



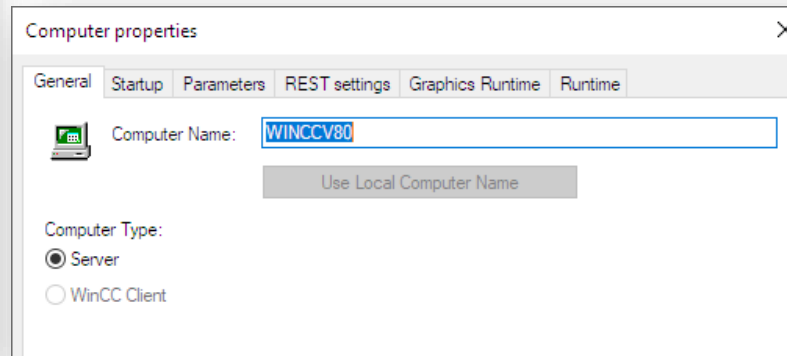
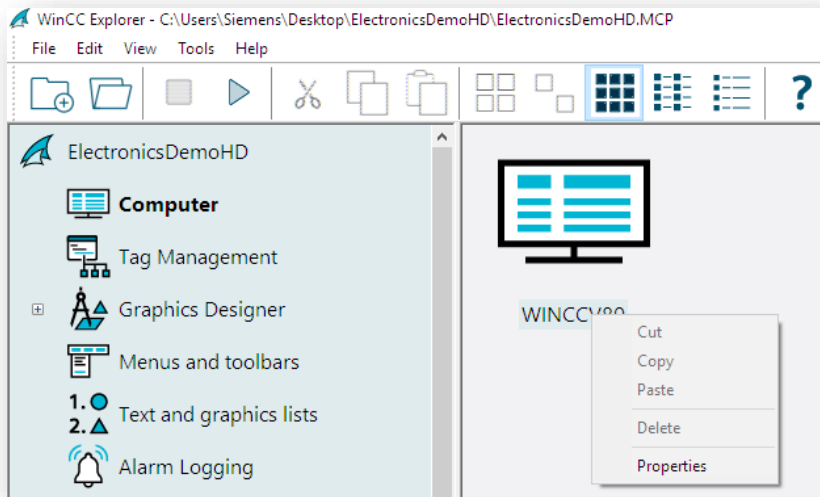
# SIMATIC WinCC V8.0 Demo-project

How to setup / work with the demo-project

## How to explore the demo project?

### Prepare the demo project for Runtime

- Download the project and unzip it
- Open the „ElectronicsDemoHD.mcp“ file with the WinCC Explorer
- Open the computer properties in the project and adapt the computer name

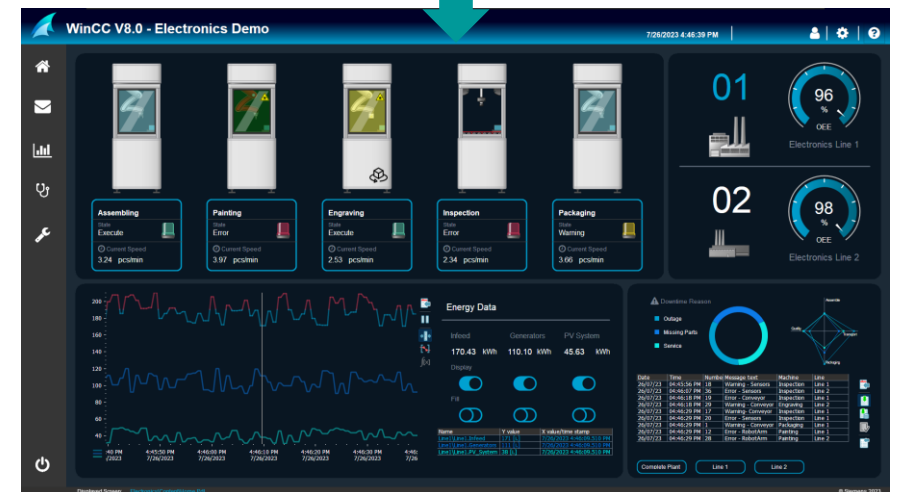
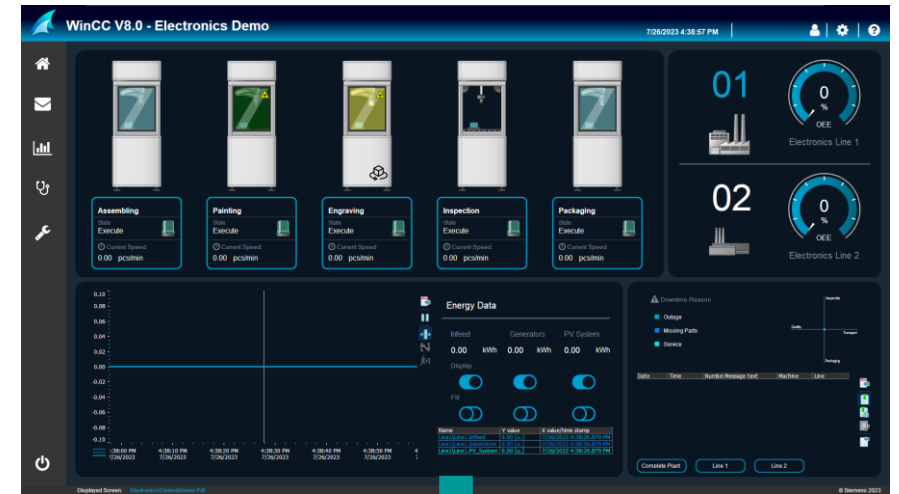
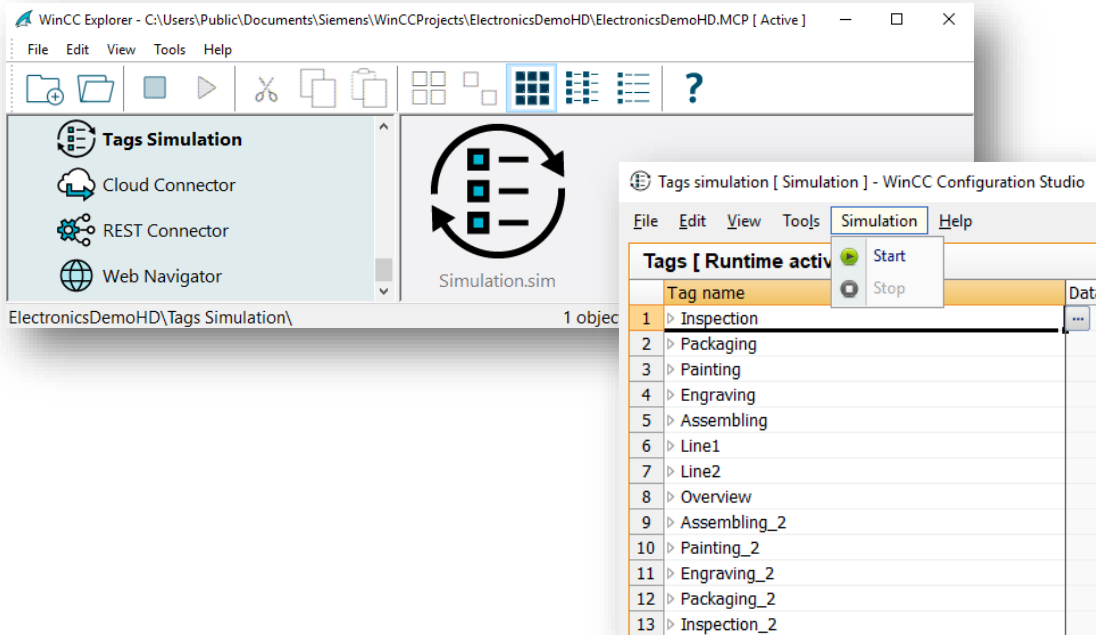


