Case Study

**Voice Compression over Point-to-Point Data Links**

Atento, Spain

ATENTO

**Challenge**

To connect contact centers in Spain with hundreds of customer service representatives offshore in two South American countries.

**Solution**

RAD's Vmux voice trunking gateways, which feature the best compression ratio on the market while maintaining high voice quality over data links, drastically reduce Opex by eliminating the need to lease expensive international E1 lines.

**Features**

- Efficient use of international bandwidth
- Excellent voice compression ratio
- Local trunks used for outbound calls
- Modular and scalable solution

**Benefits**

- Reduction in the number of lines
- Fast deployment of new services and desktops
- Use of the same lines for voice and data
- Opex reduction

# RAD's Vmux Enables Spanish Call Center to Eliminate Costly International E1 Lines

With a presence in thirteen countries, Grupo Atento has established itself as a leading provider of international contact centers for Spanish and Portuguese-speaking markets. Atento's international network now includes more than 46,000 customer service positions and a staff of more than 100,000 people who provide offshore operations for more than 400 multinationals that offer standardized customer service to clients in different countries.

In Spain alone, Atento employs more than 9,000 people at fourteen sites in eleven cities, who provide more than 240 services to more than 90 customers.

Recently, Atento needed to connect three different sites in Spain with a total of 1,200 desktops in South America. To accommodate that traffic, a total of 30 Mbps of bandwidth would be required to link all 800 desktops in Lima, Peru and another 400 in Bogota, Colombia. Given that the traditional solution of leasing multiple international point-to-point E1 lines is quite costly, Atento sought a solution that would significantly reduce operating expenses (Opex).

The modular, scalable solution that Atento selected combines voice compression with TDMoIP® pseudowire technology, developed and patented by RAD Data Communications. TDMoIP is a standards-based transport technology that extends voice, data and video circuits transparently across packet-switched networks.

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>
> Javier Alonso, Communications Product Line Manager, Dominion Tecnologias

RAD data communications

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At each site in Spain, Atento deployed RAD's Megaplex-2100 modular integrated access multiplexers, which multiplex incoming calls from the PSTN, and Vmux-2100 voice trunking gateways, which compress up to 16 E1s of the incoming traffic over a single E1. At the remote sites in South America, each bank of thirty telephones was connected to a Vmux-210 compressed channel bank and voice trunking gateway. By employing TDMoIP technology, the Vmux units are able to transmit voice as well as data traffic on point-to-point data lines between both continents. In addition, each site in South America also hosts a Vmux-110 remote voice trunking gateway which delivers a full E1 of voice traffic to that particular office's PBX.

By employing TDMoIP technology, the Vmux is able to support a highly efficient use of bandwidth while offering the best compression ratio in the market. "In comparison to VoIP, for example, which currently yields voice compression rates averaging 10-12 kbps, the Vmux compresses at a rate as low as 5.3 kbps – approximately half that of VoIP," notes Javier Alonso, Communications Product Line Manager at Dominion Tecnologias, the RAD partner that served as system integrator for the project. Another attractive aspect of RAD's solution is that it is simple to install," he adds. "That ensured the fast deployment of Atento's new services and desktops."

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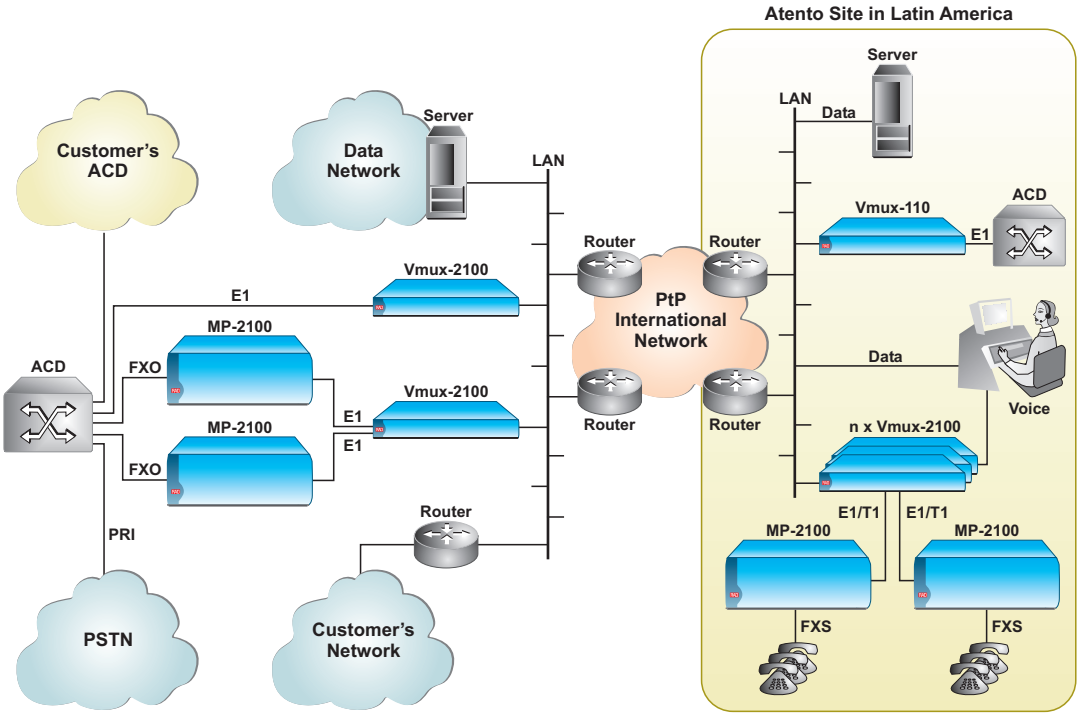
> Javier Alonso, Communications Product Line Manager, Dominion Tecnologias





**Corporate Headquarters**
RAD Data Communications Ltd.
24 Raoul Wallenberg Street
Tel Aviv 69719, Israel
Tel: 972-3-6458181
Fax: 972-3-6498250
email: market@rad.com

**US Headquarters**
RAD Data Communications Inc.
900 Corporate Drive
Mahwah, NJ 07430, USA
Tel: (201) 529-1100
Toll free: (800) 444-7234
Fax: (201) 529-5777
email: market@radusa.com


www.rad.com

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