



Performance assurance solutions that are open, programmable and fully functional in multi-vendor networks ease the strain on operators and multiply the benefits for all.

With a significant presence in 21 countries around the world, telecommunications provider Telefónica boasts a customer base of more than 341 million businesses, mobile and residential customers. In addition to services under the Telefónica banner, its global reach includes three major regional brands: Movistar in Spain and Spanish speaking Latin America, O2 in the U.K., and Germany, and VIVO in Brazil.

Telefónica has selected Accedian's network performance assurance to deliver a new level of customer experience to their mobile subscribers, business and residential customers across Telefónica's global footprint. Accedian will provide ubiquitous, real-time network performance visibility to deliver the best possible quality of service (QoS) and reliability, building on solutions used by 18 of the world's top 20 mobile operators, and supported by more than 35 international patents. Telecom Review recently met with Scott Sumner, Accedian's VP Solutions Marketing, and Natalie Mountain Accedian's Marketing Project Manager, to give our readers a feel for what

is happening in the service assurance marketplace.

Accedian has worked closely with Telefónica since early 2012, initially with the VIVO team in Brazil, extending to Movistar properties throughout Latin America, operations teams and technical teams in Germany and Spain, and then globally with the CTO office in Madrid. A big part of Telefonica's LTE (4G) growth strategy relies on improving reliability of their 3G network. Because smartphones and 4G data packages are priced at a premium, expectations are high as users migrate to LTE. Few subscribers realize that voice calls are still carried over 3G. Since the customer's perception is that they're on a new network, QoE has to be excellent for both voice and data to ensure users who upgrade have an exceptional experience, regardless of which network technology carries their connection. 3G delivers data where LTE coverage is limited, too, so this older infrastructure must also provide the best possible broadband as users become data-centric, always-connected subscribers. Therefore, whether for data or voice, optimizing 3G service quality is key to improving and accelerating the return on investment (ROI) of LTE build-out.

Although more critical in Central and Latin America, where 75% of subscribers are prepaid voice users without a data plan, accelerating subscriber transition to LTE is a key objective across all of Telefonica's operations, globally.

To realize this goal, Telefónica turned to Accedian for a performance assurance solution to deliver a new level of customer experience to mobile subscribers. As their operating regions became familiar with the real-time QoS visibility offered by the Accedian platform, they began using the same solution to assure enterprise-grade business services connectivity, data center access, wholesale Carrier Ethernet, and residential triple-play offerings. Accedian now provides performance assurance for all key services delivered across Telefonica's global network.

Accedian's performance assurance solution unifies QoS visibility over Telefonica's multi-vendor metro and backhaul networks using a standards-based approach. It assures transport network performance for a full range of LTE applications including mobile broadband, VoLTE, video streaming, voice and text messaging, internet of things (IoT) connectivity, and value-added roaming services for partner carriers.

At the first nationwide deployment in Brazil, Accedian solutions monitor backhaul connections for both 3G and LTE sites, assuring not only data connectivity, but helping VIVO to reduce call drops, boost availability, optimize bandwidth utilization, and optimize call quality. VIVO now tiers network traffic over eight classes of service (CoS) to each base station, in order to ensure voice and critical monitor each CoS independently, ensuring the network maintains and optimizes the QoS of each service flow, end-to-end.

"By underpinning our network with Accedian real-time monitoring, we have complete visibility to control and optimize quality of service (QoS) to new levels of excellence. It's a strategy we pioneered and proved out with extensive planning, testing and engineering," explained Vivo's CTO, Jose Pedro Nascimento. "Our subscribers will now benefit from a fully-assured network that is designed to offer the best digital lifestyle experience, and provide the most reliable, scalable connections to enterprises who count on our network to run their businesses."

Telefonica's requirements for a comprehensive performance assurance solution to cover its global footprint included:

- Ubiquitous coverage to localize issues, plan network upgrades, and optimize performance.
- Real-time metrics covering network QoS, as well as voice and video and QoE, for trending, alerts and reporting.
- Multi-CoS monitoring to properly assure signaling, synchronization, voice, video and broadband flows sharing backhaul and access links.
- One-way metrics without synchronized endpoints, to address the provider's highly asymmetrical network with many radio backhaul and FTTx links
- Fast and easy instrumentation deployment with a virtualized, centralized control platform.

Accedian's solution hit all these marks with ubiquitous, real-time network performance visibility to deliver the best possible QoS and reliability for Telefonica's customers. The solution was developed and proven with nearly three years of testing, engineering, and operations integration that started in Brazil. From there, trials extended to all other Telefónica properties deploying LTE in Latin America (10 total), and then to multiple countries in Europe.

The success of early trials resulted in Accedian monitoring the Telefónica network during the 2014 FIFA World Cup with local partner HTCOCOM, and the same solution will be used to assure performance during the 2016 Summer Olympics in Brazil.

With proven results in Latin America and Europe, Accedian was included in—and exclusively awarded—a global RFP for performance assurance of Telefonica’s global LTE networks footprint. Full deployment (or expansion) is now planned or underway in Brazil, Argentina, Peru, and Nicaragua, to be followed quickly by other Latin American and European operations.

“Thanks to this partnership with Accedian, Telefonica’s customers will be able to take advantage of the improvement in end-to-end network performance assurance. We feel confident of our ability to deliver the highest possible levels of quality of experience (QoE) at all locations we serve, which is translated into transformative opportunities for our customers. We view Accedian as a key partner in this strategic project,” stated Enrique Blanco, Telefónica Global CTO.

Accedian’s solution won out because it provides Telefónica with:

- Cost-efficient, highly virtualized performance assurance.
- Ability to use existing base stations and network elements as test endpoints in many cases.
- Proven end-to-end visibility in multi-vendor networks.

- Open integration into existing network management systems.
- Scalable monitoring and reporting (via the Accedian SkyLIGHT™ reporting platform) for real-time visibility across the network.
- Ability to extend the life of existing 3G base stations with standards-based performance monitoring—using Accedian Nano Modules.
- Direct support from Accedian's Professional Services team, for scaling out new cell sites: turn-up services, system provision monitoring, reporting and results interpretation. Looking to the Future

Empowered by the service assurance capabilities afforded by Accedian's solution, Telefónica continues to focus heavily on establishing market leading QoE, with plans to:

- Replicate the strategy at scale across its Movistar mobile brand footprint in Spanish speaking countries.
- Continue to increase LTE coverage and capacity with new towers and upgrading 3G base stations across the VIVO service area, using Accedian solutions for turn-up and monitoring.
- Use the same assurance platforms for business services and wholesale Ethernet offerings, and to monitor QoE for triple play residential services.

Accedian has built a long term partnership with Telefónica that will help this multinational operator achieve their goal of delivering a differentiated, new level of customer experience. In a crowded connectivity marketplace, this commitment to their customers is a winning formula.

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