Application Note

Keeping Alerted of your Network with Custom KPIs

MonitorQOS is an advanced monitoring solution that provides its users with real-time, user-defined KPIs, made from the entire fields of data records (xDRs). It has been developed to constantly monitor the network's quality-of-service (QoS) in real-time.

This flexible solution can easily be integrated in an existing network operations center (NOC) independently of solution vendors. MonitorQOS is an all-purposes monitoring system that aims to be the mobile operator's generic stream processing component of its Big Data architecture.

MonitorQOS provides the most accurate and current insights of the network's health.
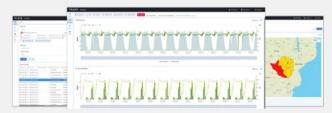

MonitorQOS

A pillar of the NITRO Mobile Platform:

MonitorQOS is one of three products that aims to monitor and improve the customer experience through Service Quality Management (SQM). MonitorQOS is a powerful tool to get alerted to any KPIs from the network, either predefined or created by the user himself. It can connect to existing data sources and users can build their own dashboards answering their specific needs.

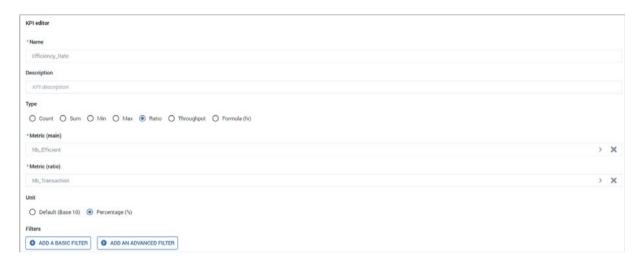Get the full picture with MonitorQOS, SecureQOS & ExploreQOS

SecureQOS offers a comprehensive troubleshooting solution that provide the root causes of any dysfunctions, from a transaction's history to its end-to-end call trace and protocol decoding bits.

ExploreQOS provides 360° insights for network performance and its associated services, such as voice, messaging and data, from 2G to 5G Core and radio environments.

User-built voice SQM dashboard in MonitorQOS

xDRacts

xDRact is a technology used by VIAVI to create a custom set of KPIs and aggregation dimensions directly from the xDRs collected from VIAVI non-intrusive eProbes or through external data (e.g. Billing, RAN OSS... through the Southbound Interface). An xDRact is a table of custom KPIs and filters configured by the end-user himself.

xDRact can be based on templates, created and/or shared. An advanced filtering editor is provided under the preview table to easily filter large tables with many columns. Complex-filters can be applied at all stage of xDRact definition to filter out xDRs to work with, to dimension definition and to KPIs definition. In practice, xDRact are as easy-to-use to configure and handle as a spreadsheet software.
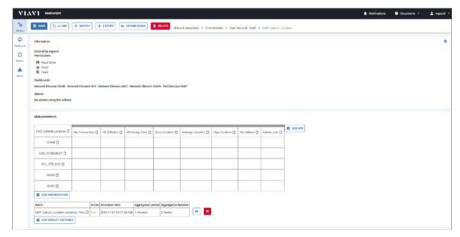

KPI builder with an advanced condition editor

Unlimited and interactive dashboards

Create, monitor, improve and share your dashboards

Once one or many xDRact has been set, the user can visualize their outputs in tables or through rich dashboards. With a graphical dashboard editor, the user can create, edit, delete, set private/public as much dashboards as he desires. This is particularly useful for information exchange between technical departments. (e.g. a MAP-protocol-Expert sharing his own dashboard displaying an issue to another colleague not familiar with the protocol.)

Example of a MAP xDRact

Benchmarking and alarms

With its built-in comparison feature, MonitorQOS can compare in real-time, separated data sources for benchmarking or validation purposes.

In order to direct attention on the right KPIs to follow, MonitorQOS provides an alarm module that triggers alerts on user pre-defined KPIs crossing threshold and on specific events. All data can also be sent to the operator's 3rd party solutions through the Northbound Interface (NBI).

Build your own chart

VIAVI got you covered with chart-building capabilities. Any xDRact or KPI created can be easily visualized in a dashboard by building a chart with the chart-building wizard embedded in MonitorQOS.

Insert any chart in any dashboard

Once a chart is properly set, the end-result is immediately displayed and can be inserted in one or multiple dashboards.

Reporting

For managers, as well as any other users, it is important to receive automatically pre-configured reports summarizing the network activities. Using MonitorQOS report feature, users can schedule or download manually any report at a given frequency and granularity. Reports can also be sent automatically by emails.

Chart building feature

Example of histogram end-result

VIAVI (NASDAQ: VIAV) is a global provider of network test, monitoring and assurance solutions for communications service providers, enterprises, network equipment manufacturers, government and avionics. We help these customers harness the power of instruments, automation, intelligence and virtualization to Command the network. VIAVI is also a leader in light management solutions for 3D sensing, anti-counterfeiting, consumer electronics, industrial, automotive, and defense applications. Learn more about VIAVI at www.viavisolutions.com.