- The change becomes effective only after you restart WinCC.  
Therefore, close and reopen the project with the WinCC Explorer.
- Start the WinCC Runtime

# How to explore the demo project?

## Start the tag simulation

- The demo project requires a tag simulation for the dynamizations
- To start the tag simulation, open the preconfigured simulation file “Simulation.sim” via:  
WinCC Explorer > Tags Simulation > Simulation.sim
- Start the simulation via: Menu bar > Simulation > Start



# How to explore the demo project?

## Home screen

Login (siemens/siemens)

Switch design mode

Show helpful information

Home screen

Alarm screen

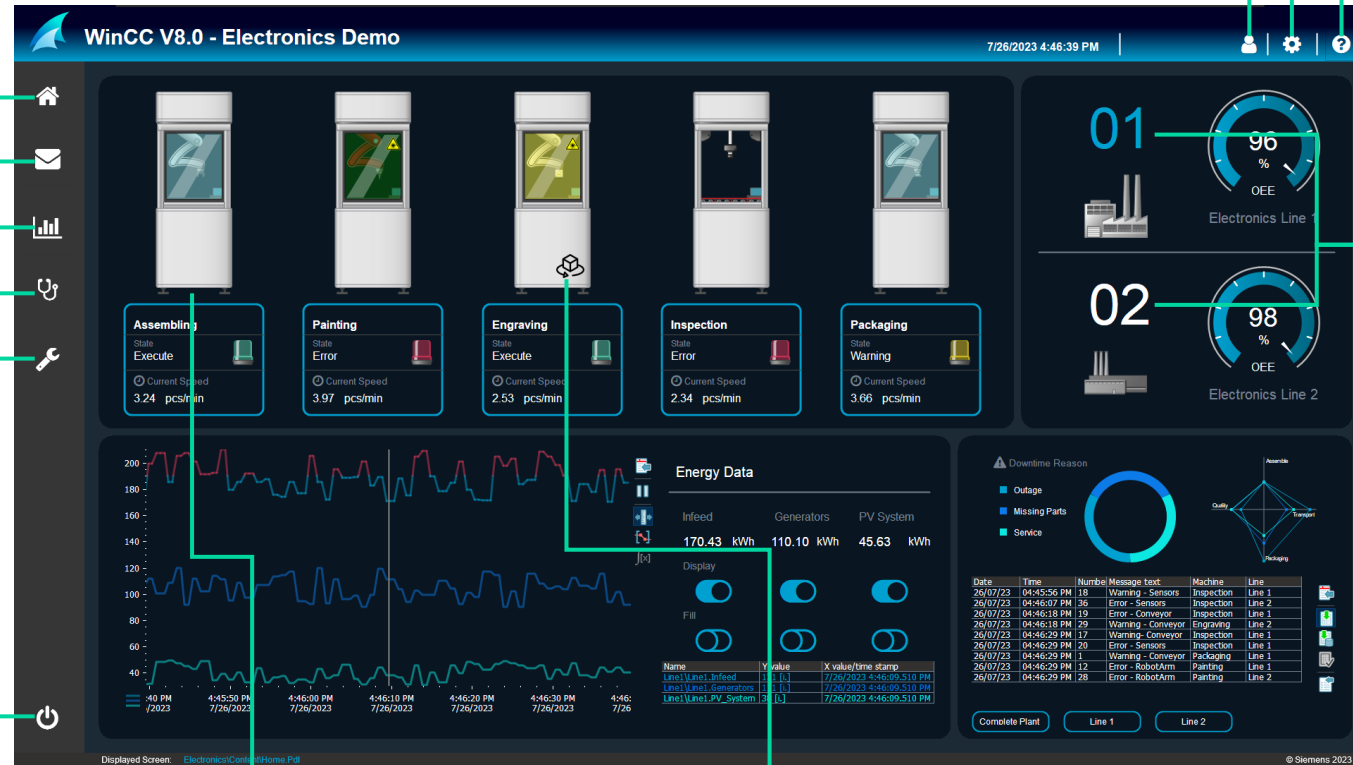
Trend screen

Diagnostic screen

Parameterization screen

Switch between two different factory lines

Stop the Runtime



Faceplate instances which open a Pop-Up on click

Open a detail view with the new 3D control

# How to explore the demo project?

## Info screen



### Tag Simulation

WinCC Explorer - C:\Users\Public\Documents\Siemens\WinCCProjects\ElectronicsDemoHD\ElectronicsDemoHD.MCP [ Active ]

File Edit View Tools Help

Tags Simulation

Cloud Connector

REST Connector

Web Navigator

Simulation.sim

ElectronicsDemoHD\Tags Simulation\ 1 object(s) Licensed mode

### Tags [ Runtime activ

Tags simulation [ Simulation ] - WinCC Configuration Studio

File Edit View Tools Simulation Help

Tag name	Data
1 > Inspection	
2 > Packaging	
3 > Painting	
4 > Engraving	
5 > Assembling	
6 > Line1	
7 > Line2	
8 > Overview	
9 > Assembling_2	
10 > Painting_2	
11 > Engraving_2	
12 > Packaging_2	
13 > Inspection_2	

Start Stop

To start the tag simulation open the preconfigured simulation file "Simulation.sim" via:  
WinCC Explorer > Tags Simulation > Simulation.sim

Start the simulation via "Simulation > Start"

### Login Credentials

For the Runtime

User: Siemens  
PW: siemens

For WebUX

User: Tablet  
PW: siemens

User: Monitor  
PW: siemens

### PLC Simulation

You can simulate a PLC to test the Channel Diagnosis and SysDiag Control. Therefore drag and drop the folder "<ProjectPath>\00\_PLC\ExamplePLC\_MMC" into PLCSIM.

