Complete Operational and Commercial Readiness

Around the globe, service providers tout the promises of LTE—lightning-fast upload and download rates, high definition video streaming, and even Machine-to-Machine communications.

Time lines imposed by spectrum auction regulations and significant infrastructure investments only add to the growing market pressure to deliver on LTE performance commitments from day one. With consumers and content providers eager to take full advantage of LTE’s high capacity, high-performance network, you must be ready to deliver it before your competitors do.

LTE is a major and critical technology turn. The stakes are high, and the challenges are complex. Success will depend on your ability to achieve both operational and commercial readiness.

NETSCOUT’S value extends beyond product capabilities with expertise to guide and support you throughout the LTE technology transition.

ACHIEVE OPERATIONAL READINESS

Validate Your LTE Infrastructure

Operational readiness requires the transformation of a diverse array of brand-new components into a fully functioning network. Facilitating this transformation will require advanced tools to support your network planning and engineering organizations.

Manage Traffic Growth and Network Expansion

Facing exponential subscriber growth, network planning teams will be stretched to continuously expand the network efficiently with minimal CAPEX. The network will also require constant tuning to adapt to the infrastructure growth and shifting user behavior.
Augment Troubleshooting Processes and Tools
As with any technology turn, LTE’s uncharted waters will challenge your most seasoned network operations teams. Lack of experience with LTE infrastructure and the absence of baseline metrics can jeopardize both the productivity and performance of your Level 2/3 troubleshooting teams as they face new, unfamiliar performance issues.

Proactively Monitor Performance
Designed with service quality in the core specifications, LTE demands higher performance, throughput and latency standards. As network usage ramps up, real-time visibility into how well the network is delivering services and meeting these goals enables rapid optimization of performance.

ACHIEVE COMMERCIAL READINESS
Leverage Existing BSS and Processes
Your LTE network must be rapidly integrated into your existing Business Support Systems and processes to provide crucial information for billing, fraud, SQM and other systems. Driving down the cost per bit must be a priority not only for infrastructure and services, but the systems that support it.

Develop New Revenue and Service Strategies
Effective monetization of your LTE network is crucial to achieving a strong, rapid ROI on the infrastructure investment. Highly detailed data and analysis provides mission-critical information to develop service-based pricing and bundles.

Strengthen Customer Care Organizations
Empower front-line representatives with intuitive troubleshooting tools and work flows to minimize escalations and increase first-call resolutions. Track Subscriber Behavior and Service Usage Visibility into how subscribers are using the LTE network is vital to effective decision-making across multiple organizations.

OPERATIONAL READINESS
Reduce technical and business risks from day one
- Deliver service rollouts and expansions on time every time
- Enable inter-operability and inter-system monitoring

Accelerate revenue from infrastructure investments
- Develop optimal service pricing and monetization strategies based on actual subscriber usage
UNIQUE CHARACTERISTICS PROVIDE THE TOOLS FOR LTE SUCCESS

NETSCOUT delivers a comprehensive toolkit designed to help you increase your rollout velocity and meet your LTE readiness milestones with confidence.

**Complete Correlation and Capture of Control and User Planes**

With user plane traffic accounting for 90% or more of LTE bandwidth use, deep visibility is needed to effectively manage capacity, optimize resources and troubleshoot performance issues.

- Analyze destinations and subscriber use in detail over time.
- Eliminate the need to recreate issues with one-click access to automatically-captured, complete user plane data and correlated call displays.

**Device-to-Content and Cross-Network Visibility**

LTE will coexist with legacy networks well into the future. As a result, your visibility from handset-to-content must extend beyond eNBs and EPC domains.

- Easily report, monitor troubleshoot performance from RAN to Core and across technical borders from a single view.

**Full Subscriber-based Correlation**

NETSCOUT’s unique algorithms automatically correlate permanent and temporary identifiers within and across technology domains.

- Maintain a complete view of each subscriber’s activity.

**Automatic Network Discovery**

LTE networks will require constant tuning and undergo constant expansion, putting pressure on change management processes.

- Enable low-touch monitoring configuration.
- Automatically detect, characterize and configure monitoring for newly deployed network elements.
- Maintain an up-to-date view of network infrastructure.
- Remove additional administrative burdens improving accuracy and productivity.

**High Definition, Flexible xDR Data Feeds**

Data derived from the LTE network can provide valuable information for a variety of applications.

- Easily integrate with existing Business Support Systems.
- Minimize the cost and complexity of capturing and processing critical data for cost containment.

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COMMERCIAL READINESS

*Achieve throughput and performance goals*

- Deliver seamless quality of experience within and across networks

*Position the LTE network and business for rapid growth*

- Enable cost-effective and graceful scalability beyond launch
- Manage continuous network expansion and tuning efficiently and effectively
SOLUTION COMPONENTS

Customer Experience Management
- Dashboard Views of Subscriber-Level Experience
- Closed Loop Action on Experience Events
- Dynamic Customer Segmentation

Roaming Performance Visibility
- Consolidated Views Across 2G/3G and LTE Technologies
- Reports, Alarms and KPIs for S6a, S6b, S8 and S9

Performance and Subscriber Intelligence
- Network and Service KPIs (User and Control Plane)
- Proactive Alarms and QoS Dashboards
- Detailed xDRs (Subscriber and Application Use) for CEM

Universal Mediation Layer
- Programmable, Tailored Data Feeds for Multiple Applications
- Complete UP + CP Record Correlation, Normalization and Mapping

Subscriber-Level Troubleshooting
- Real-Time, RAN-to-Core Session Analysis
- User and Control Plane Correlation
- Real-Time Deciphering Support for S1-AP

Real-Time Traffic Characterization
- MME/SGW Pooling Design Validation
- Change Control Analysis During Network Turn Up
- Traffic Characterization L2-L7

Packet Forensics and Decoding
- Interoperability Validation
- User Plane Deep Dive Analysis
- Support for Collaborative
- Troubleshooting with NEMs

RAN Behavior and RF Performance
- Portable RAN Analysis for Lab, FOA and Campaign-based Troubleshooting
- Real-Time Analysis and Decoding for LTE Uu Interface (UL and DL)
- Multi-UE Support for Uu Monitoring

DEMONSTRATING VALUE:
LTE SOLUTION USE CASES

Applied to your LTE readiness challenges, NETSCOUT’S solution may be used to demonstrate valuable use cases including:

- Change control when adding a new eNB to the LTE network interoperability and intersystem monitoring
- MME/SGW pooling design validation and planning
- Identification of network retransmissions that result in poor user experience
- Ensure a smooth transition to LTE roaming

Please contact us today for use case demonstrations and additional examples.