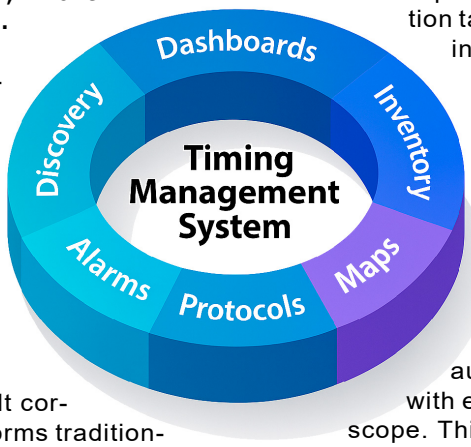
SyncMap a TMS for precision timing

Just in Time

Net.Time SyncMap

SyncMap is the Timing Management System (TMS) designed to take care of your synchronization resources based on Net.Time clocks. It offers comprehensive visibility into inventory, configuration, performance, security, and fault management, integrated in a scalable, multi-layer, multi-vendor environment.

In modern networks, synchronization demands more than accuracy, it requires control, traceability, and resilience. SyncMap keeps your timing architecture visible, operational, and secure at all times.Through real-time performance monitoring, geolocated views, and intelligent fault correlation, SyncMap transforms traditional monitoring into a proactive, context-aware management experience



Correlation rules help anticipate issues before they escalate, while events can be filtered, grouped, or suppressed based on user-defined logic.

Historical and real-time performance data reveal trends and early signs of degradation.Fault management is visual and intuitive, problems are pinpointed directly from topology views. Configuration tasks are simplified with integrated tools that support manual, remote, and automated provisioning, even across multi-vendor environments.

A robust security framework ensures controlled access, full audibility, and alignment with each user's operational scope. This gives you complete command of your network, from physical devices to timing accuracy

The Faster fault diagnosis, the Shorter service outages

Unified Control Centre

Net.Time devices are tracked in real time within a unified inventory, continuously updated via automatic discovery. SyncMap lets you navigate infrastructure layers with full contextual awareness, empowering professionals to detect, trace, and resolve faults efficiently.

Commitments

SyncMap is aligned with the core principles of FCAPS: Fault, Configuration, Accounting, Performance, and Security, offering a complete framework for modern synchronization management.

ALBEDO

Key features

SyncMap is more than a monitoring tool, it's a unified control system for synchronization networks. It centralizes inventory, automates configuration, monitors faults, analyzes performance, and enforces security policies across your infrastructure.

- **Inventory**: Manage the inventory of Net.Times and keep track of your network resources.
- **Configuration**: Configure and customise each clock to suit roles and requirements.
- **Performance**: Utilise historical and current statistics to gain insights into time performance.
- **Security**: Match users and profiles to ensure secure and controlled access to the resources.
- **Fault Monitoring**: Access maps to Detect, Correlate, Resolve events.

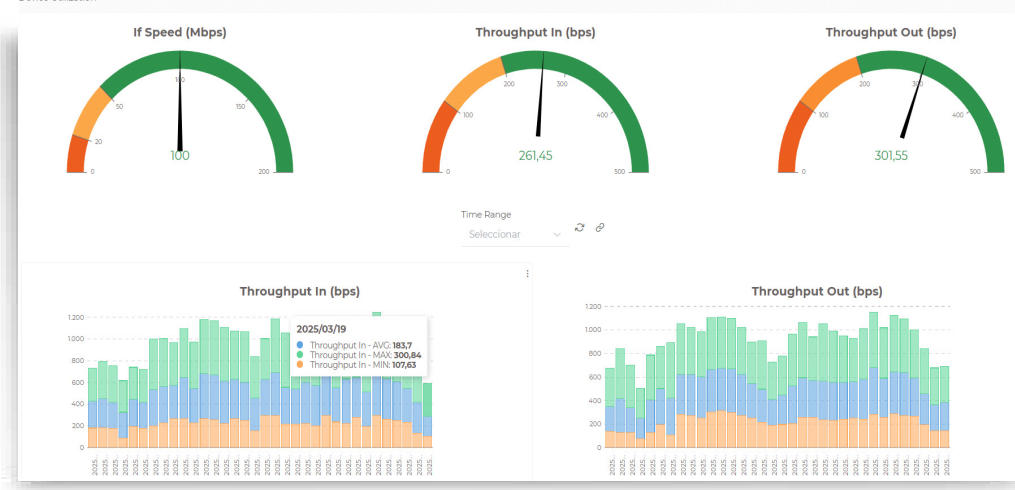
Inventory Automation

SyncMap simplifies the complex task of network inventory management by providing a real-time, automated, and comprehensive view of your synchronization infrastructure, ensuring that every element such as clocks, circuits, sites, and links are continuously tracked, categorized, and visually represented.

Visibility of Clocks, Link, Location

SyncMap automatically detects and integrates new devices into the inventory, eliminating manual data entry and reducing configuration errors. Each asset is enriched with essential meta-data such as location, type, vendor, serial number, software version, operating system, and connectivity details, and more importantly the relationships between elements.

