

Asian Pacific Telecommunications brings the benefits of Cisco **IP Telephony** to its Melbourne office buildings



Background

In 2000, Asian Pacific Telecommunications (APT) was founded by its parent company, Asian Pacific Building Corporation (APBC), a leading Victoria commercial property developer.

Asian Pacific Telecommunications' charter is to design, implement and market the IT&T infrastructure required by the tenants of today's 'smart' buildings, built by its parent company.

To date, Asian Pacific Telecommunications has successfully installed flexible IT&T solutions with converged (voice and data) networks into key office buildings serving hundreds of tenants in metropolitan Melbourne.

Asian Pacific Building Corporation employs more than 100 people servicing over 10,000 building occupants. Asian Pacific Telecommunications has achieved service take-up rates greater than 85% across all sites since its inception, and to date has 100% take-up at St Kilda Rd Towers.

Challenge

In 2000, APBC recognised that IT&T infrastructure was a critical consideration for businesses looking to rent or purchase office space. They also acknowledged that IT&T requirements varied considerably, according to the size and nature of the business involved.

Typical occupants of APBC buildings range from a sole trader working out of a serviced office, to a company leasing or purchasing an entire floor or more. Each company also had differing technology needs, from a single phone line to broadband technologies including fax and voice over IP services.

Asian Pacific Telecommunications believed they could add value by offering clients' state-of-the-art technology solutions including integrated voice, Internet, high-speed data and storage options with the flexibility for growth.

David Sheridan, General Manager of Asian Pacific Telecommunications explains: "By combining development and construction experience with an understanding of the IT&T needs of contemporary businesses, we were looking to create a unique 'Business Network Precinct' concept, which we knew would suit our clients. What we were looking to do was leverage economies of scale by cabling entire buildings and linking them into state-of-the-art networks. We knew that most companies would get tremendous value from a secure high-speed digital connection including broadband connection to the web, converged networks pushing both voice and data and unrestricted access. We also knew that they would find these services highly attractive if they were offered at a reasonable rate."

With the challenge of finding the best high-speed networking solution, the APT team investigated Cisco Systems' Architecture for Voice, Video and Integrated Data (AVVID).

The cost-efficiencies, manageability and flexibility it offered quickly convinced APT that the future of integrated communications lay with a converged IP Telephony network which they could roll out across their office buildings.

Solution

Leveraging Cisco's Architecture for Voice, Video and Integrated Data (AVVID), APT has built an impressive broadband network that services five office buildings in downtown Melbourne. Businesses operating within these buildings can easily be switched into the network and then, with as little as one phone connection, they can benefit from the speed, productivity and cost enhancements of IP Telephony.

David Sheridan explains: "For example, in St Kilda Road Towers at 1 Queens Road, there are 600 suites on 15 floors serviced by two core Cisco Catalyst 6509 switches and fibre Optic cable, which runs from the basement to the penthouse floor. Each floor has a Cisco Catalyst 4000 switch and corresponding inline power, which is required for IP Telephones.

Running into each suite or office is single Cat5 cable and points, and a 10/100MB connection. To get on the Internet, APT has installed a 10MB broadband pipe and uses Cisco 7200 routers for gateway functionality to the outside world.

To ensure that the entire system is secure, APT has developed a Virtual Local Area Network (VLAN) that spans the 14 floors, providing each client with their own Virtual Private Network complete with a robust Cisco Firewall for security.

APT has also installed Cisco CallManager software which, via the Cisco 7940 and 7960 IP XML handsets, offers corporate and building phone directories, missed calls/received calls, multi-party conference calls, phone forwarding to the Web, caller ID and phone calendar.

APT has also deployed voice mail using a powerful communications server that works in conjunction with

Cisco CallManager to provide advanced, convergence-based services - such as voicemail and unified messaging - and integrates them with common desktop applications.

To provide an accurate Internet billing solution. APT turned to a local systems integrator who developed a unique Internet billing package which enables APT to accurately track and manage Internet usage for their clients. They can now see peaks

and Internet utilisation, which helps APT better manage productivity.

To manage the VoIP billing, APT also installed an IP Telephony software billing solution from one of its two Cisco VoIP Development Partners.

David Sheridan explains: "Asian Pacific Telecommunications wanted to be able to manage their clients IP Telephony with an accurate accounting solution. IP Telephony offers many benefits including better visibility and accountability and a better understanding of how they use the telephone. Our IP Telephony software solution connects with Cisco VoIP Telephony records and downloads all related information to our secure database. From this database, we can marry call time and costs against a company and bill them accordingly.

"If a company wishes to see a breakdown of all costs we can provide an analysis report via a secure website, including information such as most expensive calls, numbers most frequently dialled and who makes the most calls."

Results

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David Sheridan, General Manager,

Asian Pacific Telecommunications

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According to David Sheridan, the key benefits to APT and their clients are the cost-efficiencies and flexibility of the converged network.

"By building 'smart' buildings with IP Telephony networks, our clients benefit from reduced costs, minimised infrastructure and better manageability. With

> IP Telephony, all the companies have toll-free bypass, which means calls within a building or to another building in the group are free of charge. Staff can quickly and easily communicate with companies in each of our locations, which increases the potential for personal networking and business-tobusiness initiatives.

"As a result, we have created a community of interest. For example, businesses in the Queens Road offices have the opportunity to use the XML handsets to push advertising to other IP Telephony handset screens within the building.

"With an IP Telephony network, it's simply a question of adding a Cisco router and IP handsets and then linking them to our network. We can maintain the network ourselves with a small team of engineers who travel between our locations, although most of the maintenance can be carried out remotely via a web browser. For example, we can program the handsets remotely and even put XML pages on the phones to update all the businesses' contact details, business centre services or weather information.

"Another benefit of a converged network is that, because there is only one cable to install for everything, instead of two (one for phones and one for data), cabling costs are halved. We've also found the network to be extremely reliable as a fully redundant system with built-in failsafe mechanisms."

Partnerships

For a successful IP Telephony rollout of this magnitude, it's essential to work with a comprehensive architectural plan and reliable partners. Asian Pacific Telecommunications was able to achieve their goals in an organised, timely manner as a result of their strong partnerships with companies such as Cisco Systems.

Cisco Systems Engineer Peter Cox coordinated the implementation to ensure that each element of the converged network was rolled out seamlessly.

"The APBC building is the epitome of elegance and functionality," he said, "and that was exactly what they required for their network – a simple, powerful and elegant architecture that would support enterprise-standard communications.

"With Cisco Systems technology solutions and our experience, we were able to deliver exactly what was required."

Asian Pacific Telecommunications business model has proved successful in part due to the partnerships they have developed.

David Sheridan comments: "Without our partners' unwavering commitment, we wouldn't be able to deliver the services we offer. We chose companies such as Cisco Systems as our partners because of the level of commitment they put behind a project and the range of innovative hardware and software solutions they develop. Beyond their technical capabilities, we found their willingness to understand our business imperatives and their commitment to assist us deliver on our value proposition has strengthened our successful alliance."



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