VIAVI

VIAVI NITRO AIOPS

Inventory Management and Auto Discovery

Enhancing Network Visibility with Intelligent Automation

NITRO® AIOps Inventory Management and Auto Discovery delivers a unified, real-time view of network resources, bridging silos across multiple vendors and domains. By integrating automated discovery and reconciliation, it enhances operational efficiency and reduces manual interventions.

With real-time inventory accuracy, operators gain full control over network assets, reducing unnecessary expenditures and maximizing resource utilization. By eliminating data silos and manual reconciliations, NITRO AIOps lowers operational costs, accelerates decision-making, and enhances service agility.

VIAVI NITRO AIOPS

Inventory Management and Auto Discovery

Overview

Modern networks require real-time intelligence to ensure service reliability, efficiency, and agility. As technologies such as 5G, cloudification, and AI-driven automation evolve, traditional static inventories no longer meet the demands of dynamic environments. Operators need automated, dynamic solutions to eliminate data silos, enhance visibility, and drive operational efficiency, enabling faster deployments and significant cost savings.

Business Challenges

With the rapid evolution of 5G, virtualization, and cloud infrastructure, operators face fragmented inventory systems, lack of real-time visibility, and escalating operational costs. Siloed, vendor-specific solutions create data inconsistencies, making asset tracking, fault resolution, and capacity planning inefficient. The absence of automated discovery and reconciliation results in reactive network management, increasing downtime and service disruptions.

KEY ISSUES

REDUCED OPERATIONAL EFFICIENCY

Manual Processes: manual inventory management and reconciliation lead to errors, delays, and increased labor costs, ultimately reducing productivity and causing inefficient asset utilization.

Inaccurate Data: poor data accuracy results in wasted investments, redundant infrastructure, and higher CapEx/OpEx, undermining financial efficiency.

SERVICE DEGRADATION

Delayed Issue Detection: outdated inventory data prolongs outages, degrades service quality, and negatively impacts customer experience.

Poor Visibility: insufficient network visibility leads to undetected misconfigurations and missing network elements, compromising service reliability and assurance.

DELAYED DIGITAL TRANSFORMATION

Automation Delays: lack of real-time discovery impedes AI-driven optimization and digital transformation, limiting revenue growth and innovation.

Inaccurate Inventory: misallocation of CapEx due to inaccurate inventory data further slows digital initiatives.

1964.900.0525

Introducing NITRO AIOps Inventory and Auto Discovery

The **NITRO AIOps Inventory and Auto Discovery** delivers a unified, real-time view of multi-vendor, multi-domain network resources, serving as the authoritative source of truth in increasingly autonomous network environments.

By eliminating silos and integrating dynamic inventory management, it provides operators with a comprehensive and continuously updated understanding of their network infrastructure.
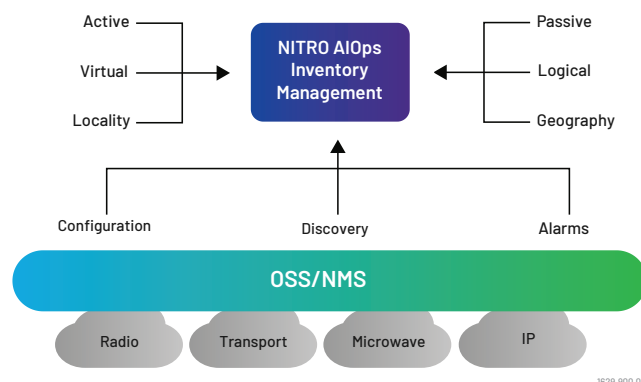
Through automated asset discovery and reconciliation, NITRO AIOps ensures accurate inventory data, enhances fault management, and optimizes capacity planning, reducing both OpEx and CapEx while eliminating manual inefficiencies.

With zero-touch automation, operators gain full real-time visibility and control, enabling self-optimizing networks, accelerating deployments, and enhancing service assurance—critical capabilities for the future of autonomous network operations.
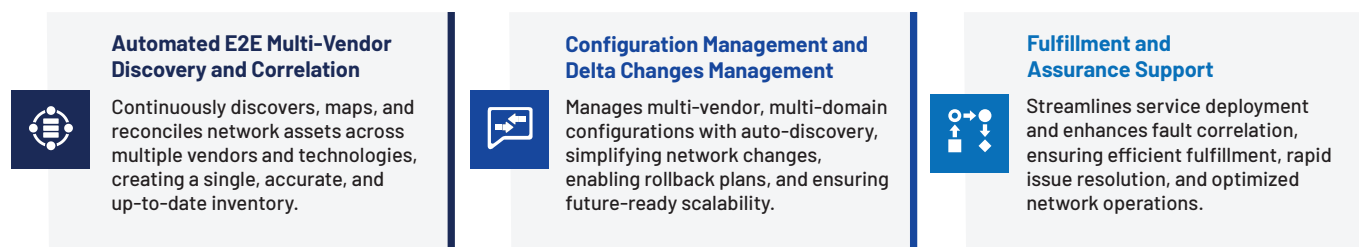
SOLUTION OVERVIEW

