PROFINET Troubleshooting & Maintenance

The PROFINET Troubleshooting & Maintenance training course is fully concentrated on the technicians who install and maintain installations with this Ethernet based network technology. Ethernet is difficult to master due to the many abbreviations, IT concepts and terminology. Even the network components work against the grain compared to regular field busses. Measuring and troubleshooting are a considerable challenge that can result in unacceptable downtime.

Details

- **Training methodology:** Theory + practice
- **Duration:** 2 Days (10 AM - 5 PM)
- **Price:** € 750.- per person, subjected to changes (Only valid for training in Wateringen)

Description

This training offers a complete set of knowledge that focusses entirely on practice to fill in the missing links of modern Ethernet networks using simple methods. The goal is to professionalize technicians in dealing with Industrial Ethernet and PROFINET. The participant learns how analyze and solve a complex PROFINET breakdown using the necessary tools.

The curriculum is underpinned by theory about network components, cabling, shielding and grounding. By means of practical exercises on real networks, the participants will put theory into practice. At the end of the training, the participants are directly capable to maintain and solve issues in PROFINET installations. They will have a strong theoretical foundation and are able to handle the necessary measurement tools, like Netilities.

What is PROFINET?
PROFINET is an Industrial Ethernet standard for automation that includes plant-wide fieldbus communication, plant-to-office communication, and equipment-to-equipment integration. PROFINET can simultaneously handle standard TCP/IP and real-time transmissions at sub-millisecond speeds. Using proxy technology it easily connects to PROFIBUS; thus protecting the existing investments in plant equipment and networks.

Target audience

This workshop is intended for everybody who is responsible for PROFINET installations. For example:

- Installation companies
- Electrical engineers
- Cabinet builders
- Service technicians
- Application managers
- Suppliers
- Hard- and software-engineers

Topics

Theory

- Overview of PROFINET
- Basic principles of Industrial Ethernet en TCP/IP
- PROFINET cabling guidelines
- Grounding and shielding
- Network components (switch, router, proxy)
- PROFINET protocol
- Strategy of troubleshooting

Practice

- Assembling cables
- Measuring a cable using a cable tester
- Configure and commission a PROFINET network
- Network diagnose via a webserver of a switch
- Protocol analysis with Wireshark
- Network management with Netilities

Dates

Other Information

The participants will receive: *a course book, writing materials and a certificate of participation.*

It is recommended to bring a laptop or PC with a free USB port.

Lunch is included on all course days.