SIEMENS
Ingenuity for life

Virtual Controller

Software platform for the emulation of SIMATIC controllers

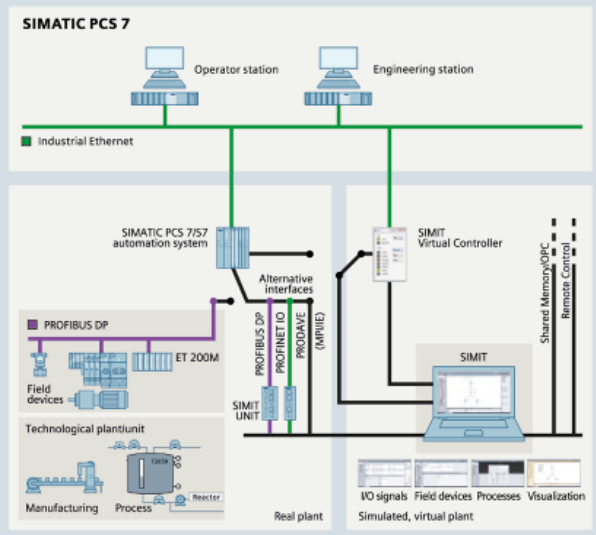
The continuously increasing pressure to deliver automation projects on time while meeting high profitability targets requires an optimized engineering work flow as well as the shortest commissioning and start-up times possible.

Using SIMIT Simulation Platform, you can simulate the complete behavior of your plant, including the automation system, to improve engineering efficiency and shorten time to market. With SIMIT, commissioning and operator training can be performed virtually in a realistic, yet safe environment. This leads to early detection and correction of automation errors and safer, more efficient production by a well trained operations team. To reduce the space required for a simulation system, the automation program can be loaded into and run in a Virtual Controller, an emulation of the physical controller installed in the plant.

In this configuration, referred to as software-in-the-loop, no hardware is necessary to test the automation software except the computer where the software is executed. The automation program can be downloaded directly to the Virtual Controller without making any changes. SIMIT then simulates the I/O signals of the controllers as well as the behavior of the field devices and process equipment.

Your advantages

- High quality control programs due to early detection and correction of errors
- Reduced commissioning time and fewer risks during start up
- Minimal impact to production while implementing changes
- Plant knowledge is passed down from experienced to new operators
- New operators can be trained quickly in a realistic training environment
- Improved safety for plant personnel and equipment



The Virtual Controller provides additional benefits when used in conjunction with SIMIT for operator training. The Virtual Time Management feature allows users to speed up and slow down the simulation to make more efficient use of training time. Users can also create Snapshots of their simulation which save the controller and simulation states. Snapshots can then be loaded at a later time to begin a training session from a specific point in the process.

Virtual Controller Facts and Features

- Emulates the behavior of S7-300, S7-400, and S7-410 controllers
- Runs independent of the engineering system
- Up to 32 virtual controller instances per simulation station
- Distribution among several PCs is possible
- Virtual Time Management speeds up and slows down simulation time
- Snapshots store specific controller and simulation states for future use
- Fully integrated in SIMIT, licensed through the SIMIT dongle
- Coupling is configured and run through the SIMIT interface
- Communication between virtual controllers as well as with external partners is possible
- Communication with physical controllers for hybrid software-and-hardware- in-the-loop scenarios is possible

Ordering data

- SIMIT V10.1 Virtual Controller - Full
  1 Controller
  6DL8913-0JK10-0AB5

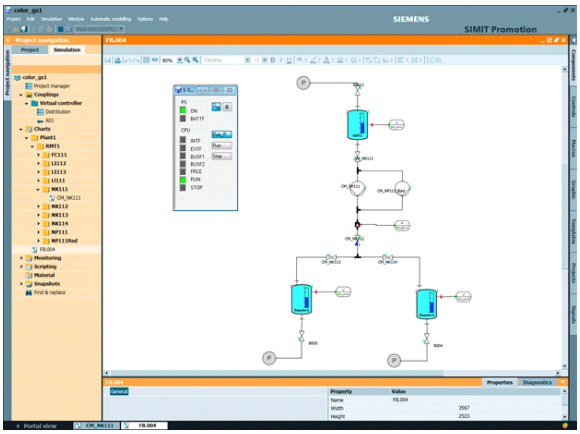
- SIMIT V10.1 Virtual Controller - 300
  1 Controller
  6DL8913-0NK10-0AB5

- SIMIT V10.1 Virtual Controller - Entry / SIS
  1 Controller
  6DL8913-0QK10-0AB5

- SIMIT V10.1 Virtual Controller - Full
  5 Controllers
  6DL8913-0KK10-0AB5

- SIMIT V10.1 Virtual Controller - 300
  5 Controllers
  6DL8913-0PK10-0AB5

- SIMIT V10.1 Virtual Controller - Entry / SIS
  5 Controllers
  6DL8913-0RK10-0AB5



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