Case 15: ACTnet Frame Relays Media Integration and Global Access

BANCO DO BRASIL CASE
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Bank’s Network Cuts Millions from Phone Bills while Offering Global Access for Worldwide Sites

The Problem: Inadequate Communications Network for International Branches

When Banco do Brasil, the largest bank in Brazil with over 2500 branches, began expanding their international operations, they knew that process would most likely be an expensive, but necessary, investment to provide customers with the services they expect. What they didn't realize was that a technology on the horizon would soon provide a way for the Bank to meet all their data communication and network performance needs, while offering an opportunity to cut gargantuan telephone bills down to size.

The Solution: An Integrated Networking System Called ACTnet

With 32 sites in 26 countries on four continents-and still growing- Banco do Brasil wanted a sophisticated network that also was cost-effective, easy to install and grow with minimal investment in equipment and staff. ACTnet met all those requirements and also provided a way to control rising telephone and facsimile costs, which had mounted to $4 million a quarter! By integrating telephone and fax calls among branches and between the branches and headquarters in Brasilia, Banco...
do Brasil estimated they could cut 25-30% from their long distance telephone bills and realize a six-month payback on the cost of the wide area network.

**Banco do Brasil - Completed Network**

*The Result: High-Performance Global Network Charts Future*

The implementation of the ACTnet Network allows the Bank to control their communications except for exorbitantly-priced international mail service, there is now a high-throughput, low delay network.

ACTnet supports full LAN-to-WAN access and AS/400 data processing from every site, no matter how remote. Any-to-any telephone and fax connectivity means every person with access to a telephone or a fax machine at the Bank can communicate with any other employee over the network, eliminating all toll charges. Both these capabilities are critical to Banco do Brazil’s future growth and success.

**ACTnet Integrates Voice, Fax, Data and LAN Using Frame Relay**

Combining advanced compression techniques with Frame Relay compliant technology, ACTnet supplied an innovative solution for the Bank. ACTnet comprises two Frame Relay switch models, the MS-1000 and MS-2000, and a Frame Relay network access multiplexer, the SDM-FP.

The MS-1000/2000 is a high-performance switch that provides up to 4 Mbps port data rate with greater than 20,000 packets per second throughput. Both switches are compliant with the full range of Frame Relay standards and offer distributed network intelligence, dynamic learning of network hub configurations and automatic rerouting in the event of trunk failures. The SDM-FP combines voice, fax, data and LAN input and compresses that information for cost efficient communications. The SDM-FP is a standards-compliant Frame Relay Access Device (FRAD), but unlike other FRADs, the SDM-FP translates telephone and facsimile calls as well as data into Frame Relay packets. Frame Relay not only provides a high throughput, low delay transport mode, it also allows for easy any-to-any network connectivity. Other vendors of integrated network solutions rely on point-to-point links, making voice and fax communications especially difficult.

**Banco do Brasil Builds Network from the Ground Up**

For Banco do Brasil, the ACTnet solution allowed them to implement a sophisticated network that would meet a myriad of needs. Fortunately, they didn't have to worry about eliminating existing wide area networking equipment, because they had a very limited computer communications network outside Brazil. What they did have was a far-flung international branch network on four million dollar monthly telephone and facsimile bills in the effort to communicate with and between the personnel at the remote sites and their customers. ACTnet targeted both problems.

Communication through networks has been a significant improvement enabling enterprises global access with two essential benefits:

- **Customisable** transmission media, affordable, shareable, **low operation costs**.
- **Full connectivity** of all networked devices and user’s stations to a network node.