



Industrial Backbone Components - Theory and Practice (CP3)

The modular high performance Ethernet switches from the MACH and PowerMICE families are designed specifically for industrial applications: for installation in a control room, or as an office/plant floor gateway.

Although Industrial Ethernet is essentially the same as that used in the office environment, the demands are greater, particularly in the area of network resilience. The correct choice of device, together with a high level of technical competence, is therefore an important prerequisite.

Languages

- CP3e English
- CP3f French
- CP3d German
- CP3n Dutch
- CP3p Portuguese
- CP3es Spanish

Duration

3 Days
9:00 – 16:30

Schedule / Location / Price
www.hicomcenter.com



Recommended for the Hirschmann™ Industrial Backbone Specialist certification examination

Target Group

Product training course for System Engineers, Network Designers and Support Technicians.

Prerequisites

A basic understanding of Ethernet and routing is required, for example "Industrial Ethernet (CT1)", "Industrial Networking (CT2)" and "Industrial Routing (CT3)". Product knowledge from the "Rail Family (CP1)" course is also recommended.

If available, the participant should bring a laptop with Ethernet connection and an operating system CD. Administrator rights are required.

Objective

In a professional environment the participants receive in-depth knowledge about the MACH and PowerMICE Layer 3 functionality. This includes installation, commissioning, and supervision. The training is part theory and part practice. The necessary knowledge about functions and deployment possibilities of the products are taught in individual theory blocks. Each block is followed by practical exercises, designed to familiarize the participants with the devices through first-hand experience.

Seminar Content

Hardware Overview

- MACH Family
- PowerMICE

Firmware Segmentation

- Layer 3 Enhanced
- Layer 3 Professional

Router Interfaces

- Port based
- VLAN based

Unicast Routing

- Static routing
- RIP
- OSPF
- VRRP
- HiVRRP
- Tracking objects

Multicast Routing

- DVMRP
- PIM-DM
- PIM-SM



Access Control Lists (ACL)

- Filter rules
- Queue assignment

Quality of Service (QoS)

- Weighted Fair Queuing
- Traffic shaping