Name	Date modified	Type	Size
ExamplePLC_MMC	6/14/2023 9:34 AM	File folder	
ExamplePLC	5/2/2023 7:11 PM	Siemens TIA Porta...	340 KB
Export_ExamplePLC	5/2/2023 1:19 PM	Compressed (zipp...	652 KB

PLCSIM S7-PLCSIM Advanced V5.0 Control Panel

Online Access: PLCSIM TCP/IP

Virtual Time Scaling: 0.01 OFF 100

Strict Motion Timing:

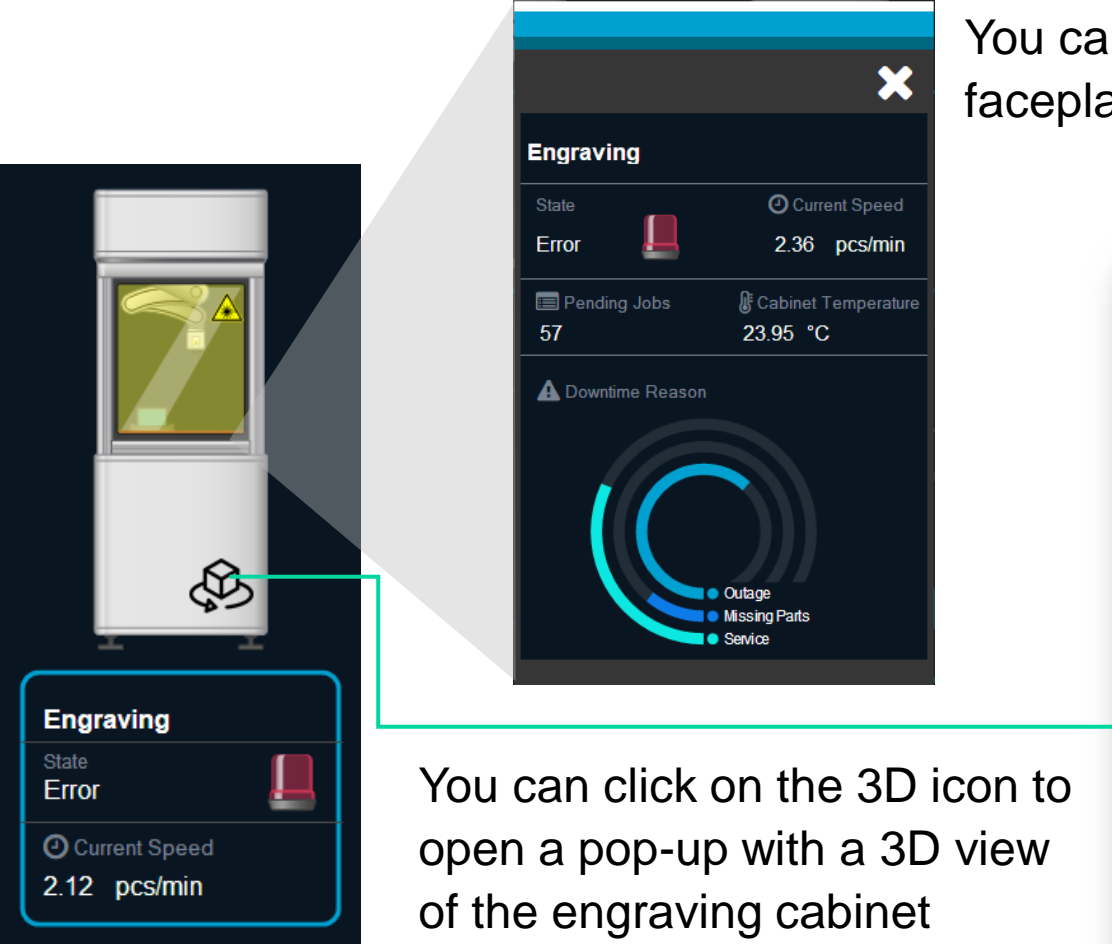
Start Virtual S7-1500 PLC


1 Active PLC Instance(s):


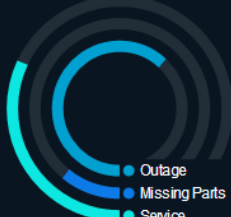
ExamplePLC\_MM / 192.168.0.1

# How to explore the demo project?

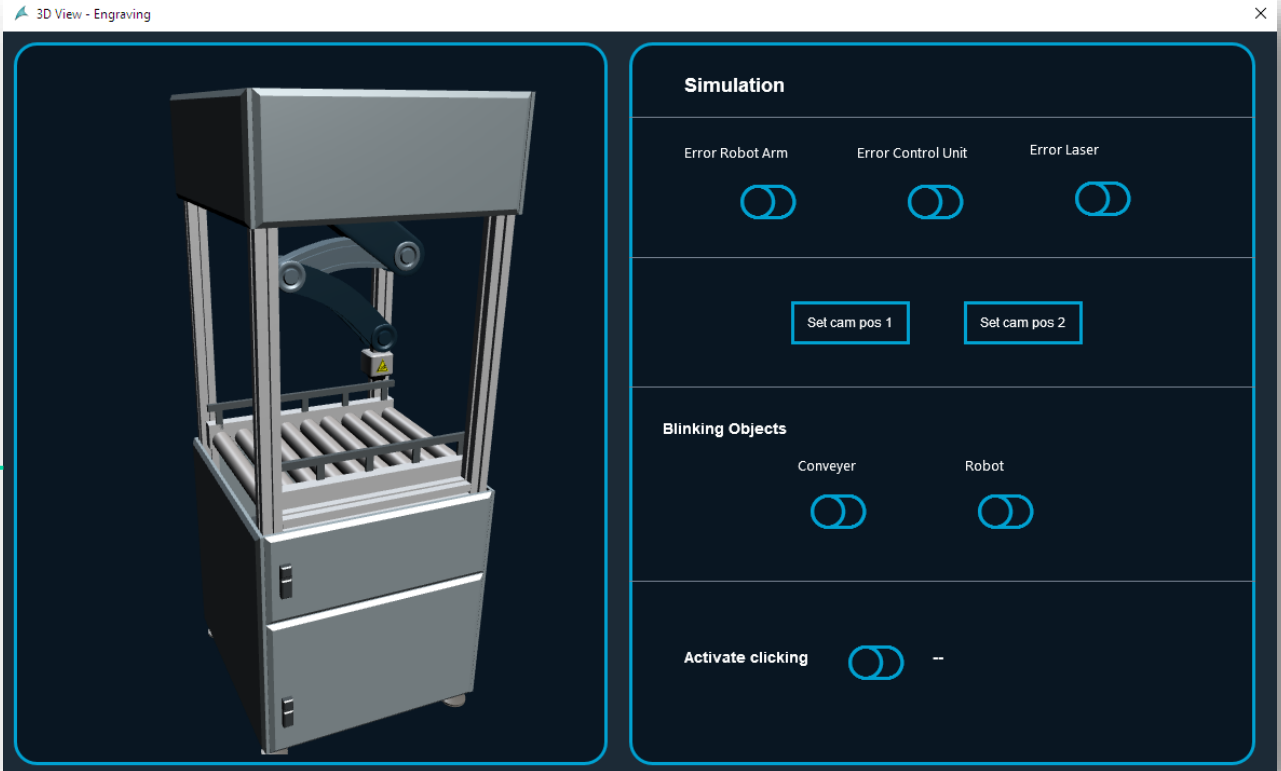
## Home screen – Pop-Ups






**Engraving**  
State Error   
Current Speed 2.12 pcs/min



**Engraving**  
State   
Error 2.36 pcs/min  
Pending Jobs 57  
Cabinet Temperature 23.95 °C  
Downtime Reason  
  
● Outage  
● Missing Parts  
● Service


You can click on the machine cabinet faceplate instances to open a detail view pop-up