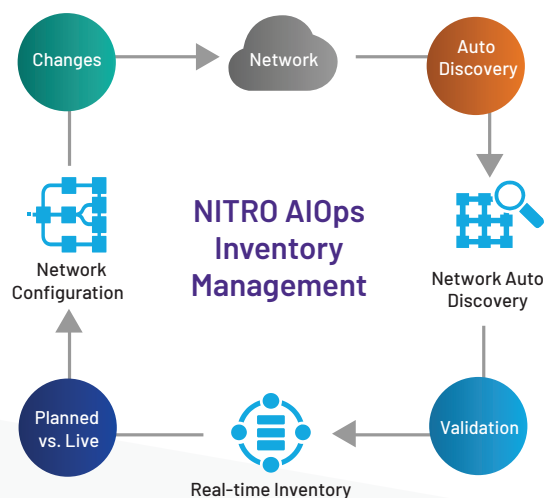**NITRO AIOps Inventory Management and Auto Discovery** delivers a dynamic, real-time view of network assets, eliminating the limitations of static inventories. By treating the live network as the single source of truth, it enhances decision-making, streamlines operations, and optimizes service assurance. With advanced self-discovery intelligence, it provides operators with complete situational awareness, ensuring reliable performance and efficient network management.

1629.900.0923

Key Technical Capabilities

Automated E2E Multi-Vendor Discovery and Correlation

Continuously discovers, maps, and reconciles network assets across multiple vendors and technologies, creating a single, accurate, and up-to-date inventory.

Configuration Management and Delta Changes Management

Manages multi-vendor, multi-domain configurations with auto-discovery, simplifying network changes, enabling rollback plans, and ensuring future-ready scalability.

Fulfillment and Assurance Support

Streamlines service deployment and enhances fault correlation, ensuring efficient fulfillment, rapid issue resolution, and optimized network operations.

1963.900.0525

Unified Data Model with Auto-Discovery and Reconciliation

1615.900.0823

NITRO AIOps Inventory Management creates a unified data model by seamlessly integrating multi-source network data, enabling real-time synchronization across domains and vendors.

By eliminating data silos, it establishes a single, authoritative source of truth, laying the foundation for automation and intelligent decision-making.

With a continuously updated network view, this unified model accelerates service evolution, enhances automation, and reduces Mean Time to Repair (MTTR) through precise fault correlation and faster issue resolution. The result is improved network resilience, operational efficiency, and a future-ready foundation for self-optimizing networks.

BUSINESS BENEFITS

NITRO AIOps Inventory Management enhances operational efficiency, reduces costs, and improves network reliability by delivering real-time visibility and automation. With a unified and continuously accurate inventory, operators can streamline processes, accelerate troubleshooting, and optimize resource utilization, eliminating inefficiencies and manual interventions.

By enabling faster decision-making, improving service quality, and supporting seamless network expansion, NITRO AIOps drives greater business agility and competitive advantage. Its automation-driven approach ensures operators can rapidly adapt to network changes, enhancing resilience and positioning for future-ready operations.

Operational Efficiency (OpEx Reduction)

Reduces manual effort errors and inefficiencies with automated discovery and reconciliation, eliminating data silos and improving decision-making with up-to-date network intelligence.

Reliable Service Fulfillment and Assurance

Pre-validates network designs for efficient service deployment. Allows the correlation of faults with performance to enhance service reliability and customer experience.

Optimized CapEx Allocation

Provides accurate asset visibility, preventing over-provisioning and enabling smarter investment in network expansion and upgrades.
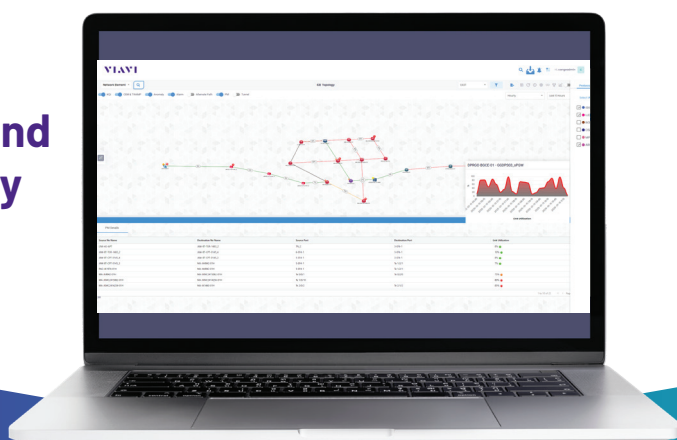
Improved Network Reliability

Allows the correlation of service performance with network faults, allowing faster issue resolution and reduced MTTR.

