

The background of the slide features a dark blue field filled with numerous small, glowing teal particles of varying sizes, creating a dynamic, starry effect. A vertical teal bar is positioned on the left side of the slide, partially overlapping the main title text.

Novinky Simatic Technology SMG, Simotion

Siemens Drives Days 2022, Dolní Morava

SIEMENS

| Kdo prezentuje

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Engineered
with TIA Portal

SIMATIC S7-1500 T-CPU

Outlook TIA v18

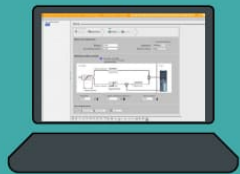
[siemens.com/simatic-technology](https://www.siemens.com/simatic-technology)

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TIA Portal V18 Outlook Highlights formachinebuildingOEMs

PRELIMINARY

Motion Enhancements



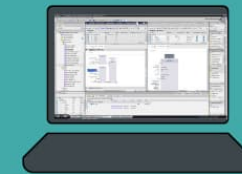
Velocity Gearing, Extensions for superimposed motion and camming

SW Controller T/TF



New: SIMATIC Software Controller T/TF for high-end Motion Control

Advanced Programing



Unit concept with Namespaces, Failsafe program in a SW-Unit TO references (1st step)

5D / 6D Kinematics



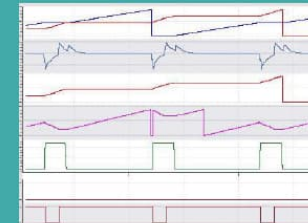
Kinematic functions for up to 6 interpolating axes

S7-1500T/TF News



New: SIMATIC S7-1514 SP T/TF Performance & Memory increase for S7-1511T/TF and S7-1515T/TF Drive Controller Enhancements

Trace



Long-term trace with TIA Portal (1st step) Fast Fourier Transformation

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All about Motion control

All about Motion control
Contains a clear summary of the content on this topic in
Siemens Industry Online Support (SIOS).

<https://support.industry.siemens.com/cs/ww/en/view/109803969>





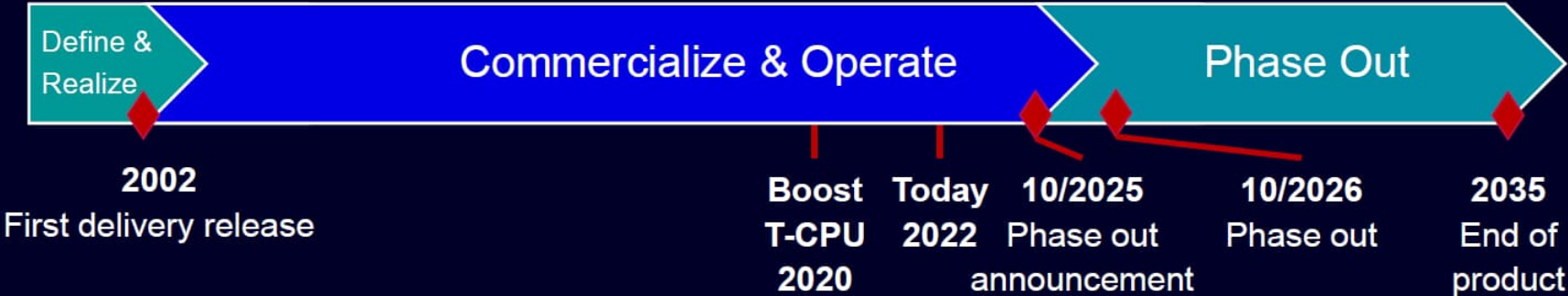
Engineered
with TIA Portal

SIMOTION ???

