Smarter performance and security monitoring for next-generation networks

DATASHEET

Features & Benefits

- » In-depth 3G and 4G monitoring and analysis
- » Monitoring load and performance of network entities including eNodeB, MME, SGW, P-CSCF, S-CSCF and HSS
- » Analysis of network and service layer KPIs - such as authentication latency, call setup delay, top talkers, failed sessions etc.
- » In-depth protocol analysis for Diameter, GTP and more
- » Advanced correlation enabling VoLTE analytics
- » Pre-defined and user configurable displays, alarms and reports for LTE and IMS
- » Drill-down from high level KPIs to sessions, to packet level details in order to rapidly troubleshoot performance and security problems
- » Easily scalable for carrier grade networks with traffic rates exceeding 100 Gbps

Now more than ever, mobile subscribers, organizations and individuals, increasingly rely on the employed dynamic of being "always-on" and "always-connected," for voice, data, video and mobile broadband services in 4G Long Term Evolution (LTE) and IP Multimedia Subsystem (IMS) networks. With heavy reliance and usage of LTE and IMS, providers need to securely and successfully innovate, deploy and monitor a wide range of products and services to meet business objectives. For example, as VoLTE becomes a key revenue driver, carriers and service providers must be able to both deliver and manage high quality, always available voice services while aggressively minimizing degradations which could be easily perceived as poor quality of service and user experience. As the mobile infrastructure becomes a complex matrix of networks, services, devices, applications, and security threats, the greatest challenge to providers and carrier class operations is the management of end-to-end security, performance and availability.

Customers won't compromise on their demands, and neither should you. NIKSUN NetMobility differentiates from conventional market offerings with dual security and performance monitoring for 3G and 4G networks on a single appliance. With advanced correlation of user data traffic and control traffic, NetMobility can pinpoint performance degradations and security threats impacting a network segment, a user application or a subscriber handset. Monitoring across numerous network entities, NetMobility provides visibility and insight to propel planning and prioritize network event responses and remediations. Detecting and isolating cyber security threats, malicious traffic and affected user devices, NetMobility significantly reduces mean-time-to-resolution (MTTR). NetMobility allows service providers and carriers to simplify management, security and operations all while guaranteeing the best availability and quality of applications and services for subscribers. Ultimately, helping your carrier class network maximize performance and secure services to manage the user experience.

LTE Challenges

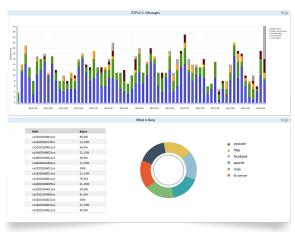
Performance: LTE and IMS introduce new models of Quality of Service (QoS) and Quality of Experience (QoE) to service providers. This necessitates visibility into performance indicators such as load and response times for individual network components including eNodeB, MME and SGW as well as tracking bandwidth usage by subscriber and application. NetMobility gives Network Operations Center (NOC) analysts awareness of subscribers' quality of experience (QoE) to preemptively identify "hot spots" in the network. Based on application demands, the operator can plan for changing trends in their networks or quickly drill-down to identify the cause of potential issues. NetMobility can assess and correlate "Cause Codes" that are returned by the network to relate caller experience with network events – granting visibility and true insights on signaling and application data.

Security: Mobile networks traditionally were relatively insulated from IP-based cyber security threats. However, the convergence of Internet-based application and LTE and IMS technologies which natively use IP puts both providers and subscribers at risk to new attack vectors. They are now vulnerable to an array of threats, such as DoS and DDoS attacks, port scanning, malware propagation, and service theft attempts. NetMobility's flexible and customizable alerting intelligence delivers real-time detection and notification to enable effective investigation and remediations of these security threats and attacks.

NIKSUN's Holistic Solutions

Designed with practicality in mind, you never have to choose between security and performance. All from a single, unified console, simply select from pre-defined or customized dashboards, alarms and reports to zoom in on the data that's important to you. Unified intelligence enables greater operator visibility into multiple LTE and IMS components for tightly integrated performance and security monitoring. The result: realization into providers' objectives while simultaneously satisfying growing customer expectations.

NetMobility's centralized management allows you to generate, collaborate, analyze and deliver reports for various organizational needs. As a collaborative platform, NIKSUN NetMobility accelerates diagnosis of complex patterns and triaging of threats on both user and control planes, to correctly identify bad actors or network throttle points.



NetMobility's Advanced Analytics

Scaling to traffic rates beyond 100 Gbps on a single platform, NetMobility is ideal for non-intrusive monitoring in carrier class operations. NIKSUN NetMobility delivers comprehensive security and performance monitoring to meet the challenges of modern carrier grade deployment scenarios. It's always ready with subscriber, application and network intelligence for smarter monitoring of your next-generation networks.

Technical Information

Monitoring Support: EPC & IMS: S1-U, SGi, S1-MME, S11, S5, S8, S6a, s6b, Gx, Gm, Mw, Cx, Rf, RTP, RTCP and more • CDMA2000: A10, A11, A12, RADIUS and more.

Standards Compatibility: All major standards including 3GPP 3GPP2, IETF and ETSI

Integration: Authentication - TACACS+, RADIUS, LDAP and Active Directory. All NIKSUN products integrate with NIKSUN NetOmni™ Full Suite for enterprise-wide data aggregation, reporting and visualization.

Package Availability: NetMobility is available as an optional package on NIKSUN NetVCR® and NetDetector® products.

Interested in learning more?

For more information, please visit us online at *niksun.com*.



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