**3D View - Engraving**

**Simulation**  
Error Robot Arm  Error Control Unit  Error Laser   
Set cam pos 1 Set cam pos 2

**Blinking Objects**  
Conveyer  Robot 

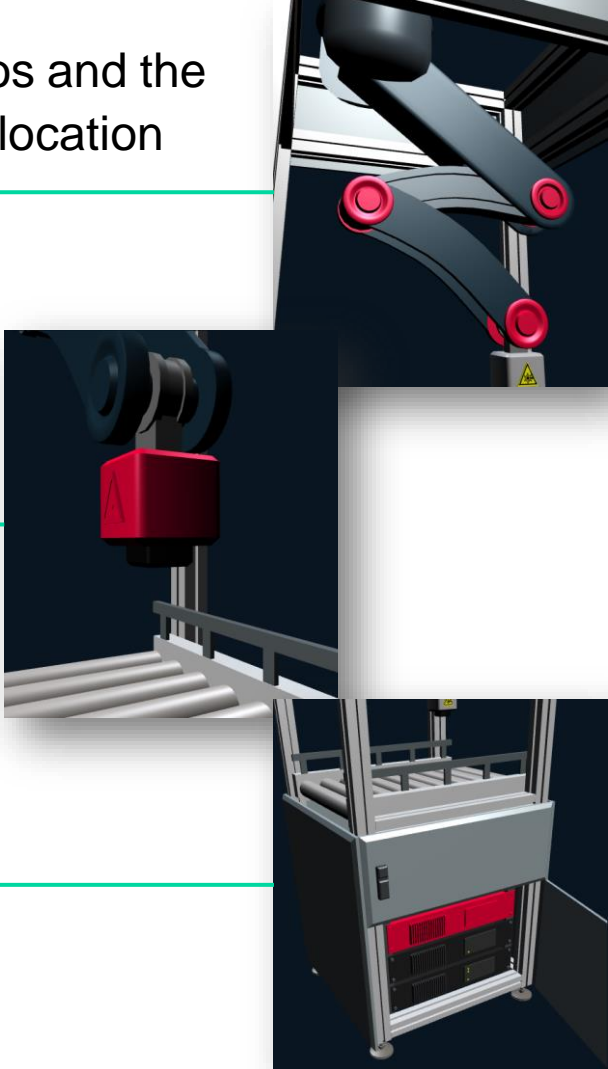
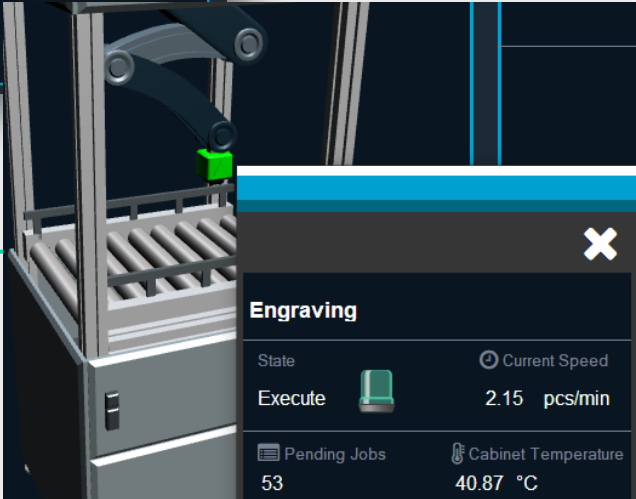
Activate clicking  --

# Display a 3D scene in Runtime and use it for error localization and navigation

Simulate different error scenarios and the 3D Control will display the fault location



By activating the click events  
And then clicking on the  
laser head,  
there will be opened a pop-up  
with details for the laser



# How to explore the demo project?

## Alarm screen

WinCC V8.0 - Electronics Demo 7/27/2023 7:29:00 AM

Message list

Date	Time	Number	Message text	Point of error	Line	Machine	Loop in Alarm	Info Text	Comments
27/07/23	07:28:09 AM	15	Error - Conveyor	Electronics	Line 1	Engraving	<input checked="" type="checkbox"/>		
27/07/23	07:28:09 AM	30	Warning - RobotArm	Electronics	Line 2	Engraving			
27/07/23	07:28:20 AM	28	Error - RobotArm	Electronics	Line 2	Painting			
27/07/23	07:28:31 AM	1	Warning - Conveyor	Electronics	Line 1	Packaging			
27/07/23	07:28:31 AM	2	Warning - RobotArm	Electronics	Line 1	Packaging			
27/07/23	07:28:31 AM	24	Error - RobotArm	Electronics	Line 2	Assembling			
27/07/23	07:28:42 AM	6	Warning - RobotArm	Electronics	Line 1	Assembling			
27/07/23	07:28:53 AM	19	Error - Conveyor	Electronics	Line 1	Inspection	<input checked="" type="checkbox"/>		
27/07/23	07:28:53 AM	18	Warning - Sensors	Electronics	Line 1	Inspection			
27/07/23	07:28:53 AM	12	Error - RobotArm	Electronics	Line 1	Painting			
27/07/23	07:28:53 AM	16	Error - RobotArm	Electronics	Line 1	Engraving			
27/07/23	07:28:53 AM	8	Error - RobotArm	Electronics	Line 1	Assembling			
27/07/23	07:28:53 AM	29	Warning - Conveyor	Electronics	Line 2	Engraving			