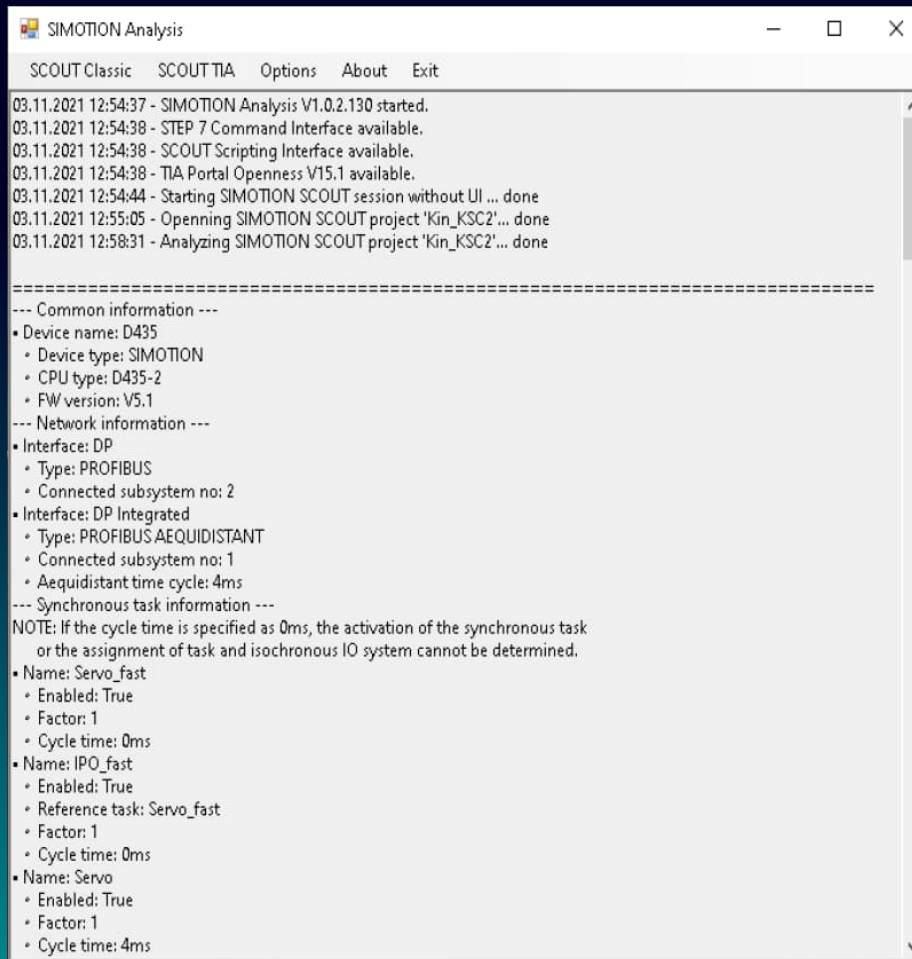
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SIMOTION D roadmap still valid



SIMOTION Analysis Tool



```
SIMOTION Analysis
SCOUT Classic SCOUT TIA Options About Exit
03.11.2021 12:54:37 - SIMOTION Analysis V1.0.2.130 started.
03.11.2021 12:54:38 - STEP 7 Command Interface available.
03.11.2021 12:54:38 - SCOUT Scripting Interface available.
03.11.2021 12:54:38 - TIA Portal Openness V15.1 available.
03.11.2021 12:54:44 - Starting SIMOTION SCOUT session without UI ... done
03.11.2021 12:55:05 - Opening SIMOTION SCOUT project 'Kin_KSC2'... done
03.11.2021 12:58:31 - Analyzing SIMOTION SCOUT project 'Kin_KSC2'... done

=====
--- Common information ---
• Device name: D435
  • Device type: SIMOTION
  • CPU type: D435-2
  • FW version: V5.1
--- Network information ---
• Interface: DP
  • Type: PROFIBUS
  • Connected subsystem no: 2
• Interface: DP Integrated
  • Type: PROFIBUS AEQUIDISTANT
  • Connected subsystem no: 1
  • Aequidistant time cycle: 4ms
--- Synchronous task information ---
NOTE: If the cycle time is specified as 0ms, the activation of the synchronous task
      or the assignment of task and isochronous IO system cannot be determined.
• Name: Servo_fast
  • Enabled: True
  • Factor: 1
  • Cycle time: 0ms
• Name: IPO_fast
  • Enabled: True
  • Reference task: Servo_fast
  • Factor: 1
  • Cycle time: 0ms
• Name: Servo
  • Enabled: True
  • Factor: 1
  • Cycle time: 4ms
```

