

Use Case:



Alarm Correlation and Optimization in GPON Networks

Problem Statement:

Managing alarms in a GPON network posed significant challenges for the Network Operations Center (NOC) of a leading telecom operator.

Excessive alarms created a "noise" effect, making it difficult for the NOC to identify critical issues quickly. With so many alarms arriving simultaneously and no clear way to separate the ones that mattered, teams had to sift through the noise manually before they could even begin diagnosing a fault. This hindered effective fault detection and resolution, leading to delays in addressing customer-impacting issues – and left the NOC reacting to problems only after they had already affected service.

Solution Overview:

The telecom operator deployed advanced alarm correlation capabilities to streamline network management and reduce alarm overload.

- **Alarm Correlation Support:** Implemented a system to correlate related alarms, significantly reducing unnecessary noise and providing a clearer view of actionable issues.
- **Precision Fault Management:** Enabled the NOC to focus on pinpointed high-priority issues (BÇO - Fault Repair Center referrals), improving the accuracy and speed of fault resolution.
- **Customer-Centric Focus:** By reducing noise and improving fault management, the solution also played a role in enhancing overall customer satisfaction.



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:

Eliminating the "alarm blindness" effect allowed NOC teams to focus on real issues, optimizing their workflow and effectiveness.

- **Decrease in Alarm Volume:** A notable decrease in the number of alarms allowed NOC teams to operate more efficiently.
- **Faster Fault Identification:** Precise correlation enabled faster identification of critical faults, reducing downtime for customers.
- **Fewer Service Disruptions:** Better fault management led to fewer service disruptions and improved customer experience.
- **Eliminating the "Alarm Blindness" Effect:** Allowed NOC teams to focus on real issues, optimizing their workflow and effectiveness.