Case Study
SK Telecom

About SK Telecom

Established in 1984, SK Telecom is Korea's largest telecommunications company with more than 28 million mobile subscribers, accounting for about half the market.

Its notable achievements include the following highlights: world's first company to commercialize CDMA and HSDPA networks, provider of Korea's first LTE service (launched in 2011), the world's first mobile carrier to commercialize 225 Mbps LTE-Advanced (2014), and successful commercialization of 300Mbps tri-band LTE-A carrier aggregation.

SK Telecom is now moving swiftly toward 5G:

- Commercial 5G non-standalone (NSA) service launched December 2018
- 5G 'smart office' and 'smart factory' services introduced during 2019, marketed to the business-to-business (B2B) vertical market
- Standalone (SA) 5G launch planned for 2020

Business issue

SK Telecom's long-term technology goals revolve around applying big data to reliably assure performance of their network infrastructure and the services that run on it. This involves:

- Using KPIs to proactively avoid user experience issues
- Detecting traffic microbursts
- Locating bottlenecks and using that information to improve network capacity
- Immediately identifying and detecting any network misconfigurations
- Optimizing fault failover to eliminate service downtime and improve network quality

These objectives have been identified as paramount to support SK Telecom's business goals related to 5G, namely:

- **Use service metrics** to develop new revenue through targeted advertising, location- and situationally-aware applications, and on-demand video delivery using a subscription model
- **Have network performance and agility underpin all services,** from pre-5G mobile broadband, voice and video over LTE (VoLTE / ViLTE), through to new revenue sources targeted by their big data strategy
- **Streamline and automate network management** by coupling complete monitoring coverage with their SDN control infrastructure

To achieve all these objectives, the operator requires a solution capable of:

- Per-flow measurements with microsecond precision
- Ultra granular, sub-second sampling
- One-way and two-way measurement capabilities
- Integrating into SK Telecom's sophisticated, multi-vendor network and their custom-designed management and orchestration systems

Solution benefits

SK Telecom deployed Accedian's Skylight. This multi-vendor compatible, standards-based solution centralizes a real-time view of network performance throughout the network. It also augments SK Telecom's existing management system

with real-time quality of service (QoS) and quality of experience (QoE) KPIs. Skylight enables SK Telecom to:

- **Maintain control and optimize end-user experience** through complete, network-wide QoS and QoE
- **Consistently support standard monitoring protocols** across multiple vendors' network equipment
- **Support next-generation networking** using automation, programmability and dynamic service chaining and deployment
- **Drive the orchestration layer** using real-time metrics

Business value and ROI

Deploying Skylight nationwide generated some impressive positive outcomes, including:

- **Increased operational efficiency** through accurate, localized information about network segments where issues originate or occur
- **Effective capacity planning** for special events and locations, such as festivals or sports stadiums

"Best-possible quality of service and quality of experience is at the heart of our reputation and our business. This is particularly important as we continue to extend our network towards 5G, and to expand coverage with small cells, making the need for 24x7 end-to-end network visibility critical. Accedian's performance monitoring solutions make this possible."

Choi Seung-won, Senior Vice President and Head of Network Solutions Office, SK Telecom

About Accedian

Accedian is the leader in performance analytics and end user experience solutions, dedicated to providing our customers with the ability to assure their digital infrastructure, while helping them to unlock the full productivity of their users.

Learn more at accedian.com

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