Analysis SIMOTION SCOUT and SCOUT TIA projects
Generates a textual report about the engineering details of
the SIMOTION devices contained in the project.
These are e.g.

- CPU type and version

- Interfaces and clock cycles

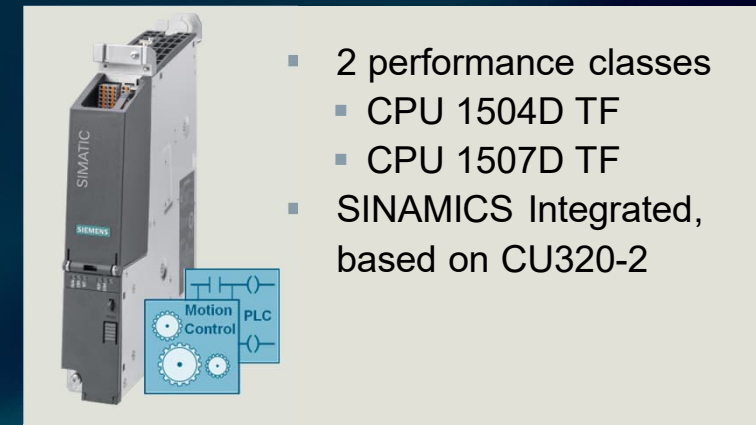
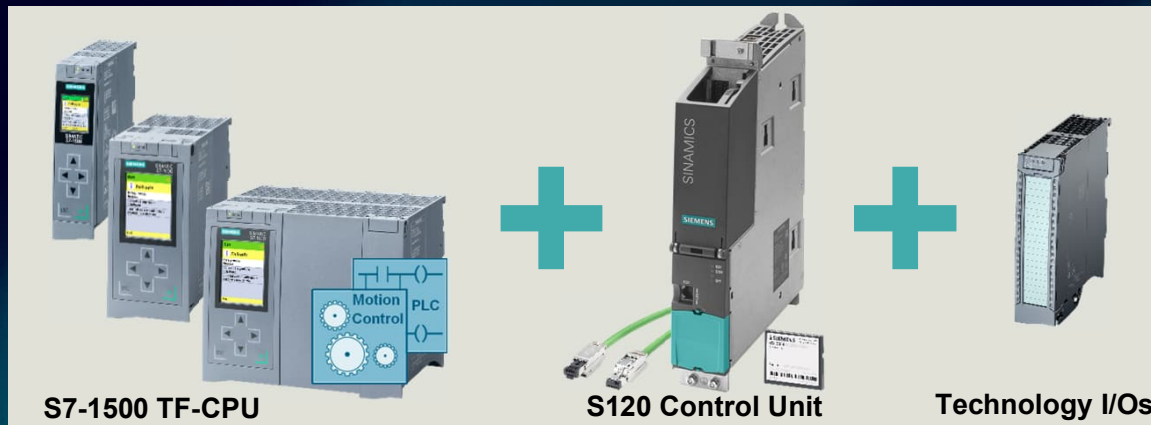
- Tasks that have been used