Hitlist

Number	Frequency	Message text	Machine	Line	Average +/-	Sum +/-	Sum +/+	Average +/+
36	6	Error - Sensors	Inspection	Line 2	14.400	1:12.000	2:23.000	28.600
20	5	Error - Sensors	Inspection	Line 1	12.200	1:01.000	1:50.000	27.500
32	5	Error - RobotArm	Engraving	Line 2	16.800	1:24.000	2:12.000	33.000
10	5	Warning - RobotArm	Painting	Line 1	16.800	1:24.000	2:23.000	35.750
17	4	Warning - Conveyor	Inspection	Line 1	24.000	1:36.000	2:01.000	40.333
30	4	Warning - RobotArm	Engraving	Line 2	21.333	1:04.000	2:01.000	40.333
28	4	Error - RobotArm	Painting	Line 2	32.333	1:37.000	2:12.000	44.000
24	4	Error - RobotArm	Assembling	Line 2	28.667	1:26.000	2:23.000	47.667
18	4	Warning - Sensors	Inspection	Line 1	23.750	1:35.000	2:23.000	47.667
31	4	Error - Conveyor	Engraving	Line 2	18.250	1:13.000	2:12.000	44.000
1	4	Warning - Conveyor	Packaging	Line 1	21.333	1:04.000	2:12.000	44.000
2	4	Warning - RobotArm	Packaging	Line 1	21.333	1:04.000	1:39.000	33.000
34	4	Warning - Sensors	Inspection	Line 2	25.000	1:15.000	2:34.000	51.333
19	3	Error - Conveyor	Inspection	Line 1	17.333	52.000	1:17.000	38.500

Complete Plant  
Line 1  
Line 2

Jump with the loop in alarm function directly into a pdf file on a specific page for a detailed operator guidance

SINAMICS G120C - List of faults and alarms

657 / 758 100%

4.2 List of faults and alarms

4.2 List of faults and alarms

Reason: SINAMICS G120C, reason: F1000, language: en, reason: SINAMICS G120C, reason: F1000, cause

**F1000 Internal software error**

Message class: Hardware/software error (\*)  
 Reaction: OFF2  
 Acknowledge: POWER ON  
 Cause: An internal software error has occurred.  
 Fault value (IDNR, integral hexadecimal): Only for internal Siemens troubleshooting.  
 Evaluate fault buffer (IDNR):

Remedy:

- Carry out a POWER ON (switch-off/switch-on) for all components.
- If required, check the data on the non-volatile memory (e.g. memory card).
- Upgrade firmware to later version.
- Contact Technical Support.
- Replace the Control Unit.

**F1001 FloatingPoint exception**

Message class: Hardware/software error (\*)  
 Reaction: OFF2  
 Acknowledge: POWER ON  
 Cause: An exception occurred for an operation with the FloatingPoint data type.  
 The error may be caused by the basic system or an OA application (e.g. FBLOCKS, DCC).  
 Fault value (IDNR, integral hexadecimal): Only for internal Siemens troubleshooting.  
 Note: Refer to 0999 for further information about this fault.  
 0999(0): Fault number  
 0999(1): Program number at the time when the exception occurred.  
 0999(2): Cause of the FloatingPoint exception.  
 Bit 0 = 1: Operation mode  
 Bit 1 = 1: Division by zero  
 Bit 2 = 1: Overflow  
 Bit 3 = 1: Underflow  
 Bit 4 = 1: Inaccessible result

Remedy:

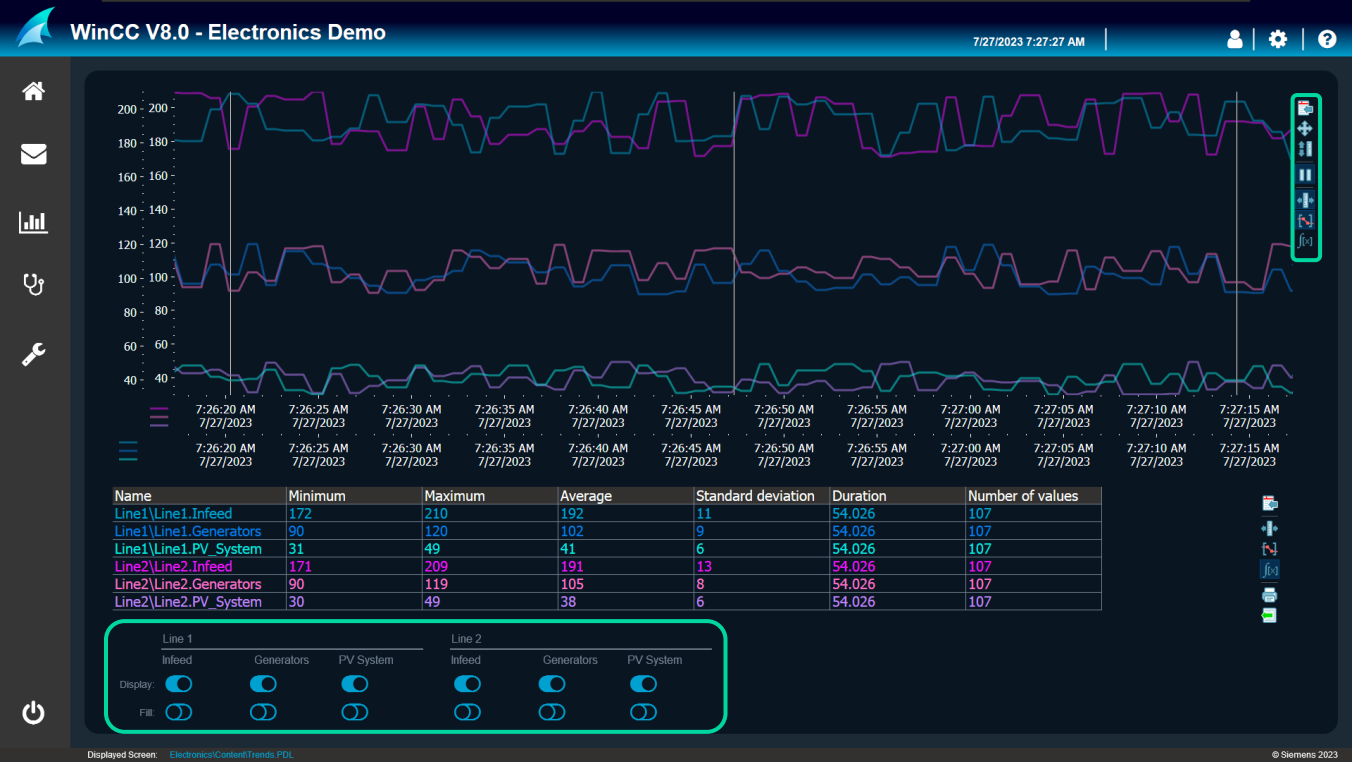
- Carry out a POWER ON (switch-off/switch-on) for all components.
- Check configuration and signals of the blocks in FBLOCKS.
- Check configuration and signals of DCC users.
- Upgrade firmware to later version.
- Contact Technical Support.

