NITRO Location Intelligence and XEdge

Enhanced Value Brief for Existing Nitro LI Customers for Special Events

XEdge

NITRO Location Intelligence

Executive Summary

VIAVI's NITRO Location Intelligence (NITRO LI) delivers precise, location-based insights into subscriber experiences, helping operators pinpoint and resolve issues. XEdge adds automated active testing, application performance monitoring, competitive benchmarking, and validation of specialized services such as First Responder communications and 5G slicing.

We see XEdge as the supporting layer for Special Events and VIP Areas, providing continuous active testing and assurance where reliability matters most. Together, they create an assurance system that accelerates resolution, reduces OpEx, and provides clear, auditable results: delivering exceptional value in airports, stadiums, hospitals, campuses, and transit hubs.

Capabilities of NITRO Location Intelligence (NITRO LI)

NITRO LI is a robust platform designed to deliver actionable, location-based insights into network performance and subscriber experience.

Its key features include:

- **Location-Based Visibility:** Geolocates subscriber experience events to identify performance "hot spots" and prioritize actions based on specific locations and times, ensuring efficient resource allocation
- **Engineering Drilldown:** Provides map-centric views of key performance indicators (KPIs) such as coverage, signal quality, call retention, dropped calls, and data throughput. These insights guide precise network optimization and strategic planning.
- **Operational Scale:** Supports large-scale network analysis, offering trend identification and cross-functional reporting to align engineering, operations, and executive teams

Complementary Capabilities of XEdge

XEdge enhances NITRO LI by introducing active testing capabilities that verify network performance and service quality from specific locations.

Its key features include:

- **Controlled Active Testing:** Enables operators to remotely schedule and execute tests for latency, throughput, video, and WiFi performance
- **Unattended Operation:** With customizable thresholds and real-time alarms ensures proactive issue detection
- **Application Monitoring:** Actively tests business-critical and consumer applications to validate real-world user experiences from designated locations, ensuring services meet expectations
- **First Responder Validation:** Tests priority and pre-emption settings for public safety communications, verifying readiness for first responders in critical locations
- **5G Network Slicing Validation:** Where supported, conducts tests through specific 5G slices (e.g., First Responder/Public Safety, enhanced Mobile Broadband [eMBB], Ultra-Reliable Low-Latency Communications [URLLC]) to confirm access, performance, and policy compliance directly from the field
- **Independent Benchmarking:** Uses a single probe to measure multiple operators simultaneously, providing fair, time-aligned comparisons to assess competitive performance
- **Cost-Effective Deployment:** Requires only a small number of compact probes deployed in high-value locations, centrally managed to minimize the need for drive/walk tests or truck rolls, delivering substantial capability with minimal investment
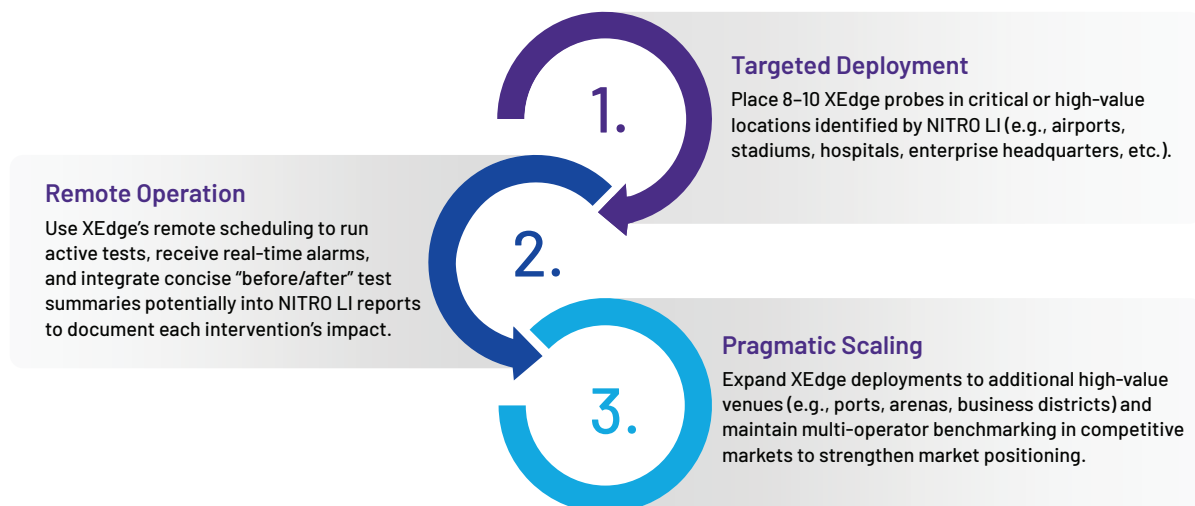
Why Combining NITRO LI and XEdge Matters

