Online Seminar

PTP
Key Features & Configuration

Overview

IEEE 1588 / PTP – Precision Time Protocol was first developed for local computer networks which required synchronization in sub-micro second range or where GPS synchronization can not be used. Due to the hardware time stamping PTP goes far beyond NTP accuracies. Demands on the precise timing have evolved immensely also in wider network environments therefore PTP has been ongoing gaining in importance and implementation in different industries and applications. Meanwhile it has become an indispensable timing base for telecommunication networks, power grid synchronization and financial transaction industry.

PTP systems are exceptionally complex due to its flexible design to solve sync problems of many diverse applications in wide range of industries. In this seminar we will learn step wisely how to configure PTP clocks to operate in a particular PTP architecture. We will work out different setups to configure a Grandmaster or Slave clock, set of predefined features or profiles, delay mechanisms, network protocols, message intervals, unicast/multicast mode, TLV or VLAN and other features essential for optimized synchronization of a PTP capable network.

Target Audience

| Network Administrators
| Network Architects
| Network and IT Engineers

Agenda

Thematic Block I

| PTP overview and key features
| PTPv2.1 (IEEE1588-2019) - What's New
| Different types of clocks: GM, Slave, Boundary, Transparent clock
| PTP Message Sequence
| Best Master Clock Algorithm (BMCA)
| E2E and P2P Delay Mechanism
| One- and Two-step operation
| Unicast / Multicast / Hybrid mode
| Default Profile, Power, Telecom and Enterprise Profile
| Common application setups

Thematic Block II

| PTP systems with different form factors and functionalities
| Configuration options
| Settings on Meinberg LANTIME IEEE1588 systems
| Master / Slave modes
| One step / Two step
| Delay mechanisms E2E, P2P
| Announce, Sync, Delay Req Message rates
| Management and monitoring: Web GUI
| PTP Simulation Software

Key Takeaways

After the PTP training course the participants will be able:

| To describe the benefits of PTP synchronized networks
| To identify a suitable PTP equipment for a particular project setup
| To install and configure a PTP device for a particular use and operation
| To understand various significant PTP concepts and terminology
| To understand the main differences between a Master and a Slave PTP clock
| To understand main features of the Default IEEE 1588 Profile, Power and Telecom Profiles
| To configure essential parameters of a PTP capable network
| To identify and configure the proper PTP equipment for a particular application

Session Details

DURATION	Approx. 1 Day
LANGUAGE	German / English (Depending on Participants)
PRICE	558,00 EUR excl. VAT; Additional participants from the same company receive a 10 % discount on the registration fee
COURSEWARE	Cisco Webex / Microsoft Teams / GoToWebinar

Registration

To register for our PTP training course, please submit your data using our contact form at:
www.mbg.link/training

You can also choose to register by emailing to info@meinberg.de or calling our headoffice at +49 5281 9309-0.

Your registration will become mandatory after we send you a confirmation.

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