

ABSTRACT

ePipe Customer Scenarios provides generic examples of how ePipe provides cost effective Internet based network solutions for businesses across a wide range of sectors.

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1. Small to Medium Business

Customer Profile

A small to medium courier business requires their depots in Brisbane, Melbourne and Adelaide to be connected to their central depot in Sydney during office hours.

Customer Requirements

Enable all branch offices to access the key corporate applications such as the parcel tracking system and central accounting system, live.

Current Mode of Operation

These two client/server applications rely on a UNIX database server and client PCs at the central office Local Area Network (LAN). Branch offices however operate their PC systems in a stand-alone mode and perform a batch transfer by modem at night or staff sends a backup on media overnight to the central office. Either method means that branch information is invariably 24 hours in arrears.

Proposed Carrier-managed WAN Solution

A network carrier proposed a new Wide Area Network (WAN) and appropriate customer premises equipment (CPE) for connecting their existing branch office LANs to the central office. Two solutions were suggested, one based on dedicated 64K ISDN connections to each branch and the other on 64K Frame Relay.

The business owner was astonished at the high cost of both solutions. The integrator servicing his LAN suggested using an Internet enabled VPN. Whilst open to the idea of a lower cost solution, the owner was concerned about network security.

Comparison with ePipe-based Site to Site VPN (SSV) Solution

Frame Relay 64k access, 8k CIR	ISDN – 64k Xpress	ePipe VPN, 64k ISDN Internet connection	ePipe VPN, 2 x 56k Internet connections
\$36,796/annum	\$56,440/annum	\$11,780/annum	\$8,980/annum
- costs are inclusive of all four sites, 1 st year network rental & ISP (for VPN) costs			

Preferred Solution

The preferred solution quickly becomes apparent, with an ePipe enabled VPN providing branch connectivity at an extremely competitive cost. The use of IPSec tunnels in the VPN ensures high levels of network security, giving the owner confidence in his new network.



2. Service Organization

Customer Profile

A service organization requires a remote access solution for their regional offices primarily to allow on-site repair technicians to access a range of critical information on the road.

Customer Requirements

To enable technicians travelling throughout each state to log completed service calls to the regional office. It is also critical that they are able to collect troubleshooting information easily and cost effectively from the corporate Intranet and access the Internet for occasional technical downloads from vendor sites. A more efficient and cost-effective method of connecting the regional offices to the central office is also necessary to streamline job costing and progress.

Current Mode of Operation

Currently the 20 repair technicians use a combination of mobile phone, long distance telephone/fax and long distance direct dial access where possible. Presently there are only 5 exchange lines dedicated for the dial in calls. Average call-spend for each technician is \$10 per day. There is no shared Internet access at the head or regional offices either. However, a stand-alone system at the head office has Internet access. This mode of operation is proving too slow and cumbersome.

Proposed Direct Dial Remote Access Solution

In-house technical staff have proposed a dedicated ISDN Primary Rate remote access concentrator, together with a "1800" number and calling cards for remote technicians and regional offices dialing in to the central network. It is envisaged this would reduce call costs to an average of \$6 per technician each day. Installation of a router/firewall with a 64K ISDN Internet connection for shared Internet access is also proposed. Management has reviewed the proposal and rejected the solution based on the complexity.

Comparison with ePipe-based Secure Remote Access (SRA) via the Internet

Current situation	OnRamp 10, with 1800 & calling cards	ePipe with SRA, 128k Internet connection & calling cards
\$44,000/annum	\$26,400/annum	\$11,600/annum
ePipe & SRA provides technicians with Windows PC, PPTP connections via the Internet to head office.		

Preferred Solution

ePipe provides secure remote access at a fraction of the cost incurred using direct dial access. Shared Internet access is also provided in the one device. Implementing the site to site VPN feature set at a later date can also enhance communications with the regional offices.



3. Hardware Store Chain

Customer Profile

A hardware store chain is expanding into regional areas and also interstate and needs to network these locations cost-effectively 7 days a week.

Customer Requirements

Management is only considering a simple, cost-effective network, which can bring each site permanently on-line with the central office and has also concluded that Internet access for e-mail, etc., for each location is also beneficial.

Current Mode of Operation

The 9 regional offices have no existing communications or IT infrastructure and require additional connectivity for a POS environment.

Batch Mode Dial-up Access

Conventional data services have been considered in the past and cannot be cost justified. Typically, batch mode access after hours is the only alternative. It is also necessary to fully integrate point of sale connectivity into the solution.

ePipe-based Site to Site VPN with Direct Connection Services (DCS)

Current situation	All 9 remote stores with VPN to head office, 56k connection	Head Office, VPN central site, 4 x 56k connections
\$8,100/annum	\$2,700/annum	\$2,500/annum
Total network cost of an integrated ePipe solution is \$5,200/annum.		

Preferred Solution

An ePipe-enabled solution provides both cost savings and an integrated solution as each site now has shared Internet access available. ePipe with DCS also provides connection, in store, for the point of sale equipment.



4. A Large International Organization

Customer Profile

A large international organization has an established Frame Relay network encompassing their offices in each of Sydney, Melbourne, Brisbane and Perth, with a link to the Internet for web browsing and email. Inclusion of some smaller Australian sites at Wollongong, Bendigo and Rockhampton into the existing WAN is not cost justified, especially as they are in regional and remote areas.

Customer Requirements

Integration of the regional branches into the existing network is a priority for accounting, customer management and sales related applications to be uniform and current company wide.

Current Mode of Operation

Regional offices have an existing stand-alone local area network. As there is no connection into the company wide area network, information transfer is by a variety of means including after hours modem connection and document courier. This means that information is not current.

Extending Frame Relay Solution

The company has received proposals to extend the Frame Relay network or connect the regional offices via ISDN. After reviewing the proposed annual rentals for these regional sites (additional Frame Relay costs of \$43,420 or ISDN at \$47,160) the financial controller has asked the IT department to investigate a more cost-effective solution.

Comparison with ePipe-based Site to Site VPN (SSV) Solution

Frame Relay 64k access, 8k CIR	ISDN – 64k Xpress	ePipe VPN, 64k ISDN Internet connection	ePipe VPN, 2 x 56k Internet connections
\$43,420/annum	\$47,160/annum	\$10,485/annum	\$7,488/annum
- cost is inclusive of all three sites, 1 st year network rental & ISP (for VPN) costs			

Preferred Solution

The preferred solution quickly becomes apparent, with an ePipe enabled VPN providing the branch connectivity at an extremely competitive cost whilst ensuring high levels of network security and an upgrade migration path.