Accelerated Innovation

Supports closed-loop automation by maintaining a continuously updated inventory, enabling seamless integration with autonomous networks and AI-driven operations.

Inventory Management and Auto-Discovery

PROVEN SUCCESS STORY

	Success Story #1	Success Story #2
Problem	• Visibility of tracking and managing end-of-service, end-of-life equipment (OEM) for upgrade/replacement • Visibility of inventory spares/availability and controlling high-value spares during critical events in field operations • Service impact of hardware failures and unavailability of inventory analysis and Open RAN assets	• Eco-system network, monitoring and provisioning complication of service change and configuration management process in each vendor OEMs • Lack off access control and management, missing consistency checks • Man-made error occurrence and excessive time for corrective action
Solution	**NITRO AIOps Network Inventory Management Solution** Planning and managing network inventory for digital transformation	**NITRO AIOps Network Inventory Management Solution** Autonomous service change and configuration management
Benefit	• **99%** inventory accuracy (through auto-discovery and reconciliation) • **100%** QR implementation on passive network elements • **70%** reduction of site survey (leveraging network auto-discovery)	• **30%** auto configuration and auto healing on incidents and tickets • **100%** error-free provisioning • **30%** resource optimization

WHY VIAVI?

Unmatched Self-Discovery and Inventory Management
- Real-time visibility: continuously tracks physical and virtual assets across the entire network, ensuring a comprehensive and up-to-date inventory.
- Automated accuracy: enhances inventory precision, accelerates troubleshooting, and optimizes resource utilization, driving both OpEx and CapEx savings.

Real-Time End-to-End Visibility Across Domains
- Ensures continuous inventory synchronization with automated discovery, providing seamless cross-domain visibility.
- Enables faster root cause analysis and significantly reduces MTTR.

The Only True Unified E2E Platform
- Full visibility: covers RAN, Core, IP, transmission (fiber, microwave), and FTTH on the active side and passive assets across multi-vendor networks, offering a holistic network view.
- AI-driven insights: leverages real-time analytics, predictive intelligence, and automation for optimal network performance.

Future-Proof Alternative
- Seamless integration: an AI-driven, cohesive platform that eliminates fragmented legacy solutions.
- Vendor-agnostic flexibility: works across multi-vendor environments, ensuring adaptability and innovation without vendor lock-in.
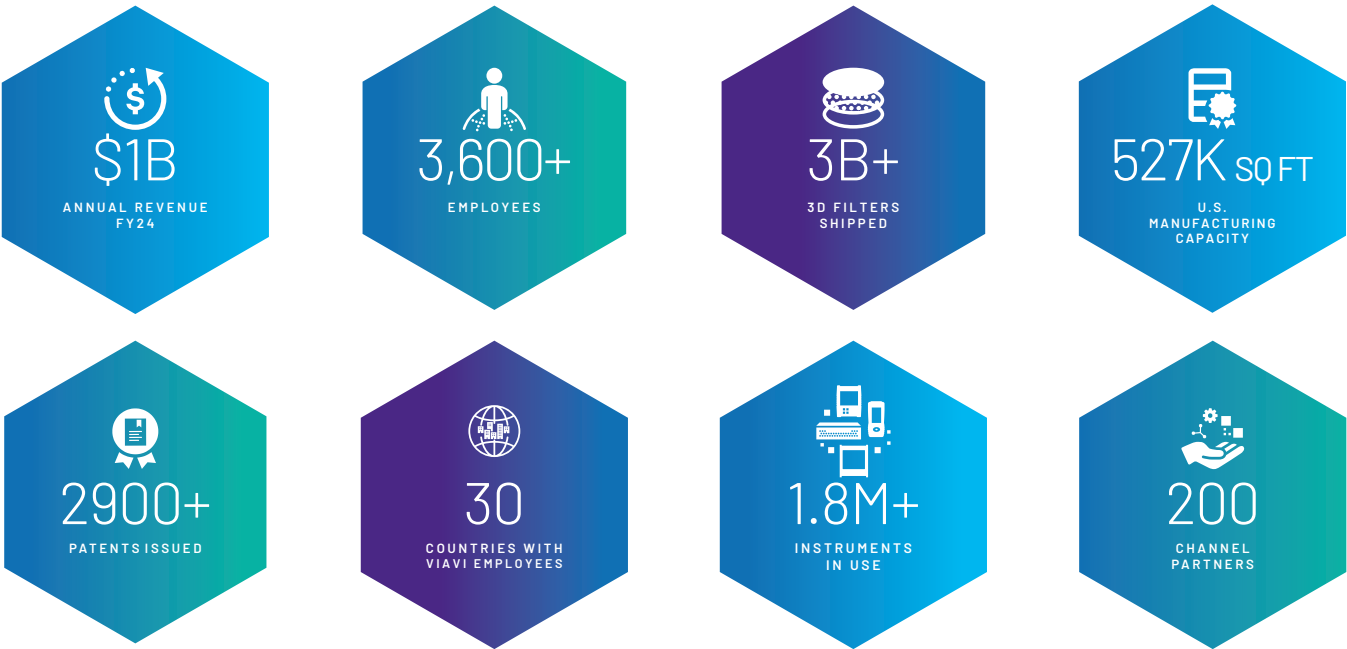
VIAVI NITRO AIOps is shaping the future of intelligent network operations.

