A Cisco Virtual Private Network records massive savings for Sanity Entertainment’s chain of music stores.
**Background**

Brazin Limited is the parent company of several successful, high profile Australian retail chains, including Sanity Entertainment, IN2 Music, Virgin Entertainment and Bras N Things. The Brazin group also owns the women's designer surfwear label, Aztec Rose.

Managing Director, Brett Blundy founded the company in 1980 when he opened his first music store in Pakenham, Victoria.

The Sanity music store concept was established in 1993. Since then Sanity Entertainment has evolved into the largest specialist music retailing business in Australia with an annual turnover of more than $400 million and over 3000 staff at 230 Sanity stores and 70 IN2 Music and Virgin Megastores.

In October 2001, Sanity Entertainment expanded into the United Kingdom when the Group entered into partnership with Sir Richard Branson’s Virgin Group, acquiring 77 Our Price Music stores.

**Challenge**

In early 2001, the rapid expansion of Sanity Entertainment had put pressure on its legacy communication, inventory and management systems, some of which had been in place since the 1980s when Sanity opened its first store.

Nelson Lai, Network Manager, explains: "We had a manual reporting system, which required stores to keep track of sales, staff hours, stock levels, stock delivery and many other accounting processes on paper. Forms were then sent up to our head office for input onto the CRM database—a process that took a couple of days at least.

With more than 300 stores, the system was inefficient and the duplication of effort led to errors. For example, when stores ran low on stock, they ordered new stock on top of the quantities we were ordering centrally—leading to inventory problems.

To remedy the situation, Sanity began to investigate new systems. Ideally they were looking to centralise and automate order replenishment and centralise EFTPOS payments to speed up transaction times. They were also looking for a dynamic ledger record that would show stock levels, transaction details, stock movement and sales in real time.

They also wanted to improve communications with their stores so that they could contact them at anytime with updates of new promotions and store queries.

The head office already had a Cisco Local Area Network featuring routers for Internet access and a firewall for security. Sanity was looking to build on this infrastructure to include all of their stores in a secure Virtual Private Network. The primary function would be to connect each store to a centralised server running an inventory database where they could update their stock levels on a daily basis.

**Solution**

By choosing a Virtual Private Network (VPN), rather than paying for leased lines, Sanity stood to save a considerable amount of money, as well as allowing for future growth with an infrastructure that was infinitely scalable. However, Nelson Lai was concerned to ensure that the VPN solution offered the highest levels of security.

“Once Steve Briscoe, Cisco Retail Account Manager, had demonstrated Cisco’s VPN and firewall solutions,” said Nelson Lai, “I felt confident that this was the scalable, secure network infrastructure we needed.”

Nelson Lai then worked on the implementation with Cisco Premier partner, IMC, who installed the Cisco PIX Firewalls and IBM, and provided each store with secure transaction point-of-sale hardware. Each store has a PC POS system used as a till cash draw plugged into the unit.

Each store is permanently connected to the Internet with a modem. Sitting behind the modem is the Cisco PIX 501 firewall with built-in switch and VPN gateway, securely linking the store to the office network.

Steve Briscoe explains: “The Cisco PIX firewall is ideal for Sanity because it’s fast and secure—offering up to 10 Mbps of firewall throughput and 3 Mbps of Triple Data Encryption Standard VPN throughput. It secures all network communications from each store to the corporate network by encrypting data with 56-bit Data Encryption Standard (DES) or optional advanced 168-bit Triple DES (3DES) encryption. This means that prying eyes cannot see Sanity Entertainment’s sensitive corporate data as it safely travels across the Internet.”

As well as the data in transit, the network is also protected by the integrated intrusion protection capabilities of the PIX.
firewall, which looks for over 55 different attack ‘signatures’ and either blocks them or notifies Nelson Lai’s team of them in real time.

At the head office a Cisco VPN 3030 Concentrator provides fast remote access, authenticates those dialling into the company network and terminates all the store Virtual Private Networks.

“The network extension feature on the Pix 501 provides Sanity with rapid set-up and deployment as well as ease of management for all the sites, which significantly reduces the ‘total cost of ownership,’” said Nelson Lai.

“The web-based User Interface on the Cisco 3030 VPN Concentrator allows for easy management of all the Virtual Private networks, at a glance, and provides good troubleshooting tools to diagnose problems.

“The modularity of the 3030 provides the scalability and availability required for the Sanity mission-critical network.”

The network also features a Cisco router 3600 series, which terminates the ATM link at the head office and is the main Internet connection to all the stores.

“The Cisco 3600 Series’ performance, modularity and footprint were key factors in our decision-making,” said Nelson Lai.

The Cisco 1700 series router provides a secure, fast connection to Sanity’s branch office in Melbourne. An 800 series router provides a direct connection to the major Virgin Mega store in Melbourne. It is the only store independent of Sanity’s EFTPOS transaction process because of its sheer size. However, the Sydney office operates as their back-up in case they lose their 64K ISDN connection – enabling them to still process EFTPOS transactions.

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Nelson Lai, Network Manager, Brazin Limited

The results
With the deployment of the Cisco VPN solution, Sanity is saving approximately $100,000 per month in dial-up credit card and EFTPOS transaction costs.

“With the EFTPOS hardware in our stores permanently connected to our network, we were able to implement a centralised EFTPOS system and as a result, we have eliminated each store’s dial-up costs for between 200 – 1000 EFTPOS sales a week.

“Because of the system we’ve installed, and the number of stores using it, we’ve also been able to negotiate a discount on our EFTPOS cost with our bank of more than 50 per cent on each transaction, leading to significant cost-savings.”

Another key benefit has been in the management of Sanity’s inventory. Not only have they eliminated most of the paperwork, they have also increased our response times. Stock is replenished centrally on a daily basis, which ensures both costs and stock levels are kept in check. They can also respond within their stores to inventory requirements, especially if one store is overstocked and another requiring the same titles.

Staff at the Sydney head office can instantly see sales at any one of stores and supply precise sales figures to organisations such as the Australian Record Industry Association (ARIA) for the nation’s top-selling 40 singles and albums charts.

The Cisco VPN solution has also enhanced productivity and information sharing between employees who regularly exchange e-mail, PowerPoint files, sales contracts and special customer orders. Stores now collaborate securely on projects across the network and individual employees can access human resource information online, such as job descriptions, job offers and health benefit plans.
Partnerships
The key to the success of this venture has been Brazin Limited’s association and partnership with Cisco.

Network Manager at Brazin Limited, Nelson Lai, believes Cisco System’s understanding of routing, firewall and VPN functions for Internet data and voice applications has enabled Sanity to make significant cost savings in a number of areas including dial-up costs, while increasing employee productivity.

Commercial Retail Account Steve Briscoe comments: “Brazin Limited did their homework on converged networks, investigating all of the available options. They chose Cisco because of our experience and reputation for reliable solutions and outstanding support programs, when it comes to something as critical as a network linking stores via the public infrastructure to a head office while maintaining absolute confidence in security.”