



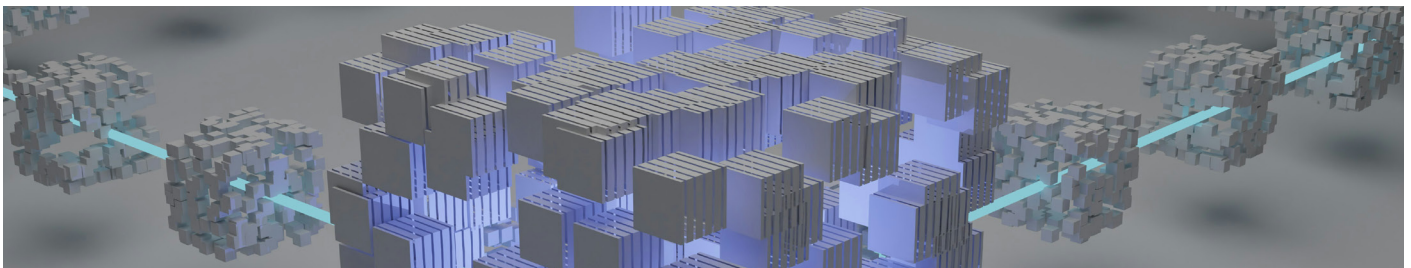
Zero Touch, Zero Hassle

# Let Automation Work for You!



## Zero-Touch Automation

Zero-touch network provides services such as device configuration, service provisioning and activation, and network optimization without the need for human intervention. This document elaborates on zero-touch automation capabilities of TechNarts' OSS solutions, outlining the processes involved.



## Configuration Management

Configuration management is fully automated through a single system, eliminating the need for human effort in any step of the process and preventing human errors.

- Unused devices and services are made functional by automatically connecting to devices and carrying out configuration processes.
- Misconfigurations are automatically detected, reported, and corrected by connecting to the device itself or the NMS.
- In case of new configurations being incorrect, automatic rollback to the last error-free configuration is initiated.
- Every configuration made on the devices is logged and backed up periodically.

## Provisioning & Activation

Zero-touch provisioning and activation streamlines operations, reduces errors, and accelerates service launch, ultimately enhancing the overall efficiency and performance of the network.

- Automatically defines services to be installed on the devices to enable use and activates the service to start functioning.
- The manual analysis process for port reservation is automatically performed by the system, and the outputs of the LLD tool are directed to the provisioning process.
- Service provisioning and activation over NMS

## Network Optimization

Network optimization is a critical aspect of modern network management, aimed at improving the efficiency, reliability, and performance of networks. By combining advanced technologies such as artificial intelligence and automation, network optimization can enhance the overall functionality and responsiveness of networks, leading to improved user experiences and reduced operational costs.

### ● Path Optimization

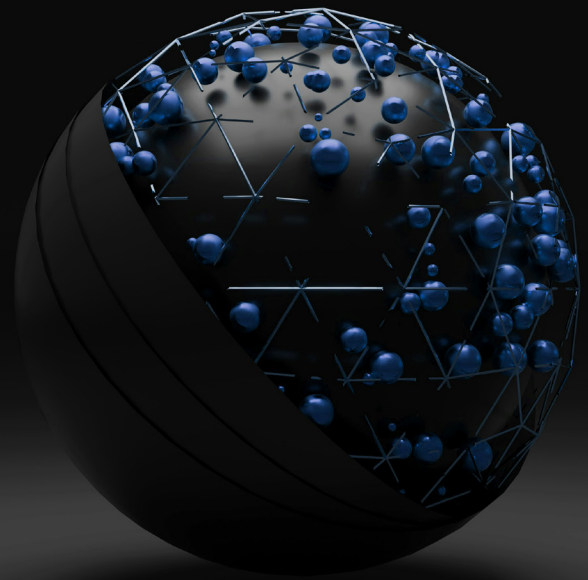
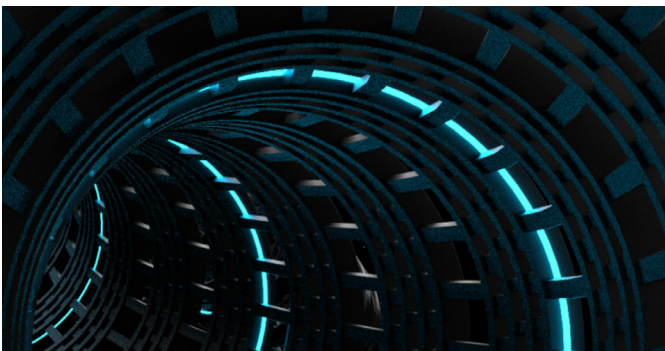
By monitoring traffic and utilization on the network, the current load status and quality of the network are evaluated. The existing situation is compared with alternative routes, and the best path is automatically selected.

### ● Self Healing

To ensure uninterrupted service in the network, corrective actions are automatically applied when the service quality drops:

**Restore Traffic Module:** When a fault occurs in a device or connection, communication between devices is automatically ensured, redirecting traffic through alternative routes or backup connections.

**Counter Reset Mechanism:** When thresholds are crossed in error counters monitoring network traffic, an automatic reset process is applied.



### ● Performance & Outage Prediction

Performance data is automatically retrieved, analyzed, and potential performance degradation or outage situations are predicted using artificial intelligence. Teams are automatically informed accordingly.

### ● Capacity Optimization

Based on the analysis of network traffic values and QoS check reports, when it is determined that the current capacity is insufficient, ports are automatically combined to increase capacity. Conversely, when it is determined that there is over - resources are dynamically released.

## About TechNarts

TechNarts has been a leading software development company since 2007 to make a difference in the sector with its innovation-oriented approach, particular staff training and extensive know-how. With 15+ years of experience in mastering cutting-edge technologies and proven methodologies, it has been offering tailor-made software solutions and services to enterprises with an endless job enthusiasm. TechNarts has a deep expertise in track & trace systems plus OSS/BSS. From telecommunications to health informatics and fintech, covering a wide range of solutions in various sectors, we build unique solutions that matter.