HiOS is an entirely new operating system for Industrial Ethernet, combining high performance with robust security providing maximum network availability and data security for efficient production processes.

The new software equips the RSP with Layer 3 functionality, turning it into a routing product whose compact housing allows it to be accommodated in the production area. It adds dynamic routing functionality to the relevant MSP hardware versions, thus guaranteeing system continuity from one product generation to the next.

**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 “Hirschmann Operating System - HiOS Layer 2 Software (HiOSL2)” 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 Hirschmann Operating System (HiOS) Layer 3 functionality of the various RSP variants, MSP, GREYHOUND, DRAGON MACH and Octopus II/III devices. 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.

**Languages:** HiOSL3e English, HiOSL3d German

**Duration:** 3 Days

**Schedule / Location / Price:**
www.belden.com/resources/training

**Seminar Content**

**Software Segmentation**
- Layer 3 Standard
- Layer 3 Advanced

**Router Interfaces**
- Port based
- VLAN based
- Loopback Interfaces

**Address Resolution Protocol (ARP)**

**Unicast Routing**
- Static routing
- RIP
- OSPF

**Router Redundancy**
- VRRP
- HiVRRP
- Tracking objects

**IGMP**
- IGMP Proxy

**Multicast Routing**
- DVMRP
- PIM-DM
- PIM-SM

**IP/UDP Helper**