MYCOM OSI's Experience Assurance monitors the quality of premium 4G/5G services for a large Asian service provider

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Executive summary

An Asian communications service provider required to identify the experience of its customers for premium and business-critical services, such as mobile broadband, mobile data services and enterprise services. They also required to know how many customers per service were impacted and how they should prioritize remediation of service impacting problems.

MYCOM OSI offered its Experience Assurance solution (Service quality management and analysis, automation solutions and an enterprise portal), operating on the AWS Public Cloud, which allowed the service provider to monitor the quality of their premium 4G/5G services. With this, they could:

- View a single pane of glass for the performance across the IT, fixed and mobile networks.
- Perform service quality analysis for proactive, real-time identification of service quality, including inventory and topology management. In addition, carry out customer impact analysis and correlate network issues to the end customers.
- Carry out automated trouble ticketing to improve operations. This included automatic notification of a degradation, automated ticketing by integrating with multiple ticketing platforms, automated dispatch to specific expert groups and automated remediation.

Implementing Experience Assurance

An Experience Assurance dashboard for the entire network was created for all services and impacted customers by modelling a range of mobile, broadband and enterprise services.

The unique aspect of the solution was its correlation of data from IT and fixed/mobile networks to troubleshoot problems; from sources such as network, infra and application performance counters, events or alarms and open trouble tickets across the fixed, mobile and IT networks. A service path was created to provide a Service Quality Index (SQI) and the customers per service were modelled to deduce how many mobile broadband, fixed broadband and enterprise customers were impacted.

In addition, service impact per region was calculated. Representation of the data in maps for quick identification of the worst performing clusters helped them in further drill down.

About the Communications Service Provider

The Asian service provider offers nation-wide fixed, mobile, LTE, and 5G services. It serves over 80 million+ customers with premium and business-critical services, such as mobile broadband, mobile data services and enterprise services.

With enhanced service quality awareness, the service performance and reliability have improved, leading to protection of enterprise SLAs.



Triple correlation between application, IT and network layers for business-critical application impact was used to model data in MYCOM OSI's Experience Assurance solution to create a dependency map on the underlying network, routers, switches and firewalls.

By ingesting CPE/UE performance stats, the Experience Assurance system correlated the UE to its subscribed plan and customer, and to understand poor performance source (UE, network access point or network). Once identified, tickets were created to initiate a fix, or to initiate a customer outreach.

Benefits to the communications service provider

- 1. With an enhanced service quality awareness, service performance and reliability of enterprise services has improved, leading to protection of SLAs.
- 2. The enhanced customer impact awareness has resulted in a pro-active customer outreach, pre-emptive remediation, and reduced complaints which lead to reduced churn.
- 3. Automation benefits were observed across several operational functions:
 - At the NOC and SOC, lower MTTx was achieved by 100% automation of the ticket creation for mobile, fixed and enterprise services. This reduced ticket volumes as service impacting tickets were intelligently automated. By correlating complex conditions that led to performance issues, silent faults were identified and removed.
 - For Field Operations, engineer call outs reduced through pre-emptive fault resolution and more accurate root-cause identification. E-mail notifications and root cause analysis (RCA) were performed in real-time.
 - Enterprise customers were supported by reducing the MTTx through automation of ticket creation into multiple trouble ticketing systems. The system provided visibility to Top-N customers and service SLA visibility through customer portals.

About MYCOM OSI

MYCOM OSI, provides Service Assurance to some of the world's largest Tier 1 telco operators. Its Service Assurance software visualizes, automates and optimizes network and service quality across hybrid telco and IT networks by integrating real time assurance with closed loop automation and analytics driven by AI/ML.

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