Chapter 13 - Case Study: Telefónica del Sur

Century-old Latin American telephone company transforms into leading Internet services provider with rapidly growing subscriber base.

The summary of how intelligent IP service optimization covered in Chapter 12 reviewed the theoretical ways service providers can expand their business models, improve their networks, and deliver better products and services to their subscribers by using the tools available in today's improved traffic and subscriber management systems.

This chapter will move from the theoretical into the real world by examining how intelligent IP service optimization has helped a long-established Chilean telephony company move forward with 21st century offerings that are making it a dynamic competitive force in the Latin American market.

Transformation of a Traditional Telco

In Chile, Telefónica del Sur has been providing telephone service in the southern part of the 2,600 mile-long country for more than 103 years. As Latin America's oldest telecommunications company, Telefónica del Sur faced a serious challenge at the end the 20th century: reinvent itself to meet the evolving telecommunications demands of the new millennium or be surpassed — and possibly usurped — by its new competitors extending along the Andes down the narrow Patagonian block.

Starting in 2000, the venerable company began an aggressive expansion plan, moving into several new markets in the South, reaching a penetration of 85-90% in its established markets and achieving a 35% penetration in new markets such as Temuco in a short four years.

But even as the dominant operator in Southern Chile, with 247.000 home passes in service, Telefónica del Sur recognized its real future lay not in the old telephony technology but rather in multimedia services, especially the triple play. With limited capital, the question was how to move forward as a major player while achieving the greatest return on carefully invested infrastructure expenditures.

Figure 13-1: Telefónica del Sur's portfolio of multimedia services

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Essential Priorities: QoE and Bandwidth

In transforming itself from a fixed-line telephony company into a multimedia service provider, Telefónica del Sur drew inspiration from its highly respected reputation for customer service. As an integral part of its transformation strategy, the company set quality of experience (QoE) as its number one priority. Also of tantamount importance was acquiring sufficient bandwidth to be a competitive force among the service providers in Southern Chile.

Because of the prohibitive cost of adding the broadband capacity necessary to meet the anticipated demand from its existing customer base and from prospective new subscribers, Telefónica del Sur looked for alternative approaches to delivering maximum service with minimal infrastructure. Rather than simply adding increasing amounts of expensive bandwidth, the company sought out solutions that would allocate bandwidth based on user needs and would utilize the costly resource in the most efficient ways possible.

After reviewing solutions from sources worldwide, Telefónica del Sur chose Allot Communications' NetEnforcer AC-1010 bandwidth management device to manage its network traffic, identify usage patterns, ensure the best QoE, and begin to introduce services to all of its residential subscribers.

"We saw at the outset that bandwidth costs were relatively high for the business plan we wanted to provide to the Southern Chilean market," says Aldo Labra, broadband business development manager for Telefónica del Sur. "But the Allot solution allowed us to manage the bandwidth we already had more efficiently, and that allowed us to service more subscribers and to provide additional specialized services."

Double-Digit Growth

The company's transformation continues today, with its user base growing by double digits over the last few years. Telefónica del Sur now provides VoIP, IPTV, digital TV, ADSL, and is the first company in Chile to offer fixed-mobile convergence services

Recently Telefónica del Sur installed Allot's NetEnforcer AC-2540 to accommodate its new 5Gbps performance requirements. The NetEnforcer AC-2540 relies on layer-7 DPI technologies to give Telefónica del Sur network operators the per-application, per-subscriber visibility needed to ensure the highest QoE to every subscriber, at all times. In addition to the NetEnforcer, it also added Allot's Subscriber Management Platform (SMP). With Allot's SMP, Telefónica del Sur is able to monitor subscriber behavior in real-time and over time, towards the introduction of innovative service packages based on an in-depth understanding of their specific needs.

Requirements	Requirements	Requirements	Future Growth
• SLA management • P2P control • Network visibility and reporting	• Additional BW requirements • More connections • Better control policies for HTTP	• > 20K connections per second • Exceeding 1Gbps • QoS redundancy • Better monitoring and control of bandwidth usage	• Continued increase in subscribers • Growth in BW • More subscriber management functionality (quota...)
NetEnforcer AC-1010 310Mbps BW control	Upgrade BW control to 1Gbps	Trade-in for NetEnforcer AC-2540 Add Allot Subscriber Management Platform	...
2005	H1 2006	H2 2006	2007

Figure 13-2: The Allot solution has supported Telefónica del Sur's strategic transformation to a multi-service company.

"Allot Communications' solution provides us with two critical growth-making benefits," explains Aldo Labra. "The traffic management analysis data lets us understand our bandwidth needs and so helps us make informed decisions about infrastructure additions. The subscriber analysis gives us the statistical data about our users and how they are using our services so that we can create specific commercial product plans to meet their individual needs. These include tiered services that meet the needs of a variety of subscriber types."

He continues: "The subscribers are getting exactly what they want, and we are able to improve our ARPU [average revenue per user] by delivering the kind of QoE we have always been known for across a range of new products and services."

Service Rules and Subscribers Grow

Telefónica del Sur is currently serving over 50,000 broadband subscribers, a remarkable feat for a company that reinvented itself after more than a century in business. Its transformation was made possible in large part by the use of intelligent IP service optimization, which allowed Telefónica del Sur to hold down infrastructure costs, increase the efficiencies of its network, and offer a wide range of new and innovative services to its subscribers.

"With the Allot NetEnforcer and SMP on our network, we have the confidence necessary to offer innovative services designed for each sub-segment of the market," says Labra. "We were also able to make a seamless transition recently to the 5Gbps solution, which allows us to retain existing customers who increasingly want better and faster service. We can also continually expand our customer base, all while adding new service offerings."

The Allot solution has allowed Telefónica del Sur to be strategic in its transformation to a multi-service company and has helped the company meet its goal to provide best-in-class QoE to its subscribers.

Chapter Summary

As this case study shows, service providers can use several aspects of intelligent IP service optimization, including deep packet inspection, to help minimize investment in additional infrastructure while gaining the ability to optimize QoE and offering an expanding set of innovative service offerings to meet subscriber needs.

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