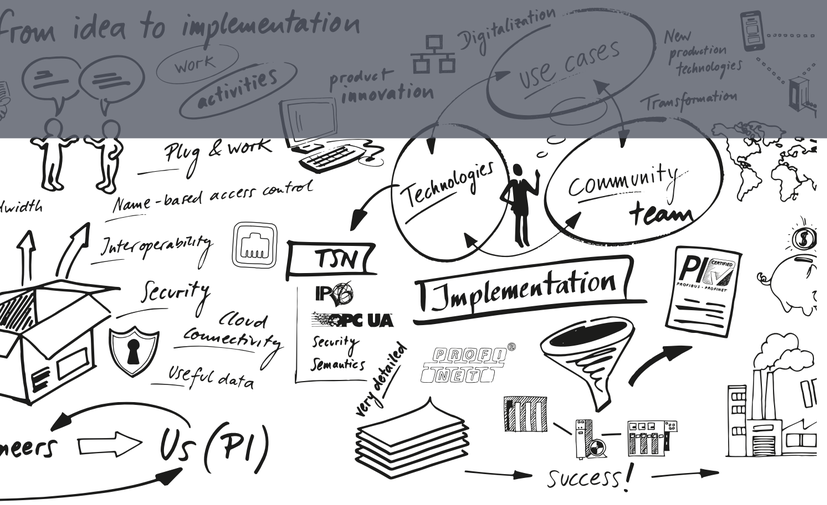


MANY Possibilities – ONE Way

PROFINET – The Backbone of Industrie 4.0

- Industrie 4.0 and IOT

  With its integration for TCP/IP and its standard Ethernet-based technology, PROFINET provides a future-proof architecture that forms the foundation of Industrie 4.0

- PROFINET@TSN

  With TSN (time-sensitive networking), PROFINET's existing RT/IRT is being expanded by a new IEEE-standardized, real-time capable base.
  The established PROFINET user perspective of data, parameterization, diagnosis, and profiles – such as e.g. PROFIsafe and PROFIdrive – can continue to be used without change

- OPC UA integration

  Thanks to their open system structure, OPC UA and PROFINET can use the same network and provide the perfect combination for Industrie 4.0 use cases:
  - *Delivery of asset management and diagnosis information*
  - *Controller-to-controller communication (also fail-safe)*
  - *Vertical communication with MES and cloud connection for big data services*

PROFINET – Our services

- PI – A strong community

  The close collaboration between users and manufacturers guarantees customer benefit and technological advancement. All participants receive support by means of documentation, guidelines, workshops and training courses

- Reliable standard – Equipped for the future

  Openness for TCP/IP traffic was one of PROFINET's design principles from the very beginning. This is now paying off in the age of Industry 4.0, making PROFINET perfectly equipped for tomorrow's challenges

- Certified quality and diversity of devices

  A large selection of devices representing many different manufacturers is the key to successfully and sustainably penetrating the market.
  Thanks to the sophisticated certification of PROFINET devices, interoperability is guaranteed between all devices

More about PROFINET:
www.profinet.com/technology/profinet

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The Leading Industrial Ethernet Standard



PROFINET for Automation

PROFIBUS • PROFINET

The Leading Standard for Industrial Communication

PROFINET – Reliable and Future-Proof



A Solution for Highest Demands



Real-time, IT and Safety via a Single Cable



Wide Range of Products Available

Internationally Leading

- User benefit drives standardization

  New standards and additional support services are developed in close coordination with end users

- Consistent solutions for the entire system

  PI technologies offer a complete solution, from plug to protocols to security

- Compatible and innovative

  The continual advancement of standards is based on technologies and future-oriented innovations

- Local support and global coordination

  With Regional PI Associations (RPAs), PROFIBUS & PROFINET International (PI) provides on-site support in both development and marketing

Technical Highlights

- Openness means access to data

  TCP/IP communication parallel to I/O real-time communication is the key to easy access to necessary information

- Flexible adaptation to new challenges

  Topologies and parameters can be adapted to fit each new system or machine

- Comprehensive diagnosis for quick problem resolution

  The unique diagnostic possibilities of the network and devices make it possible to localize errors quickly and to describe them clearly

- Safety from the market leader

  The functional safety of the machine or system is established and tested with PROFIsafe

Global Standard

- Trendsetting with node numbers

  Many manufacturers with different devices are expanding the installed base daily

- Interoperability through clear standards and certification

  The seamless compatibility of a variety of devices is ensured through suitable quality assurance

- Easy development of devices through diverse technological support

  Device developers have access to a large selection of integration possibilities and services

PROFINET®