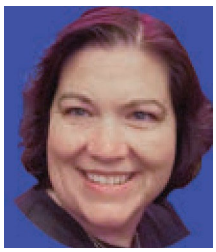
Achieving AIOps Success and Optimizing 5G Networks: Curated Data is Key



By: Heather Broughton
AVP, Service Provider Product Marketing, NETSCOUT

As more and more communications service providers (CSPs) are dealing with optimizing 4G networks along with the transition from 4G to 5G, artificial intelligence for operations (AIOps) teams present an exciting opportunity to become more proactive and reduce mean-time-to-knowledge (MTTK) when problems occur. AIOps holds the potential to aggregate and analyze network data, surfacing insights into the highest priority problems that affect the largest number of subscribers and user experience. By facilitating next-generation automation, teams can determine when the network has an issue by looking at traffic over time. For example, a lack of traffic in a certain area may not cause an "alarm" but exposes an issue that should be addressed.

AIOps also can examine customer data with the goal of leveraging vital insights into user behavior and preferences, thus empowering CSPs to develop more personalized services and help improve network promoter scores. They also can look to improve network operations efficiency at the RAN-CORE-MEC, identifying patterns and anomalies, and reducing mean-time-to-repair.

In addition, AIOps teams will be able to serve a vital role in identifying security threats in the wireless network, as well as deliver enterprise 5G service slicing assurance, and facilitate traffic and network planning to better optimize underutilized resources.

AIOps Success Dependent on High-Quality Data

The success of AIOps will be entirely dependent on the quality of the data available to the team. Put another way, AIOps needs "high-fidelity" data to improve network performance, reduce downtime, and enhance the overall customer experience. The challenge teams face is mining and refining network-level data in such a way that it is consumable for AIOps engines. And in order to drive modern software-defined services, data must also be accessible in real-time.

AIOps success is frequently hindered by an inability to see the network end-through-end, which leaves teams with an incomplete picture. What is needed is context that can reveal what the data really means. This involves the who, what, when, and where, along with the network conditions that are affecting the network quality being provided to each subscriber.

Powering AIOps with Smart Visibility

The key to powering AIOps is to tap into a common source of truth, which can be achieved by combining packet-level data with telemetry and visibility from system elements across all borders of the network. This "smart visibility" can reveal trouble spots anytime, anywhere throughout the 4G and 5G networks, allowing AIOps to focus on proactive detection versus reactive mitigation.

NETSCOUT's intelligent Smart Data solutions send high-fidelity data through the AI pipeline to an AIOps environment. Armed with this near-real time curated data, teams gain the visibility needed to achieve advanced automation, drive greater efficiency, and capitalize on new monetization opportunities. To see the automation possibilities, go to www.netscout.com.