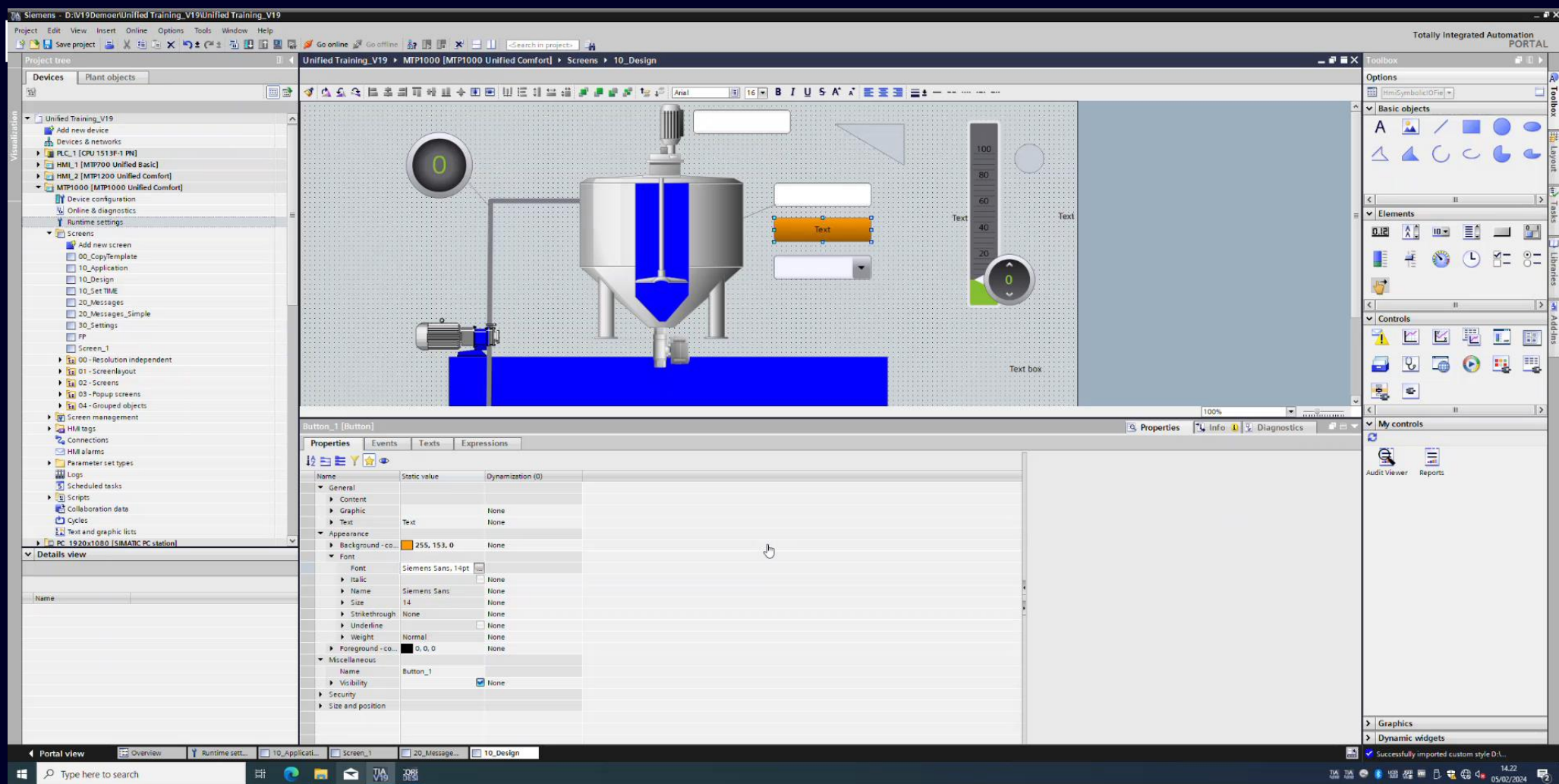
Create your user defined styles based on the style library, import it in your project and assign it to your WinCC Unified device.

Centrally defined color and font palettes

Create your custom color and font palettes once and then assign them efficiently to your elements and controls.

Free download in [SIOS](#)

De



VS Code Extension

Scripting efficiency

Unified Basic Panel ✓

Unified Comfort Panel ✓

WinCC Unified PC ✓



Visual Studio Code as development environment
Benefit from a powerful, modern development environment for WinCC Unified Java scripts

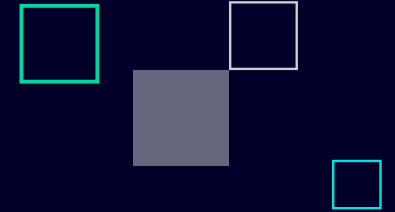
Unified Style Guide and Snippets
Automatically set up Unified JavaScript Style Guide and snippet support.



Unified AR – The Navigator

for HMI, Industrial Edge & Industrial IoT (on iOS)

Unified AR – Brings Augmented Reality to HMI / SCADA applications!



Available Features

- Seamless authentication and access to WinCC Unified V19 screens
- Seamless authentication and access to WinCC V8 up to 4 screens
- Seamless authentication and access to SIMATIC Industrial Edge Apps
- Access to web applications, documentation and websites
- Mapping of screens and apps to real-world machines / production via AR Tracking & QR Code
- In-App Engineering*
- Support for iPhone & Ipad (iOS) Android will come later
- Future support of standard AR glasses

* Server based Engineering is planned.

Biometric Authentication

Empowered with Unified Air



Products and services

HMI Unified Comfort Panels + SIMATIC RF1040, RF1060
Unified Air app (iOS & Android).
Release: V19 Update 1.

Strengthen production security with **Unified Air** and biometric authentication using mobile devices.



Hard to spoof. Biometric identifiers are unique by definition for each individual.



Simple to use. No need for extra configuration or special access rights.



Secure, nearby, offline.

Har du et projekt i løbet af de næste par måneder, hvor du kunne tænke dig sparring omkring WinCC Unified?

Skriv en kommentar, så tager vi kontakt til dig.

Kontakt

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per.m.hemmingsen@siemens.com



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Nyheder i TIA-portalen V19

Fredag den 1. marts kl. 11



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