Simulation & Scheduling

Simio



Simio - Seamlessly combining simulation and APS

Model-based planning and decision-making with a single platform

Simio is a modern simulation and planning platform that helps companies make informed decisions based on realistic digital models.

The software combines powerful event-driven simulation with advanced production planning and control (APS – Advanced Planning and Scheduling).

Simio enables the end-to-end mapping, analysis and optimisation of processes – from strategic planning to operational control.



Areas of application and benefits

Simio is used in a wide range of areas – especially where complex processes, resource constraints and uncertainties make planning difficult:

- Production systems with high variant diversity
- Intralogistics and material flow
- Supply chain and manufacturing networks
- Staff scheduling
- Planning and control during ongoing operations (APS)



Example for a Dashboard in Simio

Typical questions:

- How does a new order affect throughput times and resources?
- Which production sequence minimises bottlenecks?
- What happens in the event of system malfunctions or rush orders?
- How can capacities be optimally utilised in the short and medium term?

Special features of Simio

- Simulation and APS in one tool: Consistent use of Simio from the planning model to real-time decisions
- Object-oriented modelling with graphical user interface:
 Quick model creation thanks to reusable objects no programming required
- Real-time planning with risk-based scheduling:
 taking uncertainties and dynamic disruptions in the production process into account
- Intelligent integration into existing IT landscapes:
 Open interfaces (database, API, Excel, OPC UA, and much more)
- Available in the cloud and on-premise: flexible infrastructure depending on security requirements

From simulation to dynamic production planning

Simio allows real processes to be mapped as digital twins. The simulation is not only used for analysis, but also forms the basis for data-driven production and order planning.

Advanced Planning & Scheduling (APS) with Simio offers:

- Realistic, simulation-based planning results
- Quick response to changes and disruptions
- Automated decision support
- Improved capacity utilisation and delivery reliability



Example for a APS Gantt-Chart in Simio

Simio thus becomes the central decision-making platform between strategy, planning and operations.



SimPlan AG has been a service provider for the simulation of operational processes since 1992 and, with more than 120 employees, is now one of Germany's leading providers of simulation services and tools.

Services related to

Simio

We are a cross-industry full-service provider for simulation, digital twins and virtual commissioning, supporting companies in all industries with extensive expertise in optimising their business processes.

- Detailed knowledge of logistics and production gained from over 30 years of project work
 - → Development and use of standards
 - → Continuous development of simulation topics through research and development
- Use of the software in simulation projects
- Licence distribution and maintenance
- Training courses, workshops, webinars (https://www.simplan.de/en/trainings/)
- Development of application- and industry-specific modular kits
- Development of supplementary tools,
 e.g. SimAssist for displaying and presenting
 the results from experimental scenarios with
 Simio

Simio is manufactured by Simio LLC.

Please feel free to contact us

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