

# Amdocs Helix Performance Management (PM)



## Optimize your network and service performance

In a highly competitive market, characterized by the rapid evolution of complex telecom networks, delivering cost-effective, high-quality digital services has become crucial. Yet, managing the performance and quality of service in complex telecom networks poses significant challenges in analyzing network traffic and extracting the insights needed to make informed decisions.

Amdocs Helix PM, part of the Amdocs Helix Service Assurance Suite, is a scalable, carrier-grade solution that optimizes network and service performance for the effective management of the end-to-end performance and QoS of complex telecom networks. With integrated software modules tailored for even the largest network environments (including 5G, LTE, wireline and transport) it empowers communications service providers (CSPs) to efficiently collect, process and analyze traffic information and KPIs, and gain the valuable insights they need to ensure efficient resource allocation and enhanced quality of service.

**Process large volumes of data in real time**

**Adjust performance thresholds automatically**

**Gain deeper insights into network behaviour**

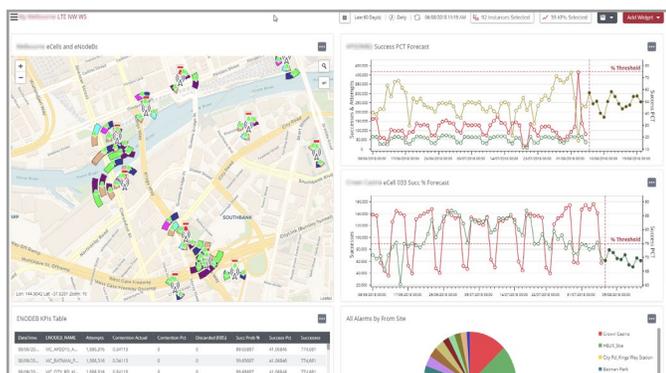
**Improve network planning and dimensioning**

**Identify service degradations**

**Speed up the resolution of network performance issues**

## Real-time processing of large volumes of data

When assessing network performance, CSPs must manage vast amounts of data from diverse domains and technologies – including equipment vendors, service probes and other external resources. Amdocs Helix PM efficiently collects and analyzes hundreds of millions of network performance measurements per day, providing real-time translation of this wealth of information. In terms of data storage, the solution offers comprehensive support for both big data storage using a Hadoop framework and traditional relational databases utilizing Oracle. With this support, which accommodates both long-term storage needs and day-to-day operational requirements, CSPs can manage their data seamlessly.



## Near real-time KPIs & KQIs

Amdocs Helix PM provides strong data-aggregation capabilities that enable the calculation of key performance indicators (KPIs) and key quality indicators (KQIs), thereby significantly enhancing system performance and facilitating precise traffic analysis. Examples include the ability to identify peak and high-traffic network periods and seamlessly apply automatic aging (thin-out) to operational measurements (OMs). In addition, the solution generates threshold-crossing alarms (TCAs) based on a diverse range of conditions.

## Service performance management

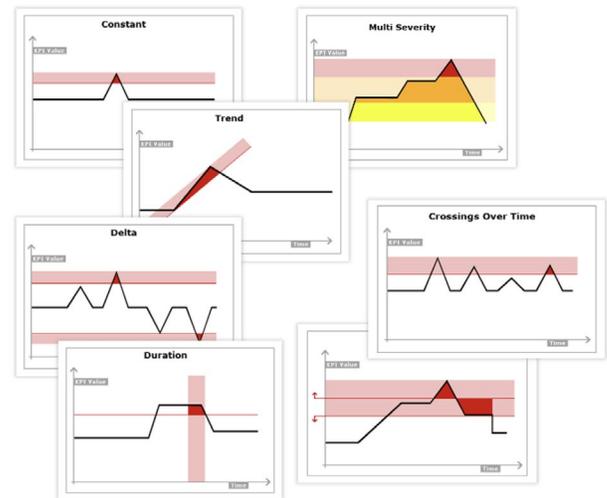
Amdocs Helix PM provides comprehensive end-to-end monitoring of mobile, fixed, IP and OTT services, ensuring the reliability and performance of mission-critical applications and digital services, regardless of the technologies. Leveraging its robust data processing capabilities and advanced analytics algorithms, the solution extends this functionality to encompass the management of service-oriented KPIs and KQIs, empowering service operations center teams to rapidly detect service-level violations on a per-service basis and investigate underlying factors to identify the root cause. Furthermore, the solution facilitates identification and prioritization of key issues impacting services and customers, enabling rapid diagnosis of their impact and automation of the resolution process.

## Deep insights into network behavior

Amdocs Helix PM offers a set of analytics and machine learning algorithmic tools that enables engineering and operations teams to gain an automated view of network performance and reliability, facilitating execution of key responsibilities and daily tasks. The tools provide a range of options, ranging from threshold crossing monitoring to adaptive and machine learning thresholds, advanced data forecasting and statistical anomaly detection. With this information, these stakeholders gain valuable insights into the nature of the network and user traffic, the patterns and the behavior of different KPIs and KQIs, as well as their internal effect on each other and their impact on the tasks at hand.

