

Take the first step toward fieldbus automation in your plant.

The objective of these informative Webinars is to teach the basics of all types of Industrial Ethernet. Right from your desktop, now you can easily learn about this rapidly growing technology. Industrial Ethernet opens up numerous manufacturing automation applications that were previously impossible for conventional industrial networks. Industrial Ethernet is now suitable for standard and more advanced applications including deterministic logic control, high-speed performance requirements and harsh environments.

Industrial Ethernet also holds the keys to fulfilling the promise of integrating all manufacturing and enterprise functions, both factory and office on one network. A single architecture eliminates the wall that for years has separated the plant from the office.

Learn about standards, ISO/OSI model, TCP and IP frames, and Ethernet Network Architecture, including office vs. factory requirements, network considerations and Ethernet switch functions. Other information will include quality of service, port mirroring, IGMP, Ethernet addressing, subnets and routers. See a synopsis of each Webinar in this brochure.

System Requirements

PC-based attendees:

Windows® 2000, XP Home, XP Pro, 2003 Server

Macintosh®-based attendees:

Mac OS® X 10.3.9 (Panther®) or newer

**Register today at the PTO
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FREE

INDUSTRIAL ETHERNET WEBINARS



Learn all the basics
of Industrial Ethernet
without leaving your desk.



WEBINAR NUMBER ONE

Introduction to Industrial Ethernet

Day/Date: Tuesday, April 10, 2007

Time: 2 pm Eastern Time

An introduction to Industrial Ethernet, including standards, ISO/OSI model, and Ethernet, TCP and IP frames.

- Ethernet vs. Industrial Ethernet.
- Difference between an Ethernet Protocol and Industrial Ethernet Protocol.
- IEEE/RFC's, IP, TCP, UDP and ports.
- Application layer protocols.
- Advantages and disadvantages of the different types of transport layers in the OSI Model for cell and field level control.
- Common Industrial Ethernet protocols.
- Implications of choosing a particular Industrial Ethernet protocol.
- Services Industrial Ethernet protocols provide.

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Webinar will be archived at www.us.profinet.com

WEBINAR NUMBER TWO

Ethernet Network Architecture

Day/Date: Tuesday, May 8, 2007

Time: 2 pm Eastern Time

Learn about Ethernet Network Architecture, including office vs. factory requirements, network considerations and Ethernet switch functions, including quality of service, port mirroring and IGMP.

- Office grade Ethernet switches vs. Industrial Ethernet switches.
- Switch types and features required when used with common Industrial Ethernet protocols.
- Network topologies for laying out a network and network component types.
- Differences between office and industrial networks.
- Topology and layout, I/O on the factory floor, and environmental factors.
- Unicast, multicast and broadcast, IGMP, VLAN's, QoS, managed vs. unmanaged.
- Aging, mirroring, redundancy, LLDP and topology, SNMP.

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WEBINAR NUMBER THREE

Advanced Ethernet Architecture

Day/Date: Tuesday, June 5, 2007

Time: 2 pm Eastern Time

Learn additional details on Ethernet network architecture, including Ethernet addressing, subnets and routers.

- Importance of MAC and IP addressing for network communications.
- Connecting network devices and networks – Local area networks vs. Wide area networks.
- Concepts of network Addressing, MAC, IP, IP Address Classes, Subnet Mask, DHCP, DNS.
- Subnets and private Internet addresses.
- Routers, types of networks and connecting networks together with routing.
- Layer 3 switch and OSI Model of network components.
- Firewalls and network security.
- Performance issues: routing, addressing, security, subnets, industrial protocol.
- Device names and ease of replacement using LLDP/SNMP and memory cards.

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