MAJOR CSP LEVERAGES AI-POWERED NETWORK MANAGEMENT

Ceragon equips this Connectivity Service Provider with the modern links and NMS they need to deliver the premium services their customers count on.

SERVICES PROVIDERS

EUROPE

Some problems are good to have. Like, getting bumped from your seat in economy... to first class. Or, finding out you have a bit of bonus budget you need to allocate before the end of the year. Or, being the innovative operator of one of Europe's largest telecommunications companies as you leverage new AI-powered network management tools to support your network modernization efforts.

Like many Connectivity Service Providers (CSP), this customer is deep in the middle of modernization efforts, letting go of some legacy technology and vendors to streamline and optimize the operation of their growing network as it undergoes 5G densification. This large CSP has customers that come in a couple of key flavors, including end-users (B2C) and business customers (B2B) who resell connectivity services to their own end-users.

The benefits for B2B customers like Mobile Network Operators (MNOs) and Internet Service Providers (ISPs) using this CSP's 'White Label' network services are clear - Instead of incurring the CAPEX and OPEX of building and maintaining their own high-speed networks, they instantly have access to the vast infrastructure and services provided by an established and trusted industry professional.

THE CHALLENGES

Limited Legacy Software Technology | Phasing-Out Some Incumbent Vendors | Advanced Modern Network Management Requirements
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As this CSP's network continued to grow and transition to 5G, it became clear that hundreds of new high-capacity low-latency links would need to be added. In addition, several aging devices needed to be upgraded or replaced. Add to that, new regulatory requirements mandating a move away from certain incumbent vendors. This created an opportunity for the Connectivity Service Provider to expand its long-established relationship with trusted vendors like Ceragon. When the CSP needed to add an additional 600 E-band millimeter wave links, Ceragon was happy to help.

If you are adding hundreds of new links to your network, it's probably wise to consider upgrading your Network Management System (NMS). This CSP happened to be using an older NMS with an outdated, rigid, relational database. Challenges often equal opportunities, and in this case, the CSP recognized that upgrading to a modern NMS would allow them to leverage the robust flexibility of an Elasticsearch database. This new tech would deliver enormous advantages, like full-text search and relevance scoring, scalability and performance improvements, distributed architecture with higher availability and improved load balancing, along with analytics and aggregation capabilities, all critical to the operation of a denser, more complex network.

The Connectivity Service Provider was faced with a tough decision. Should they take on the potentially costly and time-consuming task of developing a new in-house proprietary NMS of their own? Or, turn to a trusted partner for a robust ready-made NMS with all the future-friendly features they would need. Picking the right partner would allow them to avoid the plethora of software development pitfalls, along with the associated time and cost.

THE SOLUTION

Collaborative Customer-Led Product Development | Modern AI-Enabled NMS | Future-Friendly Network Management Features
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Fortunately, the CSP and Ceragon have a long history of collaborating on innovative solutions. The Connectivity Service Provider has played a key role in several of Ceragon's customer-driven product development projects. When the team demonstrated an early version of Ceragon Insight, the AI-powered network monitoring, management, and maintenance oversight solution, the CSP immediately recognized the potential.

Ceragon Insight would deliver the Elasticsearch database functionality the CSP was looking for along with an entire suite of AI-powered features including advanced analytics tools that could provide predictive and preventative management for their large network. In addition, the CSP was able to work with the product development team to impact Ceragon Insight's development roadmap and future features.

All this added up to an ideal NMS outcome for the customer. They would now have a modern, flexible NMS that utilized AI to optimize the operation of their Tier 1 network. In addition, they could help ensure that future iterations of the software were tailored to their needs, and the needs of operators just like them, all without having to take on the burden of developing their own in-house software.

THE RESULT

Ceragon Insight's analytics module provides the CSP with an intuitive, in-depth view of their entire network. The AI aids in monitoring and analyzing network health and helping to ensure optimal performance and functionality. A variety of dashboards and graphical tabular views deliver the invaluable knowledge the CSP's Network Operations Center (NOC) needs for performing tasks like:

+ Alarm and Incident Investigation
Investigating and correlating between alarms and incidents to speed up troubleshooting and identify root causes

+ Link Performance Analysis
Analyzing individual transport link performance to identify irregularities

+ Predictive Traffic Management
Tracking and identifying traffic anomalies associated with throughput and utilization to anticipate capacity issues

+ Preventative Monitoring
Mitigating bottlenecks, outages, and other issues before they impact network health.

+ Remote Maintenance
Avoiding unnecessary field site visits, to reduce overall OPEX, while improving ongoing network performance