**F1002 Internal software error**

Message class: Hardware/software error (\*)  
 Reaction: OFF2

# How to explore the demo project?

## Trend screen



Try out different control functionalities like moving time and value axis to compare different trends or calculate a statistic so that the statistics are shown in the RulerControl

Select different tags which should be displayed in the trend control and change their appearance

# How to explore the demo project? Diagnostic screen

The screenshot shows the WinCC V8.0 - Electronics Demo diagnostic screen. The top bar displays the title and the date/time: 7/27/2023 10:48:18 AM. The main area is divided into several sections:

- Status:** Shows system information for 'ExamplePLC'.
- Counters:** A table listing various system metrics and their current values.
- Trend Chart:** A line graph showing 'CPU\_Utilization\_Total\_Load' over time. The y-axis ranges from 20 to 80. A red line represents the current load, which fluctuates between approximately 25% and 75%. A green horizontal line is drawn at 45%.
- Event Log:** A list of system events with columns for No., Date, Time, and Event. The events include power on/off, mode changes, and communication status.
- RT Drag & Drop:** A text box at the bottom right of the trend chart area says: "Use RT Drag & Drop From IO fields to a trend control to create trends in Runtime".

You can simulate a PLC to test the Channel Diagnosis and SysDiag Control. Therefore, drag and drop the folder "<ProjectPath>\00\_PLC\ExamplePLC\_MMC" into PLCSIM.

This screenshot shows a Windows File Explorer window and the PLCSIM control panel. The File Explorer window is open to the path: ElectronicsDemoHD > 00\_PLC. It shows a folder named 'ExamplePLC\_MMC' and two files: 'ExamplePLC' (340 KB) and 'Export\_ExamplePLC' (652 KB). The PLCSIM control panel is open to the 'S7-PLCSIM Advanced V5.0' window. It shows the 'Online Access' section with 'PLCSIM' selected. The 'Virtual Time Scaling' is set to 1. The 'Start Virtual S7-1500 PLC' section shows '1 Active PLC Instance(s)' and 'ExamplePLC\_MM / 192.168.0.1'.

# How to explore the demo project?

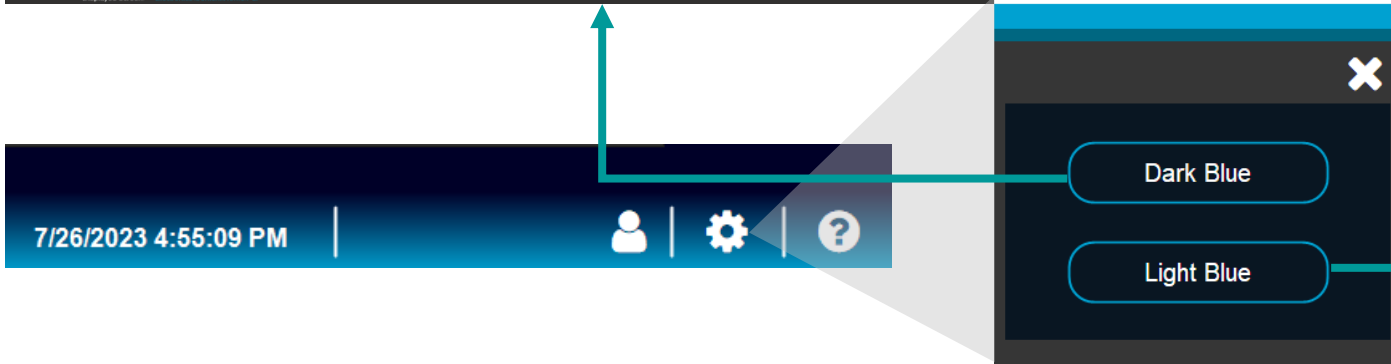
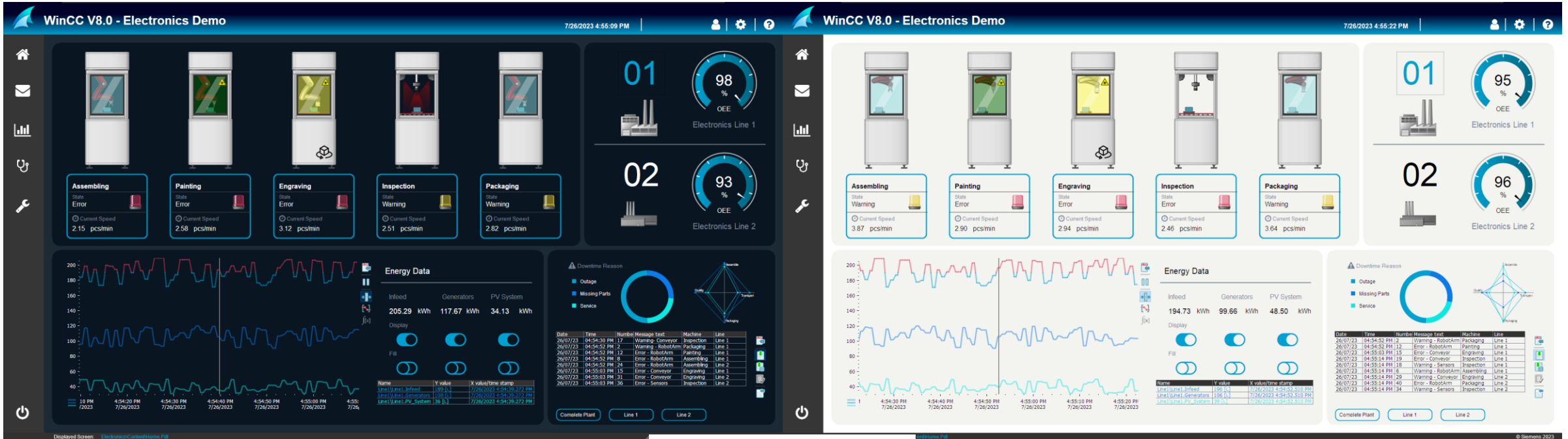
## Parameterization screen

Time	Number	Message text	Comments	Computer Name	User name
07:25:26 AM	1000205	WCCRT-WINCCV80:Connection System connected		WINCCV80	
07:26:08 AM	1000304	WCCRT::Tag simulation Simulation started.			
08:01:39 AM	1900002	ESIG: Electronic signature of user [ID:11] SIEMENS canceled.		WINCCV80	SIEMENS
08:03:16 AM	1008003	USERT-WINCCV80-Manual login		WINCCV80	siemens
08:03:47 AM	12508141	WorkpieceMode: siemens new=Automatic old=Manual		WINCCV80	siemens
08:03:49 AM	12508141	WorkpieceMode: siemens new=Manual old=Automatic		WINCCV80	siemens
08:04:00 AM	12508141	ActualPositionVertical: siemens new=20 old=0		WINCCV80	siemens
08:04:04 AM	12508141	ActualPositionHorizontal: siemens new=10 old=50		WINCCV80	siemens
08:04:12 AM	1900000	ESIG: Electronic signature of user [ID:11] SIEMENS accepted.		WINCCV80	SIEMENS

