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Ingenuity for life



OPC UA

The open interface
for simple network integration

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OPC UA – an important standard on the way to digitalization

Over the past few years, OPC UA has seen a steep rise – for good reasons: It is platform-neutral, provides proven security mechanisms and powerful performance, enables seamless communication with 3rd-party applications, and can flexibly be scaled to your every need. With its semantic capabilities, it supports intelligent and autonomous systems. This is why Siemens builds on OPC UA as „the“ open interface from the controller level up to the cloud. But is this all it does?

Benefits

- Vertical communication
- Open interface
- Interoperability across all levels
- 3rd-party connection

Features

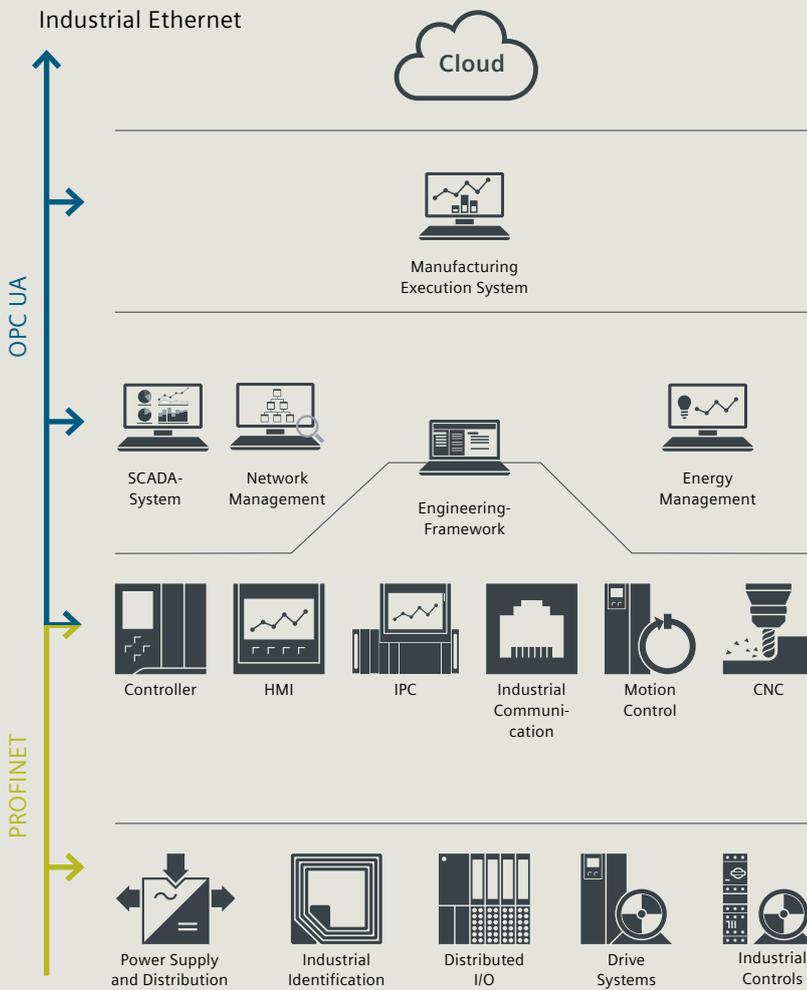
- + Vendor & platform independent**
Direct implementation in sensors, controllers, HMI and ERP-systems on any operation system
- + Security concept**
Combining methods of authentication, signing of messages and encryption
- + Consistent & scalable**
Direct connection of devices over all communication levels
- + Unambiguous interpretation of data**
Through integrated semantic description of data

Conclusion

OPC UA and PROFINET

Open standards for communication concepts within digitalization.

Communication is becoming the crucial element of automation solutions. With OPC UA and PROFINET combined, manufacturing companies can benefit from even greater added value.



With its open interfacing capabilities, OPC UA plays an important role throughout Siemens' Totally Integrated Automation (TIA) portfolio

Siemens products offering OPC UA

- SIMATIC IT

- PCS 7
- SIMATIC NET Software
- SINEMA Server
- WinCC OA RT
- WinCC V7 RT
- WinCC Professional RT
- Telecontrol Server Basic
- SIMATIC Energy Manager PRO

- SIMATIC S7-1500
- SIMATIC S7-400 with CP 443-1 OPC UA
- Comfort Panel
- WinCC Advanced RT
- SIMATIC IPC DiagMonitor V5.0
- MindConnect Nano
- MindConnect IoT2000
- SIMATIC IOT2000
- SIMOTION
- SINUMERIK

- SIMATIC RF600
- SIMOCODE pro PN
- Softstarter SIRIUS 3RW44
- SITOP PSU8600
- SITOP UPS1600

OPC UA – the open interface for vertical communication

In industrial communication, requirements are increasing rapidly – from standardization to security to smart data capabilities. OPC UA has established itself as a standard for open and vendor-independent communication from controllers to the ERP level and to the cloud. With Siemens, you can tap the full potential of OPC UA – and even more: The smooth combination with PROFINET makes your investment future-proof.

OPC UA and PROFINET – the perfect complement

In a symbiosis with PROFINET, OPC UA makes an even better fit. Both standards are based on standard Ethernet and use the same network. Combining their individual strengths, both standards interact to ensure seamless vertical communication throughout the automation and the IT world.

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