

CASE STUDY

CSTORE

RETAIL

RESTAURANT

FINANCIAL

HEALTHCARE



The SmartNetwork reduced MAPCO's average cost per connection by more than 50%

OVERVIEW

MAPCO Express executives were tired of receiving severely limited performance data from their 389 fuel and convenience stores in Alabama, Arkansas, Georgia, Kentucky, Louisiana, Mississippi, Tennessee and Virginia. Senior management realized that real-time information about every facet of the business was important to continued growth and competitiveness. The company's dial-up network was a primary culprit in this problem. MAPCO needed a reliable, private broadband network that could support multiple data-gathering and communication requirements including:

- Faster transaction speed in the store and at the pump
- More frequent and faster updates from stores to corporate regarding transactions and inventory
- Remote video monitoring of all stores at the regional and corporate level to reduce theft and increase security

BROADBAND OPTIONS

MAPCO considered three alternatives: Frame Relay, satellite, and Cybera's SmartNetwork. Peers told Robin Perry, MAPCO's network administrator, that a private DSL network was not possible. After a brief pilot project, SmartNetwork emerged the clear winner in regard to bandwidth, scalability, affordability and management. MAPCO determined that:

- It could outfit more than three times the number of stores with SmartNetwork as compared to satellite.
- Frame Relay was more than three times the price on a monthly basis for the same bandwidth
- Neither Frame Relay nor satellite offered a managed service.

Company Name: Mapco

SmartNetwork Solution:

Cybera created a SmartNetwork Solution using 70 percent DSL and 30 percent MPLS/T1 to support all MAPCO locations. The comprehensive service includes:

SmartNetwork includes:

- Affordable connections for all locations
- 24/7 monitoring and notification of all network elements, including customer premise equipment
- Guaranteed security and reliability
- Adequate connection speeds at each location to enable current and planned applications
- Trouble shooting with Telcos and vendors in seven states
- A single monthly bill itemizing the 389 locations using MAPCO identifiers

Cybera also supported several customized requirements for protected Internet access to training facilities and special port routing for credit card transactions.

SmartNetwork Results:

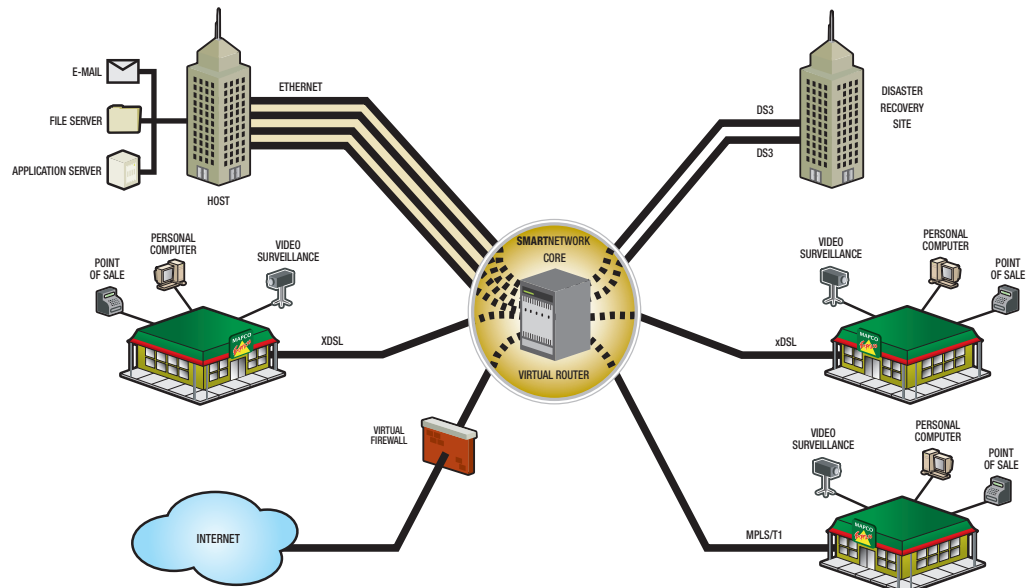
- Credit card transactions that take 2.5 seconds instead of 30 seconds, leading to reduced wait times for customers
- Support calls to MAPCO's help desk that average five minutes as opposed to 20 minutes with dial-up
- Real-time fuel inventory monitoring, resulting in enhanced sales at all stores
- Overnight enterprise updates for POS software and marketing initiatives instead of five to seven days for total roll out
- "Basket level" information about customer transactions for market analysis and planning
- Ability for regional managers and corporate staff to monitor real-time video and audio feeds at all store locations, reducing theft, increasing security and supporting law enforcement efforts



"We have noticeably faster credit card processing, better inventory control, and real-time business intelligence about our customers' preferences and store security,"

- *Scotty Creason*
IT manager at MAPCO

SMARTNETWORK ARCHITECTURE



TECHNICAL DETAILS

Customized Network Design Equipment and Carriers

- Cisco, Netopia, Efficient
- Covad, Qwest, Level 3, AT&T

Interlata Transport Technologies

- ATM PVCs and no public Internet transport
- Private Ethernet

IP Functionality

- RFC 1918 Private IP addressing
- Static routing, for efficiency and clean troubleshooting
- DNS for name resolution and INTRAnet surfing
- DHCP for roaming regional managers with laptops

Management Protocols

- Telnet, ICMP, SNMP, SSH

Application Support

- Secure e-mail Communication enhancing corporate efficiency
- Enhanced speed and security for Intranet
- POS system upgrade
- Real-time data gathering of sales and inventory
- Video surveillance and training
- Corporate file sharing and calendaring
- Improved remote administration of workstations and POS systems
- Real-time Data Duplication

Implementation Network Migration

- Design an IP scheme based on Mapco's needs
- CPE installs managed and executed based on Mapco's requirements
- DHCP enabled workstations plugged into the CPE's router uplink port
- Custom cabling performed at each store to integrate legacy hardware

SECURITY AND NETWORKING MADE SIMPLE