All discovered assets are depicted on interactive topology maps that present your infrastructure across layers. These maps not only reflect the physical and logical structure of the network but also show the real-time status and historical performance of each device including role, configuration, alarms and usage statistics.



Streamlined Access

Operators can create and manage custom views by area, technology, or user group, enabling streamlined access and monitoring across departments or organizational boundaries. This flexible mapping system helps define zones of responsibility, improves operational clarity, and enhances security control. Whether you're managing a single domain or a national infrastructure with hundreds of Net.Time clocks, SyncMap gives you complete control over your inventory.

Full Control from large to small cluster of devices

Configuration

Centralized, Scalable Provisioning

SyncMap supports end-to-end provisioning, even in multi-vendor environments. Use templates and the Device Integrator to deploy and configure new assets quickly. Automate repetitive tasks, like firmware upgrades or backups, with the Massive Operations Launcher.

Visual Configuration

Devices can be configured directly from graphical views, grouped by layer, region, or type, enhancing accuracy and speed.

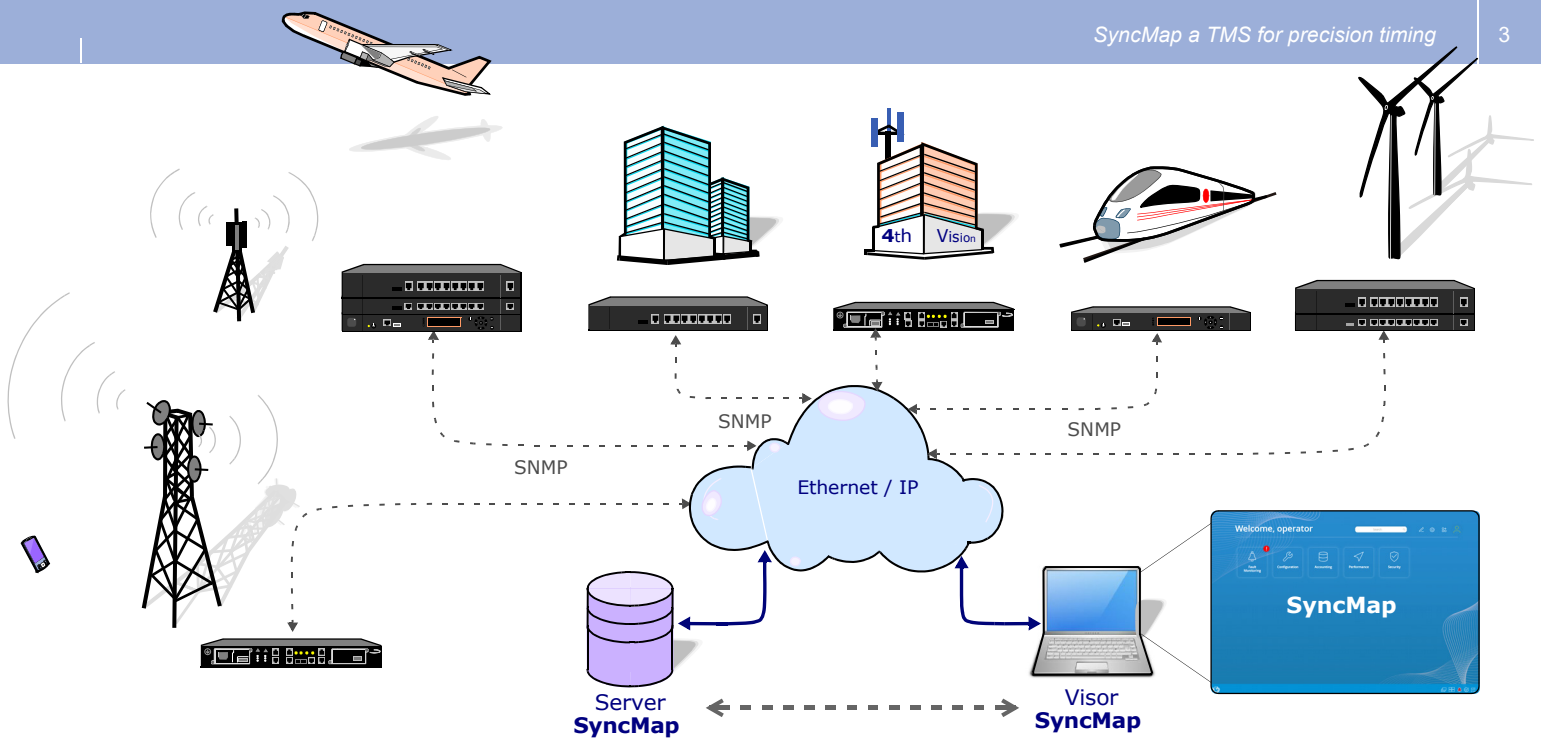
Performance

SyncMap enables precise performance monitoring across your entire synchronization network, turning raw data into actionable intelligence. It continuously collects and analyzes performance metrics from clocks, interfaces and circuits, empowering operators to assess synchronization quality, detect anomalies, and optimize operations.

