Vidax - Case Study

Optimized Least Cost Routing for a Large Call Center

Vidax deployed high-density AudioCodes Mediant 3000 media gateways together with a least cost routing server solution from KMO Telecom to increase the efficiency and reliability of its outbound call center operation. The result was a drastic reduction in communications costs within the first month of operation and an ROI of just two months.

Background

Based in Sao Paulo, Vidax Teleserviços (www.vidax.com.br) is the largest outbound call center in Brazil, providing services for many major local and international companies . Currently, the company has 6,000 agent seats, with expansion plans to reach 9,000 by 2012.

To assist in the planning and execution of this project, Vidax worked with KMO Telecom. KMO Telecom (www.kmotelecom.com.br) is one of the largest communications system integrator companies in Brazil, with a strong presence in the call center and communications sectors. The company has the staff and experience needed to deliver a wide range of high quality services within the communications sector. KMO Telecom also supplies business process operations, implementation, maintenance and troubleshooting services for its customers' installed systems.

Challenges

The infrastructure that Vidax had in place for its outbound calls was based on an Avaya PBX connected to eleven auto-dialer servers. Each of the dialers was in turn connected to a number of different PSTN service provider networks via up to 12 E1 interfaces per dialer.

The function of the dialers was to route the outgoing calls via the least expensive PSTN provider, based on a set of nearly 200,000 least cost routing (LCR) rules. However, the system in place suffered from a number of inefficiencies which resulted in only 35% of placed calls actually being sent over the optimal route. For instance, if the least route selected by the dialer was busy, the dialer would automatically divert the call via a preconfigured default route, regardless of the cost involved. In many cases, calls were simply dropped if a least cost route could not be found.

In early 2011, Vidax took the decision to redress this situation and look for a solution which would provide more reliability and increase agent productivity, while, at the same time, reducing communication costs. VoIP technology was seen as the best way forward, both as a solution for the company's immediate needs and as a long term strategy for the company's entire telecommunications infrastructure.

Solution

In conjunction with KMO, Vidax decided that the most efficient method for achieving its goals was to deploy a centralized LCR solution, whereby the routing decisions for all the dialers would be made by a common rule engine. KMO developed the LCR rule server application, which ensured that all calls were routed based on Vidax's complex requirements. In addition, the centralized system enabled Vidax to manage the rules much more efficiently, as well as providing the company with real-time system performance data (see screenshot below).

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> *Vinicius Valle, CTO of KMO.*
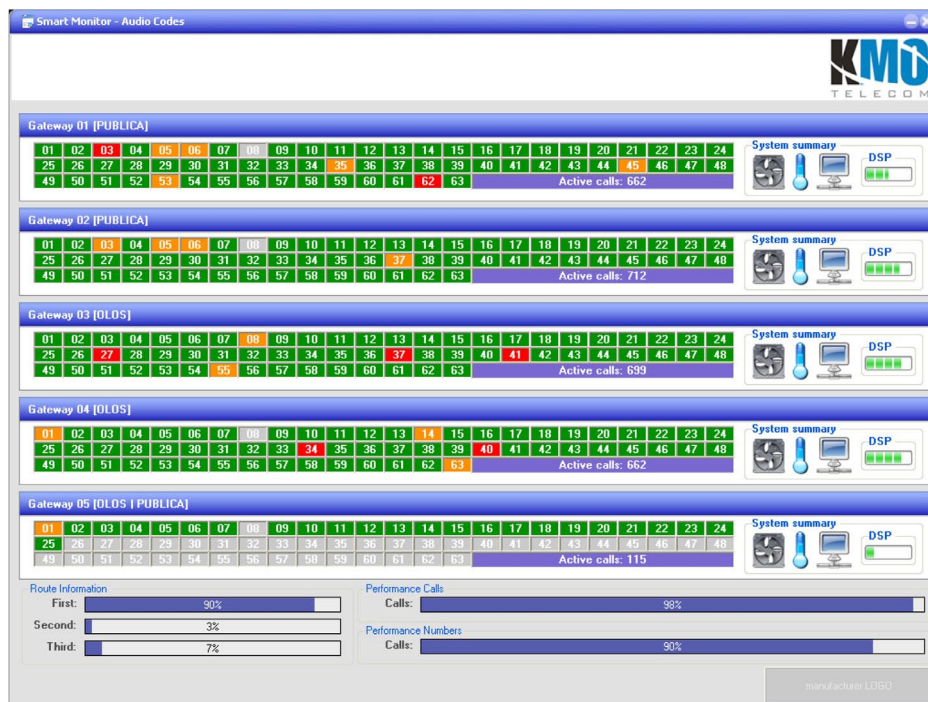
On KMO's recommendation, Vidax deployed AudioCodes Mediant 3000 high density media gateways to convert the outgoing calls to VoIP. Using the SIP protocol, the Mediant 3000 passes all the necessary call setup information to the LCR rule server which selects the desired least cost route. The call is then routed via another Mediant 3000 to the appropriate PSTN service provider.