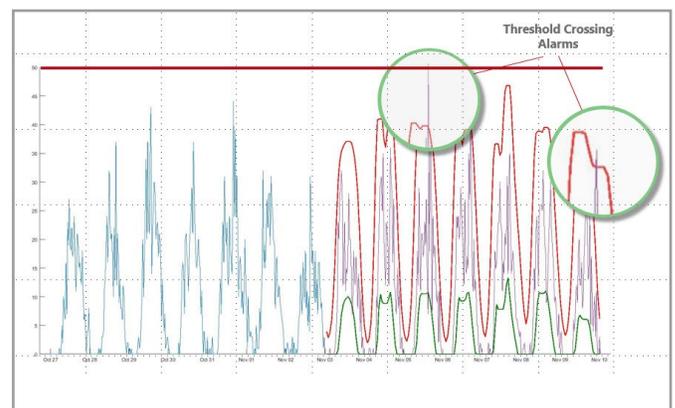
## Traffic Guard: analysis and troubleshooting

Amdocs Traffic Guard monitors network performance patterns for service degradations, using 'smart thresholds' to proactively analyze evolving network patterns and create threshold crossing alarms (TCAs).



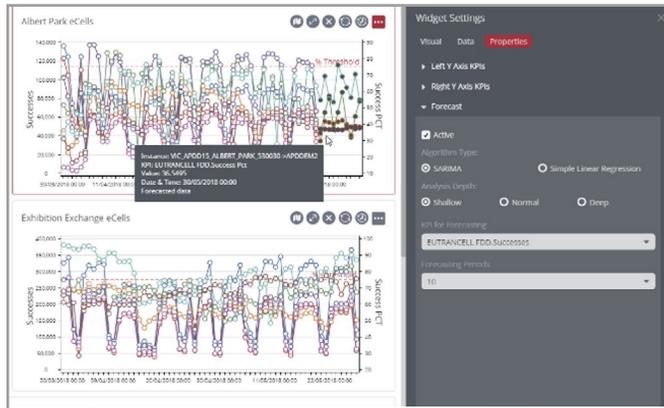
## Adaptive thresholds

The Adaptive Thresholds module automates the creation and maintenance of critical performance criteria, significantly reducing the number of rules required within the system, as well as the time it takes to deploy new services. This includes using statistical algorithms to automatically calibrate and fine-tune settings, in order to detect non-trivial problems at their earliest stage.



## Predicting network behavior

Amdocs Helix PM forecasting feature enables users to schedule automated data forecasts and trend analyses for any system counter, KPI or network element. Its patented, self-developed algorithm efficiently applies the SARIMA (Seasonal Auto-Regressive Integrated Moving Average) model to large datasets, and stores the results in the database for reporting and alarm generation.



## User interface: speeding up the investigation process

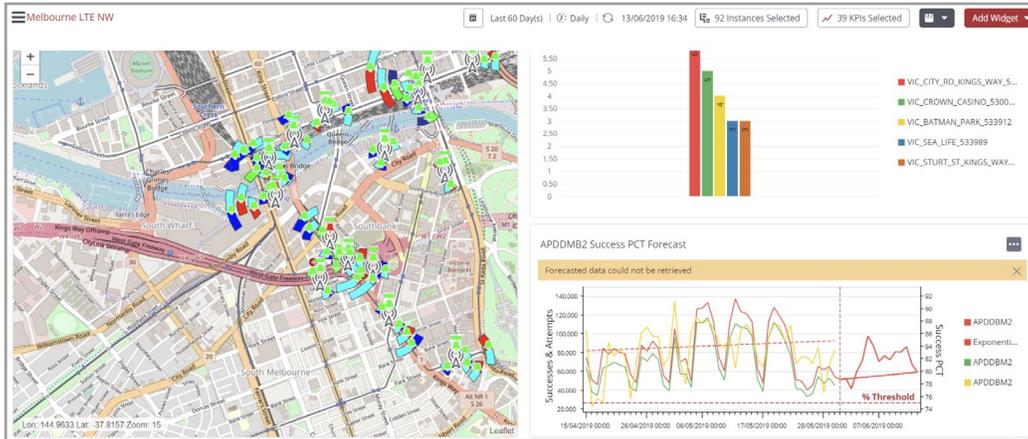
Sentinel is a centralized user interface that provides quick and easy access to all Helix PM modules. It consolidates views from across the platform, providing a comprehensive view into user actions and enabling fast queries on even the largest data sets. In addition, with its intuitive, process-driven interface and convenient widgets, it provides users with control and customization over their views.



## Anomaly detection

Anomaly Detection is a machine-learning algorithm that automatically identifies instances with highly abnormal KPI behavior or non-trivial KPI-to-KPI relationships. The algorithm learns KPI behavior, compares patterns and automatically identifies anomalies. The score results are displayed for each individual instance, facilitating easy identification of the anomalies and measuring the deviation from common behavioral patterns.





## Helix Performance Management: monitor, optimize and troubleshoot your network and service performance

- Process massive amounts of data
- Identify service degradations
- Adapt thresholds automatically



## About Amdocs

Amdocs helps those who build the future to make it amazing. With our market-leading portfolio of software products and services, we unlock our customers' innovative potential, empowering them to provide next-generation communication and media experiences for both the individual end user and enterprise customers. Our 31,000 employees around the globe are here to accelerate service providers' migration to the cloud, enable them to differentiate in the 5G era, and digitalize and automate their operations. Listed on the NASDAQ Global Select Market, Amdocs had revenue of \$4.58 billion in fiscal 2022.

For more information, visit Amdocs at [www.amdocs.com](http://www.amdocs.com)