Time	Number	Message text	Comments	Computer Name	User name
07:25:26 AM	1000205	WCCRT-WINCCV80:Connection System connected		WINCCV80	
07:26:08 AM	1000304	WCCRT::Tag simulation Simulation started.			
08:01:39 AM	1900002	ESIG: Electronic signature of user [ID:11] SIEMENS canceled.		WINCCV80	SIEMENS
08:03:16 AM	1008003	USERT-WINCCV80-Manual login		WINCCV80	siemens
08:03:47 AM	12508141	WorkpieceMode: siemens new=Automatic old=Manual		WINCCV80	siemens
08:03:49 AM	12508141	WorkpieceMode: siemens new=Manual old=Automatic		WINCCV80	siemens
08:04:00 AM	12508141	ActualPositionVertical: siemens new=20 old=0		WINCCV80	siemens
08:04:04 AM	12508141	ActualPositionHorizontal: siemens new=10 old=50		WINCCV80	siemens
08:04:12 AM	1900000	ESIG: Electronic signature of user [ID:11] SIEMENS accepted.		WINCCV80	SIEMENS

# How to explore the demo project?

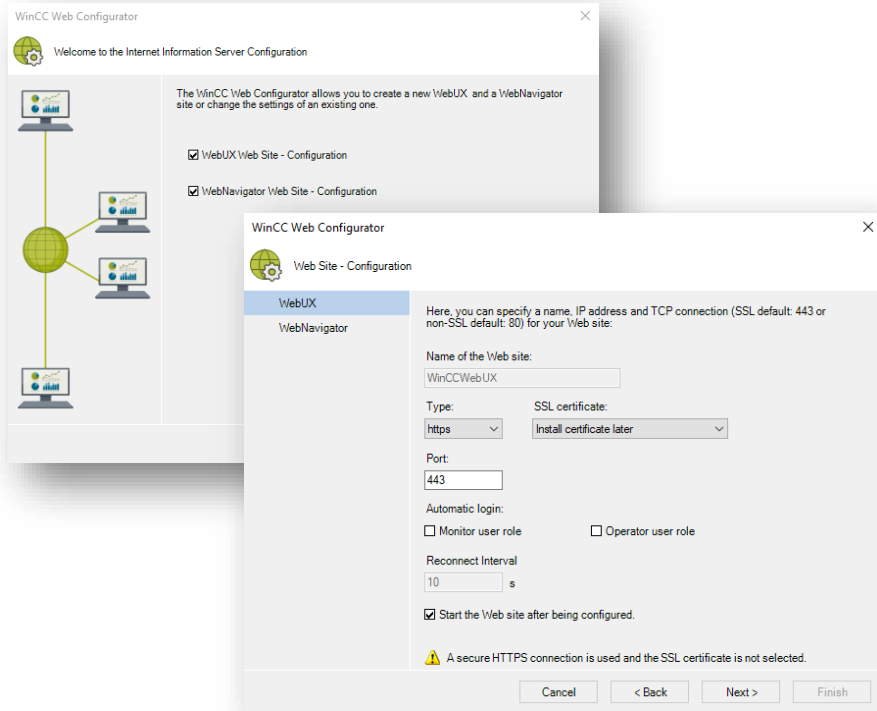
## Design change in Runtime



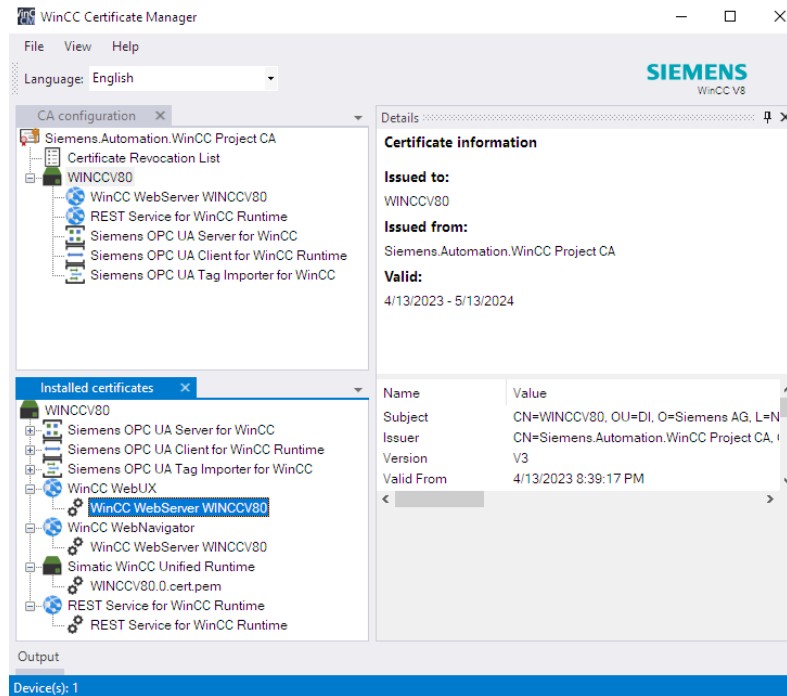
# How to explore the demo project? WebUX - Preparation



## WinCC Web Configurator



## WinCC Certificate Manager

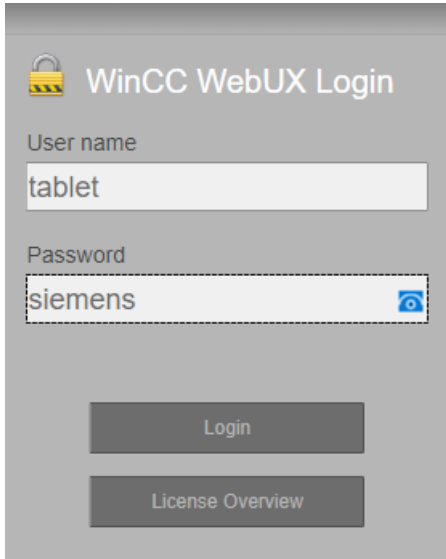


To set up the configuration for WebUX you can use the new “WinCC Web Configurator” together with the new “WinCC Certificate Manager” of WinCC V8.0.

A detailed description how to use the tools can be found in the links which lead to the WinCC V8.0 Information System.

