

SIEMENS
Ingenuity for life

Device Aggregation services - TIA Portal Openness



Your gateway to automation in the Digital Enterprise

Totally Integrated Automation Portal

[siemens.com/tia-portal](https://www.siemens.com/tia-portal)



Digital
Workflow



Integra
Engine

TIA Portal – more than an engineering framework

The Totally Integrated Automation Portal (TIA Portal) enables complete access to the entire digitalized automation, from digital planning and integrated engineering to transparent operation. As part of the Digital Enterprise Software Suite, it joins PLM and MES in rounding out the comprehensive offering from Siemens for companies on the path to Industrie 4.0, making it the perfect access to automation in the Digital Enterprise.

With TIA Portal and the possibilities offered by the new Version V14, machine manufacturers and system integrators as well as plant operators benefit from:

- shorter time to market thanks to innovative simulation tools, among other things
- increased plant productivity thanks to additional diagnostic and energy management functions
- greater flexibility thanks to coordinated teamwork



TIA Portal Version 14
is coming soon.

Open, virtual and connected

Digital workflow with TIA Portal

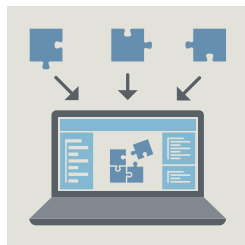
“The ability to simulate machines gives me security in design, security in sales and security in machine configuration.”

Rainer Feuchter,
CEO Optima Consumer GmbH



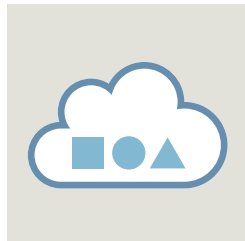
Flexible simulation

By simulating the entire installation, including the controller and HMI, and by evaluating it based on a virtual model, local commissioning time is reduced thanks to PLCSIM Advanced, the controller’s digital twin.



Open system

TIA Portal allows you to efficiently create your project using software generators, thus reducing the number of redundant workflows. With Teamcenter, you also merge the project versions from planning, engineering and design.



Cloud solution

You can connect to the cloud to increase flexibility in your everyday work. The new TIA Portal Cloud Connector lets you access the system controller from your private cloud. No installation on the engineering workstation is necessary. MindSphere – Siemens Cloud for Industry can be used for additional digital services.

Shorten your time to market

Integrated engineering with TIA Portal

“You work with a team-enabled, fully integrated tool landscape with access to a complete portfolio of necessary control and drive components.”

Andreas Martin Linck,
Head of E-Technik



One for all

With TIA Portal, you integrate all important components of your automation project: safety, security, control, HMI, drives, distributed I/O and now even motion control and power distribution. With only a few multiple entries, a shared database and a standard interface across all tasks, your engineering time is reduced.



Coordinated teamwork

With TIA Portal Multiuser, multiple people can access a project at the same time. Synchronization is automatic. You can flexibly process tasks and complete them simultaneously – both device-oriented and task-based.



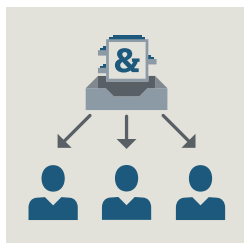
Reliably avoid errors

You reduce the amount of extra work by reliably identifying errors and quickly correcting them with numerous programming code templates. Many new and efficient diagnostic tools as well as cyclical system test recordings provide help in analyzing sporadic errors during commissioning.



Generation instead of programming

Develop your solutions even faster thanks to automatic generation of HMI visualization with SiVarc, fast and easy machine and plant diagnostic, efficient energy management system implementation as well as automatic program creation using software generators that are linked via the TIA Portal Openness interface.



Handle know-how safely and efficiently

Thanks to the comprehensive library concept, you can easily reuse all project objects and thus avoid extra work. Safeguard your specialist knowledge over the long term with know-how-protected blocks, and easily further develop existing systems and projects in TIA Portal.

Increase your productivity

Transparent operation with TIA Portal

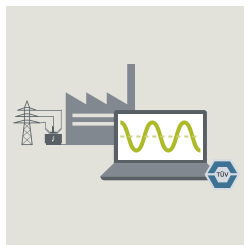
“A standard engineering platform is desirable for engineering energy efficiency systems: consistently from the device to the configuration to data storage, all the way to the customer’s desk.”

Stephan Vömel,
Proprietor and managing
director, Quintec
Automatisierungs- und
Datentechnik GmbH



Information management

The greatest possible transparency through consistent data storage in production lets you make the right decisions quickly. You can prepare data according to specific target groups with the SIMATIC Information Server locally or on a mobile device when you are in the field. The system supports WinCC/WebUX as well as WebNavigator for remote access and control.



Energy management

The integrated SIMATIC Energy Suite automation solution and the universally connected Energy Manager PRO energy management system help you get a handle on your energy costs at all times. The Energy Suite makes energy data record easy and efficient and gives you the transparency you need to save energy according to ISO 50001.



Diagnosis management

Efficient and integrated diagnosis of process errors reduce production downtimes and increase the availability of your machines and plants. The standardized ProDiag machine and plant diagnostic function gives you efficient analyses of process errors. Integrated system diagnosis helps you quickly identify errors in the automation system across all system components.



Open communication

Connecting automation and IT level by means of open communication makes it easy to integrate higher-level MES/ERP solutions. The standardized OPC UA communication protocol lets you forward production data to systems of other manufacturers. IndustrialData-Bridge is used for bidirectional, cross-system communication via standard interfaces, without any programming work.



ted
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Transparent
Operation

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Subject to change without prior notice

Article No.: DFFA-B10161-00-7600

Dispo 21507

WS 0416 2.0

Printed in Germany

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