

Use Case:

Revolutionizing Network Optimization

with Zero-Touch Automation

Problem Statement:

Network management has traditionally required significant manual effort, with operators constantly responding to network issues.

While automation offered a step forward by reducing manual intervention, it still required some level of operator oversight and decision-making. As networks grow more complex, even automated systems can struggle to keep up with real-time adjustment and optimization demands. Zero-touch automation addresses this by completely removing human intervention from network operations, enabling continuous and efficient management of network services and performance.

Solution Overview:

TechNarts' zero-touch network optimization solution fully automates network optimization tasks, ensuring network operations are handled proactively and without human intervention.

- **Path Optimization:** Traffic and utilization are continuously monitored, the "as is" topology is dynamically compared with alternative routes, and the best path is automatically selected.
- **Capacity Optimization:** When traffic values and QoS reports indicate insufficient capacity, ports are automatically combined to increase it. When overcapacity is detected, resources are dynamically released.
- **Self-Healing:** When service quality drops, corrective actions are automatically applied to restore performance.
- **Restore Traffic Module:** When a fault occurs in a device or connection, traffic is automatically rerouted through alternative routes or backup connections.
- **Counter Reset Mechanism:** When thresholds are crossed in error counters monitoring network traffic, an automatic reset process is initiated.



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 solution delivered measurable gains in service availability, resource efficiency, and operational cost reduction.

- **Reduced Service Downtime: Up to 20% reduction** in service downtime, ensuring higher availability and customer satisfaction through automatic rerouting and self-healing.
- **Higher Resource Utilization: Up to 15% increase** in network resource utilization through continuous path and capacity optimization.
- **Lower Operational Costs: Up to 10% reduction** in operational costs by minimizing manual intervention, cutting labor costs, and improving overall efficiency.