

# Optimizing Service Delivery with End-to-End Service Management

**KRATOS**



## Challenge: Managing Services End-to-End Effectively for Satellite Operations

Delivering quality services such as programming content, live sports broadcasts, data backhaul, and high-speed data access to customers using satellites is the lifeblood of your business. Today's management tools limit your ability to optimize these services because they only show individual performance metrics for an undifferentiated sea of devices, such as modems, Antenna Control Units (ACUs), High Power Amplifiers (HPAs) and other equipment in the teleport and across the network, rather than identifying which specific devices support the performance of particular services to specific customers.

In addition, multiple, unconnected tool sets are needed for different types of technologies, such as Monitor & Control (M&C) systems for the RF equipment, management systems for the VSAT networks, Network Management Systems (NMS) for the IP equipment, and Carrier Monitoring Systems (CMS) to handle carriers. This makes identifying and remediating the root cause of an issue very difficult, time consuming and equates to slow response times to outages, customer dissatisfaction and significant losses in revenue.

## Solution: NeuralStar SQM – Displaying End-to-End Service Performance Across Satellite Operations

NeuralStar Service Quality Manager (SQM), the first true end-to-end service management solution in the satellite industry solves this problem by bridging the silos, retrieving both device and service data from monitored systems at each teleport and integrating it all into one common platform.

NeuralStar SQM manages services across the entire network to help service providers improve service quality assurance and deliver visibility into customer impacting conditions to maximize revenue and reduce costs.

It organizes the geographically dispersed devices from both the satellite and IP infrastructure layers, representing services as graphical maps showing end-to-end performance. These service level views are matched to customers, equipment and carriers with real time metrics— all from a central location and in a single solution— materially improving the service quality assurance and providing insight into service-affecting conditions.



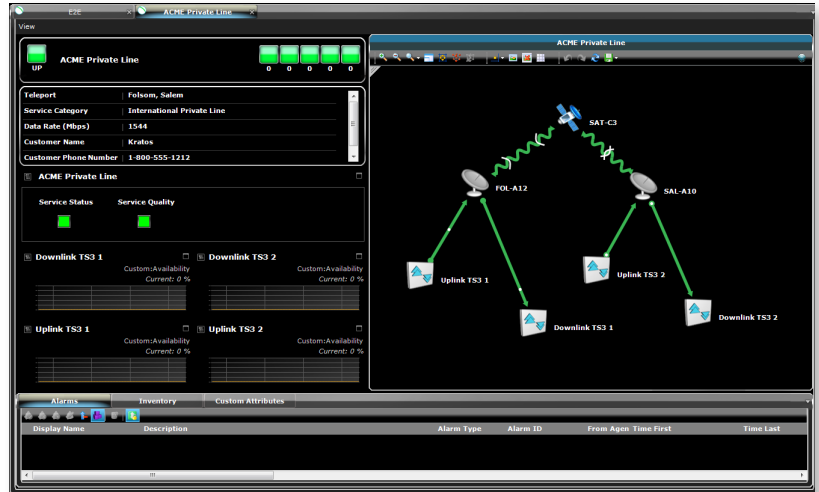
▲ NeuralStar SQM collects the data from distributed teleports and displays end-to-end service performance.

NeuralStar SQM manages hundreds of services and thousands of supporting devices across the globe enabling operators to view the status of every service using real-time intelligence and analytics to quickly assess which customers are affected by a degradation or outage of even a single device anywhere in the network.

## Experience the Benefits

### Improve Quality of Service

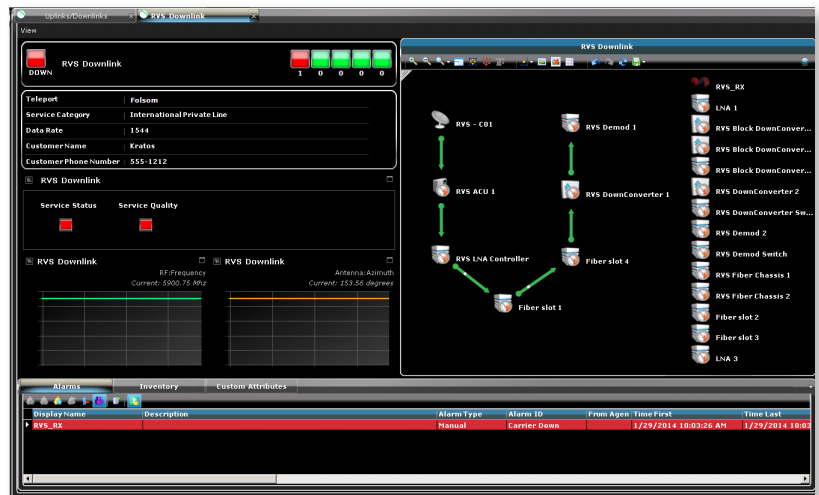
- Minimize service disruptions to customers by discovering degradation or latency on the network faster
- Manage services end-to-end with visibility from source to destination across circuit (satellite/microwave) and packet (IP) networks
- Improve service delivery by tracking KPI's including availability, status, and quality of a customer's service



▲ A NeuralStar SQM dashboard displays an end-to-end view of a service.

### Minimize Revenue Leakage

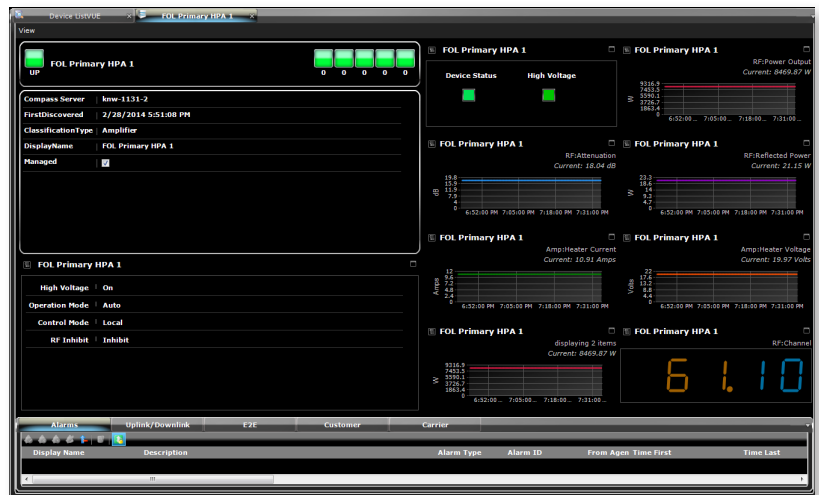
- Accelerate the root cause identification of problems through centralized alarm management
- Identify, prioritize and recover services affected by equipment failures quickly
- Improve service level delivery and maximize SLAs by reducing service downtime



▲ NeuralStar SQM shows the status of the equipment and the availability of the downlink service.

### Reduce Costs

- Manage more services and do so more effectively
- Eliminate monitoring tools and stovepipes by managing service performance across satellite and terrestrial operations in a single unified platform
- Scale to manage hundreds of services and thousands of supporting devices across the globe
- Eliminate labor-intensive manual reporting from individual management systems



▲ A drill down view from NeuralStar SQM shows the status of a device in the downlink service.