- Quantity structure of the TOs (TO type, cycle) and drive
connection

- Unit and library information with name, programming
language and included POEs

SIMATIC Drive Controller

The attractive solution, optimized for production machines



Ultra-Compact – Ideal for mechanical engineering

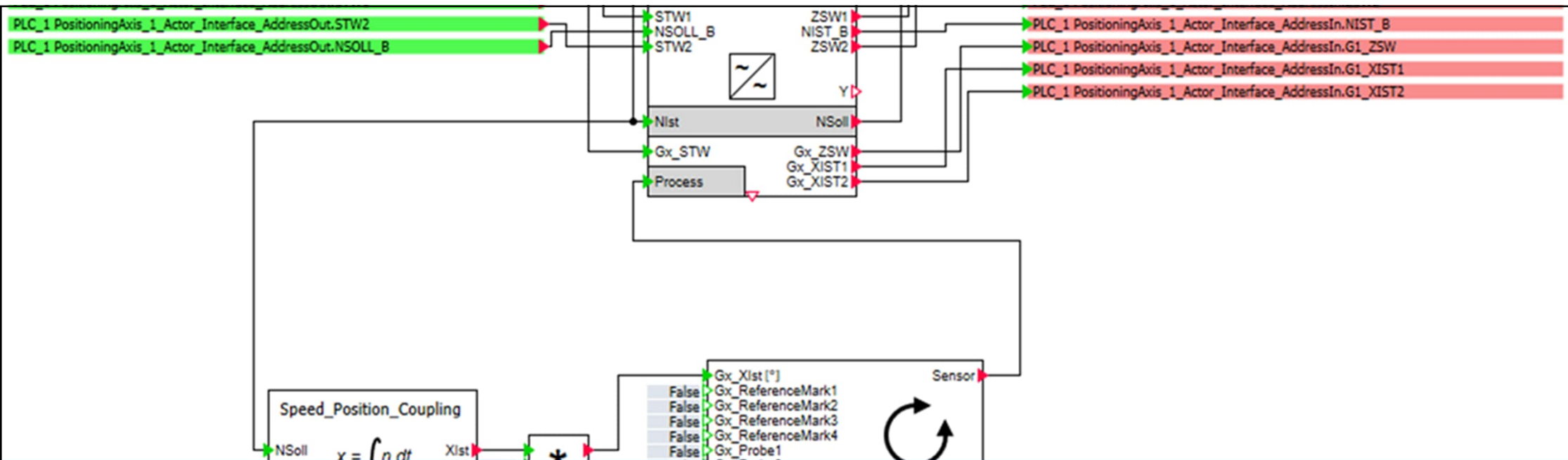
- SIMATIC S7-1500 controller, SINAMICS S120 Control Unit and technology I/Os in one space-saving device
- Small compact design

Easy handling

- Easy scalability: powerful interfaces, uniform across all performance classes
- Central data storage (one SIMATIC Memory Card) for controller and drive
- Less wiring and installation costs
- Efficient engineering in the TIA portal with SIMATIC STEP 7 and SINAMICS Startdrive

Optimized for production machines

- Powerful for demanding applications
- Well equipped with interfaces, technology I/Os and memory
- Fail-safe CPU and drive-integrated safety functions for personal and machine safety
- High-speed outputs for ultra-short output delay times and highest switching accuracy, e.g. for output cams

