

Use Case:



Automated IPv4 Allocation and Management

Problem Statement:

For a leading telecom operator, IPv4 allocation and management had become a growing operational burden rather than a routine task.

Manual oversight made processes like blacklist checks, RIPE compliance, and user error prevention prone to mistakes. Unused IPs were not consistently identified, leading to resource inefficiencies, and new systems and processes lacked seamless integration – slowing down operations and increasing manual workloads. As the network scaled, these gaps stood in the way of efficient resource utilization and cost control.

Solution Overview:

To address these challenges, the operator implemented an IPv4 Allocation and Management Tool.

- **Automated Controls:** Integrated checks for blacklisted IPs and RIPE compliance ensured clean, error-free allocations, while automated user-error prevention mechanisms minimized misconfigurations.
- **IP Resource Optimization:** The system identified unused IPs across the network and generated comprehensive reporting showing the total financial gains from reclaimed IP resources.
- **Seamless Integration:** New systems and processes were automatically detected and streamlined into the workflow, improving operational efficiency and reducing manual effort.

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 gained a fully automated, compliant, and scalable IP management environment that turned a manual, error-prone process into a measurable operational and financial gain.

- **Improved Compliance and Accuracy:** Ensured adherence to RIPE regulations and eliminated errors in IP allocation.
- **Cost Savings:** Reclaimed unused IPs translated into measurable savings.
- **Operational Efficiency:** Automated workflows reduced manual processes, speeding up IP allocation and minimizing operational delays.
- **Scalability:** The tool's ability to integrate new systems and processes ensured IP management could scale seamlessly with the network's growth.