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Amdocs Network Optimization Suite by actix

Amdocs Network Optimization Suite by actix is an analytics-driven scalable platform that helps service providers verify network performance and identify issues that affect service quality and customer experience. Leveraging drive, indoor, configuration management (CM), performance management (PM) and subscriber trace data sources, the solution enables service providers to conduct countrywide analysis and benchmarking across their networks, with the ability to load, process and analyze large data volumes using centralized and distributed deployment models.

Data Sheet

The solution is powered by industry-proven technology and more than 25 years of RAN software development experience.



Amdocs Network Optimization Suite by actix Analytics & Optimization



Amdocs Network Optimization Suite by actix provides comprehensive analysis and visualization functionality at all levels, ranging from the entire network, down to individual cells. This enables it to identify the root cause of network issues, and then recommend corrective actions. Main features include:

- Network-wide visualization: dashboards, reports and integrated views across all RAN data sources
- Drilldown analysis: configuration, alarms, performance events and traces
- Multi-dimensional approach: mobile agents, performance management, configuration management, fault management and call tracing

Amdocs Network Optimization Suite by actix 5G modules

Amdocs Network Optimization Suite by actix 5G modules ensure more efficient 5G-NR capacity usage and faster rollouts, including analysis of 5G drive data (from 5G scanner data to 5G UE capable devices), 5G cell trace geo-location, as well as analysis with automated proactive network optimization and 5G performance KPIs.

The solution has been an essential ingredient in the success of many of the world's first 5G-NR network launches and continues to be used post-launch in many of these implementations to ensure a positive 5G experience.

5G drive test module

5G scanner support:

- Cell PCI coverage plots
- Beam coverage footprint analysis
- Beam group analysis
- RF measurements and distance to cell
- Beam utilization and overlap analysis



5G handset:

5GNR attributes and events for key metrics:

- RF coverage (e.g. RSRP, RSRQ, SINR)
- L2 performance (NACK rate, modulation, MCS)
- User experience (throughput)
- RACH, reconfiguration and 5G NR bearer drops

Detailed throughput attributes:

- Total 4G and 5G throughput in NSA mode
- Throughput in CA (carrier aggregation) and non-CA mode
- Average throughout filter for throughput measurements >10 and >100 Mbps



Coverage and quality analysis in radio network analysis (RNA)



5G radio network analysis (RNA) coverage/interference analysis



5G signalling viewer of particular events

5G NR NSA Cell Trace module

This module facilitates faster site acceptance and optimization of 5G NR NSA, while providing access to GEO-located 5G NR NSA signal strength and quality, key performance indicators (KPIs) and call flow viewer (highlighting LTE and 5G NR NSA RRC signaling flow). KPIs are available at the 5G NR NSA cell level, mesh level, event level and LTE ACDR (per subscriber).

5G NR NSA radio network analysis



Cell coverage



Delta coverage



Interference

5G NR NSA mesh attributes



Comparison of coverage distribution at different mesh levels



Best 5G NR, best PCI and best RSRP



Reconfigurations to 5G NR NSA

5G NR NSA signaling drilldown



Signaling drilldown support for any connection

Automated Proactive Network Optimization (PNO) module

This module delivers ongoing network management and optimization to improve performance and reduce manual effort. Driven by customer experience metrics derived from GEO located Cell Trace data, it goes far beyond just automating the process of identifying network optimization possibilities. It also extends to generating recommendations and automating implementation of changes in the network, and most significantly, automatic optimization with "before and after" comparisons.





PNO key features:

- Interactive, open loop and closed-loop operational modes
- Multi-vendor by design
- Cluster management to reflect ownership in different teams, separate triggers per area
- Network stabilization through parameter and cell freezes and blacklisting
- User-definable triggers, thresholds, scheduling and timing
- Short and long-term impact analysis with rollback criteria
- Web interface offers:
 - Map of cells and relational data
 - KPI trending and monitoring of all PNO activities
 - Template-based use case configuration
 - Policy configuration
 - System administration

Why Amdocs

Amdocs' offerings give service providers the option to choose the "best-in-breed" tools for tuning, optimizing and maintaining their services by interfacing with all major drive survey, indoor test, chipset and subscriber trace vendors. Amdocs Network Optimization Suite by actix specifically has been at the cutting edge of new technology rollouts for over 25 years.

With over 35 years managing networks, Amdocs takes a holistic approach to maximizing coverage, capacity and performance of mobile networks. We are uniquely positioned in the market to enable open 5G architecture, which supports the creation of an agile and comprehensive ecosystem of capabilities that allow you to accelerate the rollout, efficient operation and rapid monetization of 5G networks. Our extensive pool of network consultants and subject matter experts are supported by regional competency hubs across the globe, delivering the technical solutions you need to realize cost efficiencies and meet business objectives. We are a preferred partner for tier-1 and tier-2 service providers across the globe, with a proven track record supporting projects during all phases of network rollout and acceptance – including, but not limited to – RAN, transport and core design, provisioning and troubleshooting services, pre/ post-launch optimization, triage and NFV-O, for multi-vendor, multi-technology heterogeneous open networks.

For more information, visit: <u>Network Deployment & Optimization</u>

