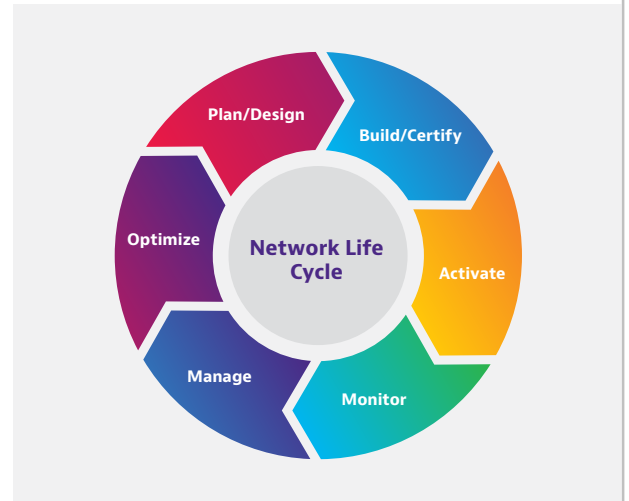VIAVI

LASER COMPONENTS

Solution Overview

VIAVI
NITRO™

Solving Industry Challenges

The evolution to virtualization and cloud, network automation, massive traffic increases, IoT, Increasing service velocity and revenue growth… These are just some of the challenges both service providers and enterprises face today as part of the complex service life-cycle. Consumers also demand that services are always on, always available, and everything is connected. In response, the industry is deploying ultra-dense, massively scalable, cloud-enabled and automated networks that can deliver the required intelligence, low latency, and high bandwidth services – today and in the future.

To help address these critical industry challenges, VIAVI offers a unique solution – NITRO.

N *Network*
I *Integrated*
T *Test,*
R *Real-time analytics,*
O *and Optimization*

Network Life Cycle: Plan/Design, Build/Certify, Activate, Monitor, Manage, Optimize

Features
• Scalable & Virtualized
• Open APIs
• Integrated agents & Software
• Automated
• Unified Workflows

Benefits
• Manage complex field operations
• Improve service velocity
• App-aware intelligence for superior QoE
• Operational Efficiency

Introducing NITRO

The VIAVI Network Integrated Test, Real-time analytics and Optimization (NITRO) solution is the first real-time intelligence platform that connects testing and service activation data from instruments with software-based planning, provisioning, assurance and optimization probes and applications, working seamlessly across mobile, fiber, cable, cloud and enterprise networks. Leveraging the value of current investments in VIAVI instruments and software solutions, NITRO addresses both the needs of today's separate business teams as well as the evolution to automated, cloud-native, policy-driven, end-to-end service delivery in the same common platform.

Powered by this development platform that accesses and analyzes data throughout the network, NITRO addresses the challenges of the increasingly complex service lifecycle across physical, virtualized, and hybrid networks/IT, helping network service providers and enterprises reduce costs and deliver new revenue streams while optimizing performance.

NITRO allows today's networks to be managed with less manual intervention and reduced skill sets by increasing the automation of workflows and lifecycles. By feeding real-time data from physical instruments and software virtual agents into a single presentation layer, NITRO helps reduce complexity and increase automation necessary to confidently evolve to future networks.

Delivering Business Value with NITRO

NITRO meets network challenges head on. By automating processes and streamlining workflows through the life-cycle, service velocity is improved and cost and complexity can be managed as networks are turned up. As services and applications are deployed, virtual agents provide unprecedented insight across the network, ensuring optimal performance and enriching the user experience. In addition, given the extreme non-uniformity of networks and the increasing demand for IoT, app-aware intelligence and automated optimization delivers maximum business benefit, leveraging existing investments in VIAVI instruments and software.

The NITRO Platform

At the heart of the solution is the NITRO Platform, a powerful, common data platform across the network that connects physical and virtual probes, agents and instruments. Supporting the widest range of infrastructures across mobile, fiber, cable, cloud and enterprise, NITRO unifies network intelligence for use by VIAVI as well as third party applications. By building scalability and virtualization into the solution together with open APIs, NITRO enables the broadest set of analytics.

NITRO vNet

NITRO Virtual Network Activation and Performance is a virtual active testing solution supporting activation, verification, performance monitoring and troubleshooting for physical, virtual and hybrid networks. NITRO vNet supports network turn-up and verification, reducing technician dispatch and time to market. Centralized performance diagnostics and enhanced workflows enable faster troubleshooting and service-impacting resolution.

NITRO Enterprise

NITRO Enterprise and Cloud Network Performance is a cloud-based monitoring solution that enables businesses to validate the performance of their hybrid IT environment. Employing virtual, cloud, or micro-appliance based agents, NITRO Enterprise performs ongoing, proactive web-based service, VoIP, and network testing. At the same time, it facilitates domain problem isolation with on-demand ad-hoc troubleshooting agent deployment. NITRO Enterprise aids IT teams in maximizing application uptime and availability while delivering optimal end-user experience.

NITRO Mobile

NITRO Mobile Intelligence, Assurance and Optimization delivers geo-located, app-aware insight. Taking a subscriber-centric approach, NITRO Mobile captures, locates and analyzes all mobile events across RAN and core, providing mobile service providers unprecedented detail to optimize the customer experience and network performance. As operators evolve from LTE to 5G, NITRO Mobile has the scale and virtualized architecture to meet the ever-growing data capacity demands while supporting automated optimization and analytics from 3rd party applications.

NITRO TechFlow

NITRO Policy-based Automated Technician Work Flow supports field operations and technicians in their capability to turn-up the network and troubleshoot network issues. By delivering a simplified workflow and process, NITRO TechFlow ensures the field operations team can manage the most complex tasks, reducing cost and time to market.

With its heritage in both instruments and systems software, VIAVI is uniquely placed to deliver test, analytics and optimization solutions through the NITRO platform. NITRO delivers real business benefits by enabling automated, virtualized networks and accelerating advanced services -- today and in the future.

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