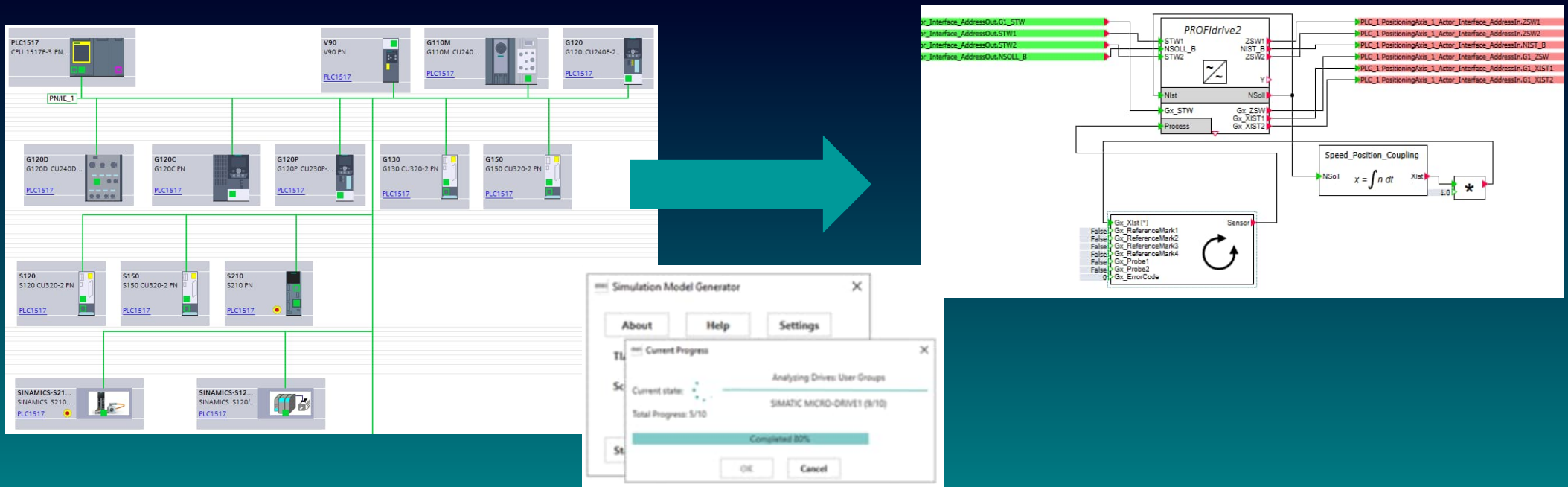


Simulation Model Generator

Verze 2, verze 3

Simulation Model Generator v2

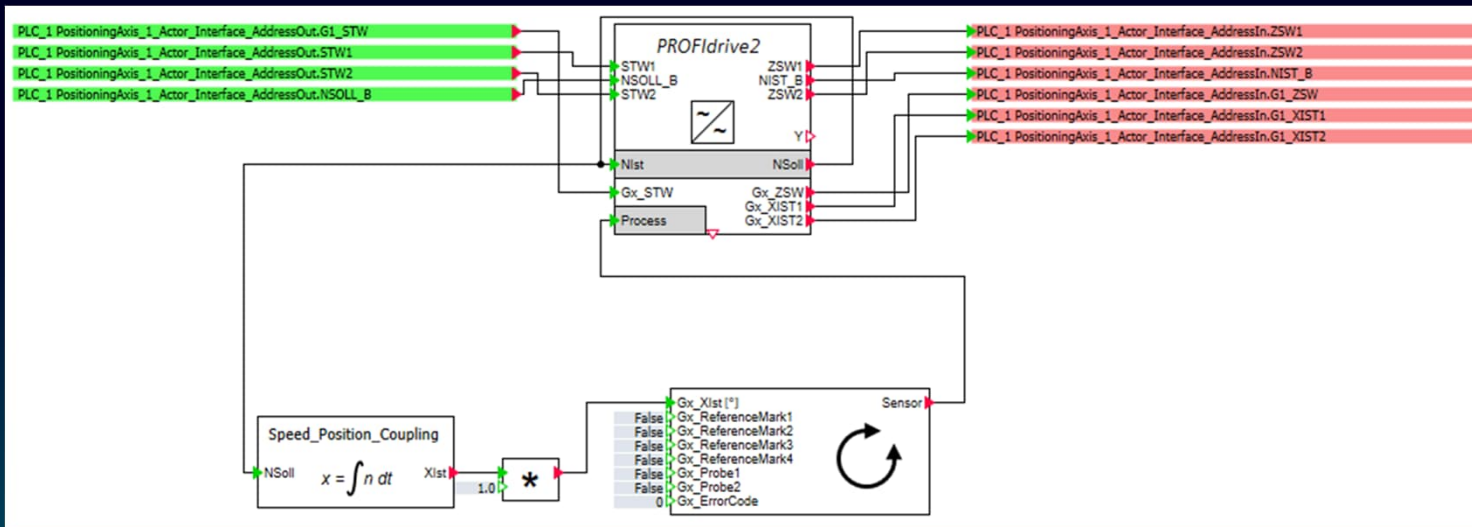
Doplněk TIA Portalu, který umožňuje uživateli automaticky vytvářet simulační modely pro SIMIT na základě konfigurace produktu TIA Portal. ([SIOS ID: 109780391](#))