Several factors led KMO and Vidax to choose the Mediant 3000 for the new call routing solution, including:

• **High density** - Mediant 3000 supports up to 63 E1s per each compact 2U chassis, saving costly rack space

• **Redundancy** - Redundancy is supported at the chassis and E1 interface level to ensure that calls can be successfully routed, even in cases of network or E1 link failures

• **Interoperability** - Mediant 3000 is fully homologated with the Avaya PBX used by Vidax, as well as with many international service providers

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KMO together with AudioCodes installed a proof of concept system which demonstrated very clearly that the new solution would meet Vidax's target cost reductions without any problems. After the successful completion of the proof of concept, the production system was deployed including, in the initial stage, four Mediant 3000s. In total, the Mediants supported 122 E1s towards the dialers and 126 E1s towards the various PSTN providers.
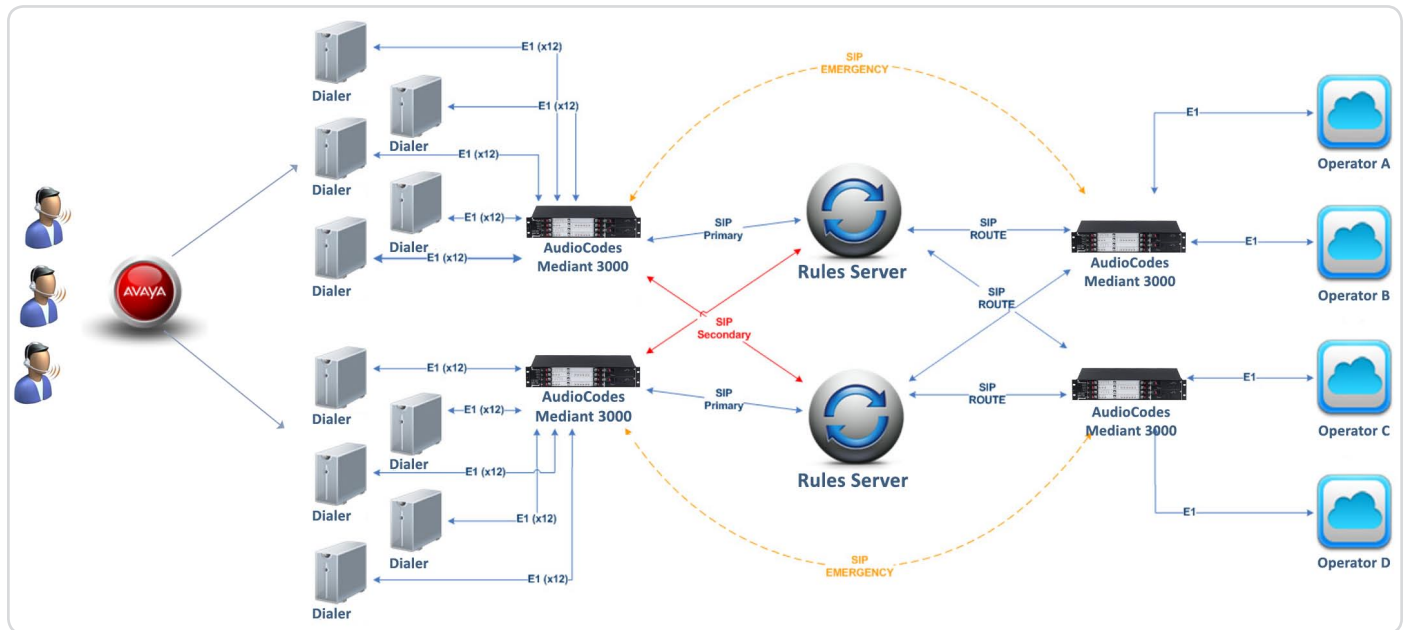
Results

The new centralized LCR system displayed remarkable results within a very short period of time. Within the first month of operation, the new centralized LCR system had helped Vidax meet its target of 95% of calls being routed via the optimal least cost route. The effect of this was a 50% reduction in the company's communications costs. The company forecast achieving ROI within just 60 days of the initial deployment.

The overwhelming success of the new system led Vidax to use the new routing servers for all their outgoing corporate calls, in addition to the call center traffic. The company already has plans to expand the VoIP network, adding another four gateways in a second phase and extending the centralized routing concept to its other call center sites around Brazil.

Commenting on the success of the project, Maurício Zanco, CIO of Vidax, said, "The people from KMO and AudioCodes presented a very good solution, including the gateways and the application to monitor the calls in real time. We have reduced the telephony costs by more than 50% in the first month after installation. We feel comfortable with the equipment and have already approved the expansion to our other sites."

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About AudioCodes

AudioCodes Ltd. (NasdaqGS: AUDC) designs, develops and sells advanced Voice over IP (VoIP) and converged VoIP and Data networking products and applications to Service Providers and Enterprises. AudioCodes is a VoIP technology market leader focused on converged VoIP & data communications and its products are deployed globally in Broadband, Mobile, Cable, and Enterprise networks. The company provides a range of innovative cost-effective products including Media Gateways, Multi-Service Business Gateways, Session Border Controllers (SBC), Residential Gateways, IP Phones, Media Servers and Value Added Applications. AudioCodes' underlying technology, VoIPerfectHD™, relies on AudioCodes' leadership in DSP, voice coding and voice processing technologies. AudioCodes High Definition (HD) VoIP technologies and products provide enhanced intelligibility and a better end user communication experience in Voice communications.

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Ref. # LTRM-06036 V.1 09/11