As your strategic partner, we drive continuous innovation to keep you at the forefront of the rapidly evolving telecom landscape.
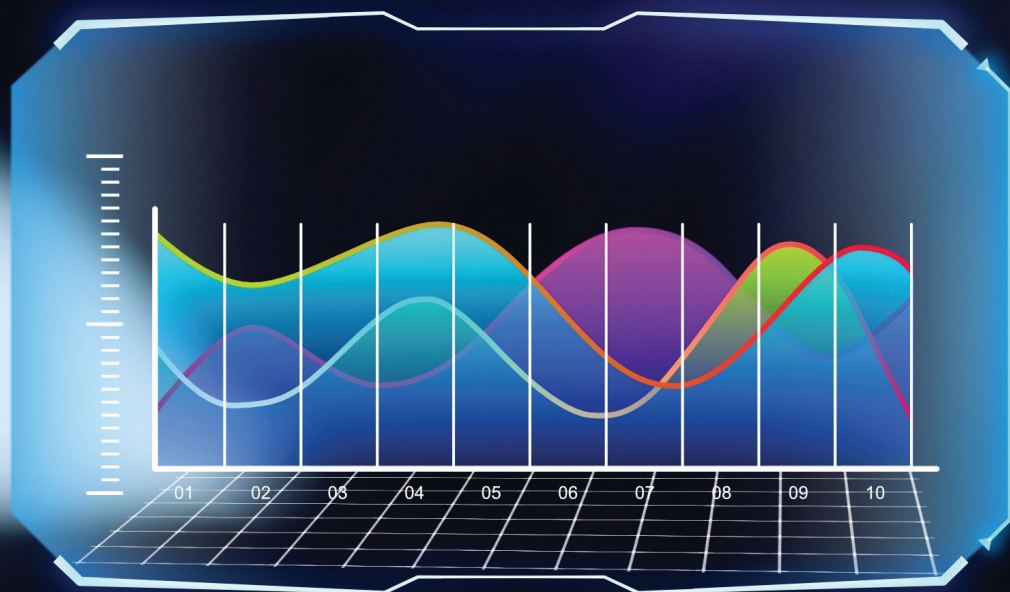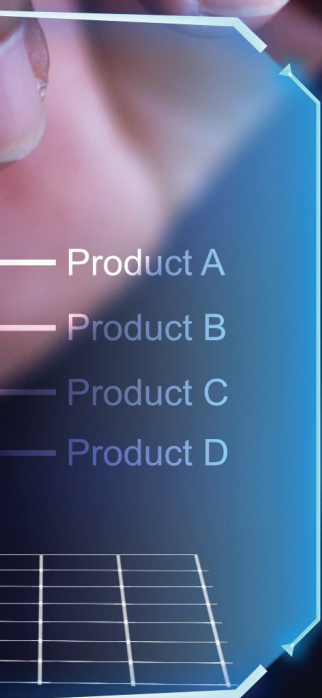
Embrace the future with VIAVI NITRO AIOps. Visit us at viavisolutions.com/aiops today.

VIAVI is a company with a diverse and rich history of technological innovations across various industries. In the past, VIAVI has been known by names such as JDSU and Acterna, but our legacy dates back to 1923 with Wandel & Goltermann.

Today, VIAVI Solutions is a global leader in communications test and measurement and optical technologies - helping enable service providers around the globe to deploy flawless fiber networks with smarter testing solutions.

$1B
ANNUAL REVENUE
FY24

3,600+
EMPLOYEES

3B+
3D FILTERS
SHIPPED

527K SQ FT
U.S.
MANUFACTURING
CAPACITY

2900+
PATENTS ISSUED

30
COUNTRIES WITH
VIAVI EMPLOYEES

1.8M+
INSTRUMENTS
IN USE

200
CHANNEL
PARTNERS

1215-1.901.0824

Product A
Product B
Product C
Product D

01   02   03   04   05   06   07   08   09   10

VIAVI

viavisolutions.com