# How to explore the demo project?

## WebUX - Operation



WinCC WebUX Login

User name  
tablet

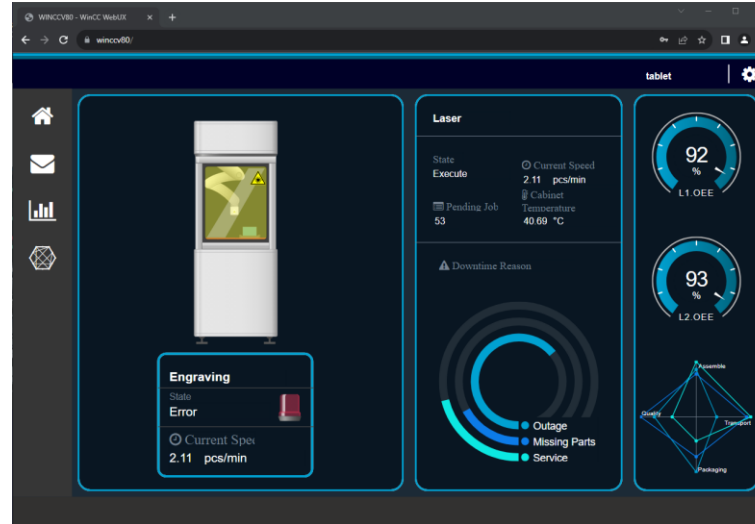
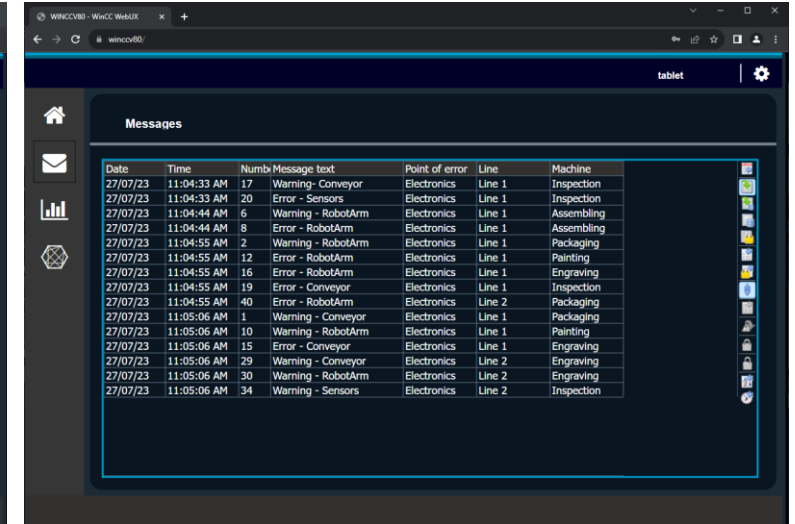
Password  
siemens

Login

License Overview

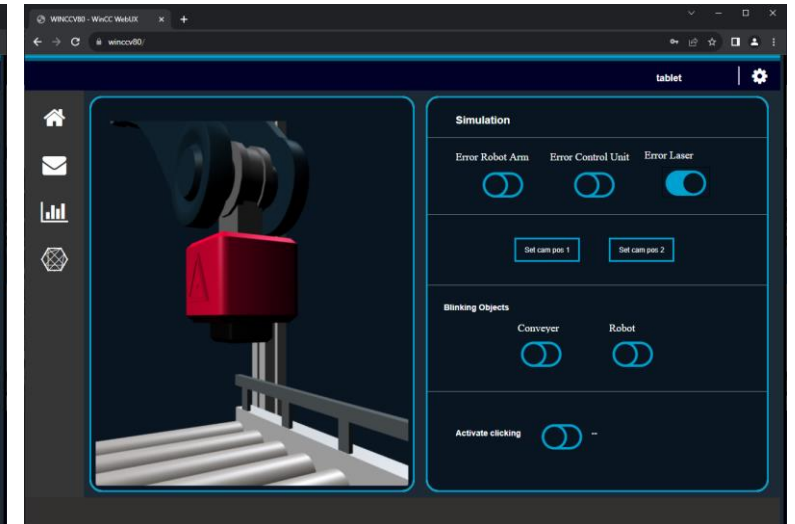
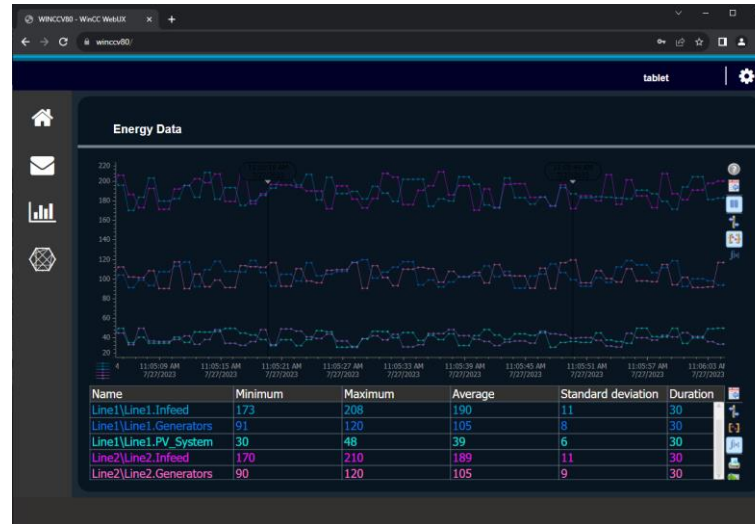
You can explore the demo project also with WinCC/WebUX.

Use therefore the user credentials (tablet/siemens) to explore the project in a resolution which is optimized to be displayed on a tablet.

WinCC WebUX Dashboard - Messages section

Date	Time	Numb	Message text	Point of error	Line	Machine
27/07/23	11:04:33 AM	17	Warning - Conveyor	Electronics	Line 1	Inspection
27/07/23	11:04:33 AM	20	Error - Sensors	Electronics	Line 1	Inspection
27/07/23	11:04:44 AM	6	Warning - RobotArm	Electronics	Line 1	Assembling
27/07/23	11:04:44 AM	8	Error - RobotArm	Electronics	Line 1	Assembling
27/07/23	11:04:55 AM	2	Warning - RobotArm	Electronics	Line 1	Packaging
27/07/23	11:04:55 AM	12	Error - RobotArm	Electronics	Line 1	Painting
27/07/23	11:04:55 AM	16	Error - RobotArm	Electronics	Line 1	Engraving
27/07/23	11:04:55 AM	19	Error - Conveyor	Electronics	Line 1	Inspection
27/07/23	11:04:55 AM	40	Error - RobotArm	Electronics	Line 2	Packaging
27/07/23	11:05:06 AM	1	Warning - Conveyor	Electronics	Line 1	Packaging
27/07/23	11:05:06 AM	10	Warning - RobotArm	Electronics	Line 1	Painting
27/07/23	11:05:06 AM	15	Error - Conveyor	Electronics	Line 1	Engraving
27/07/23	11:05:06 AM	29	Warning - Conveyor	Electronics	Line 2	Engraving
27/07/23	11:05:06 AM	30	Warning - RobotArm	Electronics	Line 2	Engraving
27/07/23	11:05:06 AM	34	Warning - Sensors	Electronics	Line 2	Inspection



# Disclaimer

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"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)" and "This product includes cryptographic software written by Eric Young ([eay@cryptsoft.com](mailto:eay@cryptsoft.com))"

"Contains portions or was derived from the RSA Data Security, Inc. MD5 Message-Digest Algorithm"