Automatické vygenerování simulačního modelu s využitím knihovny SIMIT PROFdrive library (10.x)

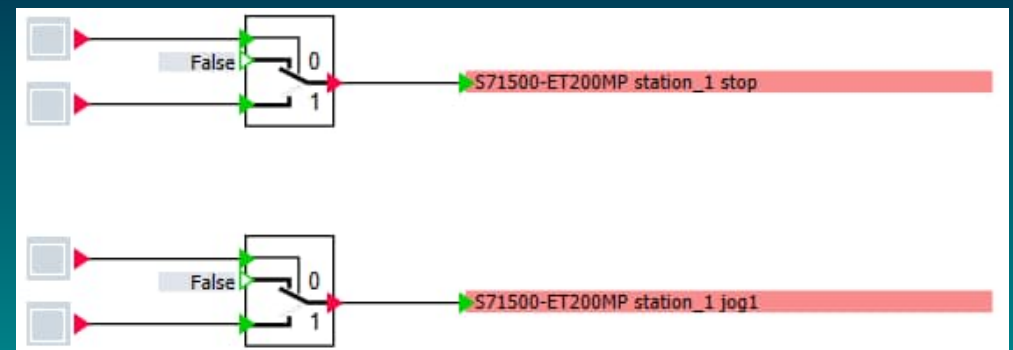
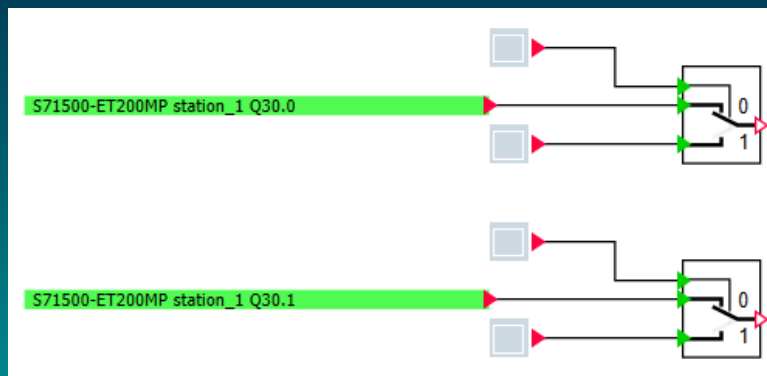
Simulation Model Generator

Vygenerováno automaticky z projektu v TIA portálu




SMG veze 3 pracuje obdobně jako verze 2, ale existuje jako EXE-program

Ukázka práce -> video



SIMATIC Machine Simulator Ordering

Software Package 	MLFB	Package contains	Typical use-case
SIMATIC Machine Simulator S	6ES7823-1HA04-0YA5 5135 €	SIMIT Engineering S V10.3 SIMATIC S7-PLCSIM Advanced V4.0	simple machine design
SIMATIC Machine Simulator M	6ES7823-1HA14-0YA5 10 541 €	SIMIT Engineering M V10.3 SIMATIC S7-PLCSIM Advanced V4.0	Medium-high complexity of machines
SIMIT Engineering M V11	6DL8913-0BL00-0AR5 8625 €	SIMIT Simulation Platform V11 SW Engineering M Floating License for 1 user	Medium-high complexity of machines
SIMATIC S7-PLCSIM Advanced	6ES7823-1FA03-0YA5 3033 €	SIMATIC S7-PLCSIM Advanced V4.0, Floating License	

I Díky za pozornost

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