

## Use Case:

# Reporting and Infrastructure Optimization

for Fiber Site Services

## Problem Statement:

**A leading CSP faced challenges in maintaining service continuity and efficiency for Fiber Site services.**

Frequent redundancy errors created potential downtime, while inefficient load balancing led to uneven traffic distribution and congestion. VLAN configuration inconsistencies reduced service reliability and impacted performance, and the lack of accurate and actionable control reports hindered the ability to address these issues proactively.

## Solution Overview:

**The CSP implemented a comprehensive reporting system integrated with Fiber Site infrastructure monitoring.**

- **Redundancy Error Resolution:** Automated checks detected and resolved redundancy issues, reducing the error count to zero.
- **Port-Based Load Distribution:** Load distribution mechanisms ensured even traffic handling, minimizing congestion.
- **Configuration Compliance:** Regular automated checks ensured VLAN configuration compliance with standards, reducing service interruptions.
- **Enhanced Capacity Utilization:** Infrastructure adjustments improved bandwidth performance across Fiber Site services.
- **Enhanced Reporting:** Real-time and historical insights into redundancy, load balancing, and VLAN configurations enabled data-driven decision-making and proactive maintenance.

## About TechNarts

TechNarts is a leading **OSS provider** with deep expertise in telecom software **since 2007**. Through its **NART OSS Suite** product family, it delivers modular, future-proof solutions for **Resource Management, Network Assurance and Network Fulfillment & Orchestration**. Its systems align with **TM Forum's ODA and Open APIs**, helping operators boost service reliability, optimize resources, and accelerate digital transformation.

## Result:

**The operator achieved a more reliable, efficient, and transparent Fiber Site service environment.**

- **Near-Zero Redundancy Errors:** Redundancy issues resolved, reducing the error count nearly to zero.
- **Increased Service Uptime:** Uninterrupted connectivity ensured for corporate and retail customers.
- **Near-Perfect VLAN Accuracy:** VLAN configuration accuracy reached nearly 100%, reducing misconfiguration and disruption risk.
- **Higher Customer Satisfaction:** Reliability improvements reduced customer complaints, while automated reports provided timely service quality updates, boosting trust and engagement.