The integration of NITRO LI and XEdge creates a synergistic, closed-loop assurance system that enhances network performance, reduces costs, and provides robust evidence for decision-making.

Key benefits include:

- **Advanced Assurance:** NITRO LI identifies where and when subscriber experience issues occur, while XEdge conducts targeted active tests to diagnose the impact and confirm resolution—often without requiring costly site visits.
- **Audit-Ready Proof:** Combines NITRO LI's network-wide, geolocated insights with XEdge's probe-based results to produce compelling, defensible reports for executives, customers, and regulatory bodies.
- **Competitive Assurance:** XEdge's side-by-side benchmarking strengthens service-level agreement (SLA) defense, supports tender responses, and enhances commercial positioning by demonstrating superior performance.
- **Service Confidence:** NITRO LI highlights locations with degraded performance; XEdge validates the actual service experience for critical applications, First Responder communications, and 5G slicing, ensuring reliability in high-stakes environments.
- **OpEx Efficiency:** NITRO LI prioritizes areas for intervention, while XEdge's continuous monitoring and automated alerts at VIP locations reduce manual testing, repeat tickets, and operational overhead. The small added cost of XEdge yields significant functional and cost-saving benefits.

Recommended Deployment Strategy for Existing NITRO LI Customers

To maximize the value of NITRO LI and XEdge, customers can adopt a phased, targeted deployment approach:

1.

Targeted Deployment
Place 8–10 XEdge probes in critical or high-value locations identified by NITRO LI (e.g., airports, stadiums, hospitals, enterprise headquarters, etc.).

Remote Operation
Use XEdge's remote scheduling to run active tests, receive real-time alarms, and integrate concise "before/after" test summaries potentially into NITRO LI reports to document each intervention's impact.

2.

3.

Pragmatic Scaling
Expand XEdge deployments to additional high-value venues (e.g., ports, arenas, business districts) and maintain multi-operator benchmarking in competitive markets to strengthen market positioning.

Example Use Cases for XEdge Placement

XEdge probes are ideally suited for high-priority locations where network performance is critical:

Airports and Ports

Ensures continuous validation of cellular and WiFi connectivity for passengers, operational systems, IoT devices, and First Responder communications.

Stadiums and Event Venues

Provides 24/7 pre-event readiness checks, live performance monitoring, and post-fix validation to ensure seamless connectivity during high-traffic events.

Hospitals, Campuses, and Enterprise HQs

Actively monitors mission-critical communications, enterprise applications, and targeted 5G slices to maintain operational reliability.

Summary

NITRO Location Intelligence provides unparalleled visibility into where and when subscriber experience issues occur, enabling operators to prioritize and plan effectively. XEdge complements this by delivering low-cost, remotely managed active testing at critical locations, such as airports, to verify fixes, monitor applications, validate First Responder services, and test 5G network slicing.

XEdge also enables competitive benchmarking to strengthen market positioning.

Together, NITRO LI and XEdge deliver faster issue resolution, significant OpEx savings, and credible, audit-ready results—all with minimal incremental cost and a substantial boost in operational capability.

VIAVI

viavisolutions.com