Visualize Trends

All performance data is available in real time, with the ability to select multiple statistics and filter by customisable time ranges. Operators can easily visualise trends across hours, days or weeks. This allows them to correlate performance degradation with network events or changes. Data collection intervals are fully customisable to fit operational needs, balancing granularity with efficiency.

The platform supports custom performance views, allowing users to define, share, and reuse filters or layouts tailored to specific tasks or roles. SyncMap is the clear choice for those focused on a subset of devices in a critical region or isolating underperforming interfaces. It ensures clarity and control. Technology-specific displays are also available to support specialised use cases. These views simplify monitoring by adapting the interface and data presentation to the technology in use.



Fault Detection & Resolution

SyncMap brings a comprehensive, real-time view of network health. It can detect, isolate, and resolve abnormal conditions that can affect synchronization performance, enabling operators to identify and respond to faults swiftly minimizing downtime and ensuring service continuity.

Stay Ahead of Failures

SyncMap detects anomalies via SNMP polling, traps, and syslogs. It classifies alarms as Current, Acknowledged, or Historical, and applies rules for aggregation and suppression.

From Alert to Root Cause

Faults are shown on interactive maps, helping trace issues to a clock, a gateway, or a circuit. Intelligent correlation highlights system-level problems first, not just isolated alerts.

Improve the Quality of Timing by implementing smart management

Security

SyncMap delivers advanced security capabilities to ensure operational integrity, regulatory compliance, and cyber resilience across synchronization infrastructures.

Security is embedded through database encryption, access logging, profile management, and customizable permissions it also includes efficient password and credential management to protect sensitive interfaces and reduce human error.

SyncMap goes further by monitoring network behaviour, tracking changes in real-time, and securing geographically dispersed clocks with georeferences and vulnerability characterization.

Real-time security dashboards and reports consolidate data from across the network, including alarms, user activity, asset vulnerabilities, and circuit/service anomalies. For added resilience, disaster recovery capabilities ensure system continuity through scheduled backups and rapid restoration procedures.

❑

KEY FEATURES

- Real-time auto-discovery
- Hierarchical and customizable topology views
- Interactive maps showing Countries, Towns, Nodes Clocks, Interfaces, Links...
- Zoomable, filterable layers with overlaid alarms and performance statistics
- Root cause analysis and fault correlation
- Sync-specific visualization
- Bulk configuration deployment and mass operations
- Ticketing system integration
- Secure role-based access
- Configuration with comparison and rollback tools

APPLICATIONS

- Telecom Topologyes
- Utility WAN / Substations
- Railwayss
- Data Centers
- Air Traffic Control

BENEFITS

- Faster fault detection
- Lower disruption risk
- Centralized visibility
- Reduced operational workload through automation
- Enhanced network security and compliance readiness
- Scalable control from small clusters to nationwide
- Faster deployments with reusable configurations
- Improved collaboration across teams
- Informed decision-making through real-time analytics

Features	
Inventory and Topology	• Network Topology with Auto-discovery • Common inventory (Devices, Cards, Ports, Subnetworks, Servers, Edges, etc.) • Grand Master clocks, Boundary clocks, Ordinary clocks, and Slave clocks • Asset visualization in real time • Detailed information about your assets (properties, actions, attachments etc.) • Maps (Topology, Family, Access and Transmission Layers, Customized maps, Areas, Stations, Connections, etc.) • Advanced reports, dashboards and statistics based on your inventory
Configuration	• Individual and Collective Configuration • Circuits representation • Real-time statistics calculating assets health • Historical data and reports • Dynamic charts
Performance	• Asset states (in order, in stock, in transit, in use, in maintenance, retired, missing, or planned) • Incidence records • Real-time and historical statistics • Traffic monitoring (properties, actions, attachments, etc.)
Security	• Log activity auditor • Prevention against unauthorized accesses • Advanced performance reports. Advanced data to detect any deviation in your resources • Compliance and auditing support • Back up management for disaster recovery
Fault Management	• Alarms and services monitoring (filters, acknowledge, suppression options are available) • Real-time events and correlation • Advanced maps and dashboards • Notification management • Ticketing system integration • Root cause identification

Platform Requirements	
Pre - Production	Windows server 2019/2022/2025 • Processor 6 Core 2,1 GHz Intel • RAM 16 GB • Hard disk 500 GB RedHat RHEL9,5 • Processor 4 Core • RAM 8 GB • Hard disk 64 GB
Production	Windows server 2019/2022/2025 • Processor 6 Core 2,1 GHz Intel • RAM 32 GB • Hard disk 1 TB SO RedHat RHEL9,5 • Processor 6 Core • RAM 8 GB • Hard disk 128 GB