When a network issue occurs do you know which service, customer, or SLA is affected?

KRATOS®

An outage occurs to a top revenue producing service that will soon be at risk of violating its Service Level Agreement (SLA). Missing the SLA will be extremely costly in terms of outage credits. Not to mention the potential of a frustrated customer. What happens now? How do you monitor your most profitable services, quickly identify the root cause of the service issue and remediate the problem rapidly to mitigate the significant customer and financial impacts?

Transforming Network Operations with Service Quality Management

NeuralStar® Service Quality Manager (SQM) is the first true end-to-end service management solution in the satellite industry that answers these tough questions to help improve and optimize network operations.

Monitor Top Revenue Producing Services

NeuralStar SQM provides dynamic service views and maps of the global network, so operators at a glance can see and understand the business implications of their infrastructure.

When a top revenue producing service, such as video goes down, NeuralStar SQM displays a critical red alarm in the grid. The Key Performance Indicators (KPIs) including service status, quality and availability show a service failure.

Monitoring top services throughout global teleport operations.

NeuralStar SQM also displays which teleport is affected – in this case Shanghai. By clicking into the critical alarm for the video service, the process to identify the issue and resolve it begins.

Quickly Identify Service Impacting Conditions

NeuralStar SQM provides an end-to-end services view from the uplink to the downlink through the device chain, antenna, and carrier that transmits service data to the satellite. In this view it is clear there is a service delivery problem with the downlink which is color coded red with a critical alarm. It is affecting the service delivery of the video to the Shanghai teleport. The service status and quality for the service indicates "Failed". By comparing the actual vs expected SLA performance it becomes clear the SLA is in jeopardy of being violated. To get to the next level of detail, one of the critical carrier alarms is clicked on by an operator and the carrier performance summary is displayed based on data from Kratos' integrated carrier monitoring product Monics.

Identifying Impacted Service Segment and SLA Status.

Determining root cause by analyzing carrier performance.

## Determine Root Cause of Service Issue

The carrier performance view from NeuralStar SQM shows drops in multiple KPIs critical to service delivery. By drilling down further and analyzing the carrier data, it becomes evident that the KPI's including EIRP, Es/NO and C/NO are well below minimum threshold levels which indicates that the service issue is signal interference. To avoid missing the SLA, immediate action needs to be taken.

Remediating Problem to Avoid SLA Violation

To resolve the interference issue, the operations team uses NeuralStar SQM's control capabilities from the integrated Compass product to switch to a back-up equipment chain. The chain includes Kratos' signal cancellation product named SigX Protect. It cancels the interfering signal and the customer service is restored. The downlink service is now back online and the service status and quality shows "Available", so the video service is again transmitting from Oslo to Shanghai. The top revenue producing service is restored before the SLA violation avoiding the costly financial impact of customer credits and ensuring customer satisfaction.
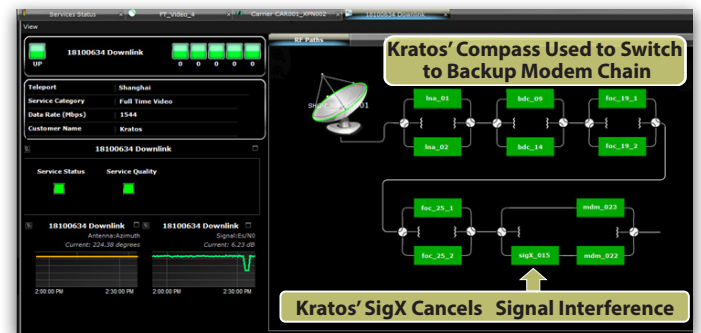
Resolving service issue to avoid customer and SLA impact.

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