Network **Synchronization** Solutions

Sync Performance Monitoring System
Timing under control

POLYNET
Perfect Timing

Accurate timing has become increasingly important in today's modern networks. Systems such as 5G, digital broadcasting, financial trading, industry automation or robotics could not function without nanosecond level timing. Ensuring phase, frequency and time-of-day synchronization in the network requires central visibility and continuous monitoring of timing devices. Our **Sync Performance Monitoring System (SPMS)** helps network operators maintain this mission-critical timing environment.

Benefits

- Real-time monitoring and analysis of GNSS operation status to detect jamming, spoofing, and signal degradation

- Quickly detect, diagnose and localize sync performance issues to avoid network downtime

- Operates in a multi-vendor environment

- Increase service availability and performance by maintaining optimal timing quality

- Monitor synchronization quality from different vendors' clocks

Key Features

- Customizable Dashboard to monitor and visualize system-wide and individual clock performance with an intuitive graphical interface

- Monitor, alert and report on key timing-device metrics, including alarms, time precision and clock hardware status

- Dedicated hardware probes (Performance Monitoring Devices or PMDs) that act as PTP slaves, and can connect up to 64 masters at the same time

Sync Performance Monitoring System Technical Data

Adding and configuration of device

• Simple configuration through JSON file

NMS Dimensioning

• Predefined monitor screens for the requested parameters

Fault management

• Easy identification of faulty network elements
• Collection of equipment alarms
• Alarm severity
• Alarm log
• Generating reports

Fault management

• The predefined quality indicator parameters show the level of all network devices

Remote Configuration

• SPMS runs in a server-database model;
• SPMS supports remote configuration management on preferred web browser

Software Download

• Client PC uses your preferred web browser;
• No other software needed

Supported web browsers

• Chrome/Chromium, Firefox, Safari, Microsoft Edge

Inventory

• Inventory of all installed network element

Events log

• Alarm logs and fault events

Operating systems

• Windows 10, Linux

Hardware requirements

• Processor: 1GHz or faster processor or SoC
• RAM: 4GB (64-bit operating system)
• Hard disk space: 200 GByte
• Graphics card: no requirement
• Display resolution: min. 1920x1080 (16:9)
• Option: Installation on Virtual Machine

Remote access

• Via major web browsers
• Option: VNC, PuTTY

Database

• PostgreSQL
• Manual or automatic database backup
• Easy database backup/restore

Data analytics software

• Grafana

Backend and data collection software

• Custom

Map software

• OpenStreetMap
• Leaflet