

BlueCentral tackles capacity, reliability and redundancy concerns with Nextgen Networks' premium high-speed Internet Services



Leading web hosting and business infrastructure provider, BlueCentral wanted a more flexible, reliable and accessible Internet service to improve service levels to its customers. Nextgen Networks was able to provide the bandwidth and physical network diversity required as well as reductions in the cost of Internet Services.

BlueCentral Customer Profile:

Industry: Web hosting and managed Internet services.

Size: Five data centres – 12,000 clients worldwide.

Snapshot: BlueCentral is a web hosting and business infrastructure provider delivering domain names, shared web hosting, dedicated hosting, co-location solutions and data centre facilities to over 12,000 clients worldwide.

Objective:

To engineer an infrastructure which is redundant everywhere and easy to manage.

To meet customer service objectives through reliable high bandwidth and physically diverse paths between data centres with multiple uplink providers and an uncomplicated service level agreement.

Approach:

Implement six high capacity services that link BlueCentral Sydney and Melbourne data centres to the outside world with dual, physically separate connections as well as two physically disparate links between its two Melbourne data centres.

IT Benefits:

- Higher bandwidth with scalability
- Flexible network management and simplified architecture
- Multiple uplink providers
- Full redundancy through physical diverse paths
- Modern network with gigabit capability
- 15 per cent improvement in bandwidth utilisation

Business Benefits:

- Lower overall cost of Internet services
- Better service levels for customers
- Stable Internet services
- Reduced downtime rebates to customers
- Competitive advantage – market differentiation
- Opportunity to expand range of billable services

The art of being a good host

BlueCentral has over 12,000 clients worldwide in the SME sector, large businesses, corporate and government departments.

With annual revenues in excess of \$25 million, BlueCentral is part of the ASX-listed Blue Freeway Group and can trace its origins in web hosting services back to 1997. With five data centres under management in Australia, the United Kingdom and North America, the largest share of its business is derived from its three local hosting facilities – two in Melbourne and one in Sydney.

There must be a better way

According to Mr. Simon Foster, Services Director for BlueCentral, the nirvana for web hosting companies is to achieve no downtime for its clients' websites and hosted applications.

"Through a history of corporate mergers, divestments and changes of ownership, BlueCentral's network architecture was outdated, complex and prone to failure," Mr. Foster said. "Meanwhile, the service agreements we operated under from a range of data carriage providers were all over the place."

"With the business continuing to grow and the volume of data we are managing for our clients also increasing, we wanted to engineer an infrastructure which was redundant everywhere and easy to manage. To meet our customer service objectives, we needed reliable high bandwidth with physically diverse paths between data centres, multiple uplink providers and an uncomplicated service agreement from a premium data services provider."

"At the end of the day, we didn't want to expend energy on managing failure in our Internet services and connections. We just wanted the network to be there all the time because whenever there is a failure, we rebate customers and availability issues can create negative perceptions in the market-place."

Mr. Foster said it was also important for BlueCentral to have scalability for future growth and uninterrupted availability when customers have spikes in their website traffic volumes.

"In a lot of cases we receive a warning from a customer that there is a big campaign or some other event happening that is going to require more bandwidth," Mr. Foster said. "We needed to be in a position where sufficient bandwidth was always available without having to even think about it or incur additional costs."



"Peace-of-mind is the most prominent benefit. We no longer worry if the Internet will be working tomorrow and we have a faster, modern network that is gigabit capable across the board."

New Internet services backbone

BlueCentral went to the market to find a wholesale data services carrier that could provide the reliable, uncomplicated Internet services backbone it was looking for.

"In the end, we chose Nextgen because of its competitive pricing as well as the overall reliability and stability of the organisation," Mr. Foster said. "We were very impressed with the fact that Nextgen was able to provide a solution that was technically very sound, uncomplicated and with unlimited access to the type of bandwidth we were looking for."

"Being backed by Leightons was also a big plus for Nextgen. Just knowing that we were dealing with a large, stable company that has been around for a long time and that has a track record of servicing the needs of its customers was a great comfort to us."

BlueCentral has purchased six high capacity services that link its Sydney and Melbourne data centres to the outside world with a pair of primary and secondary Gigabit capacity connections as well as two physically disparate links between its two Melbourne data centres.

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Corporate Internet

An important component of this solution is a fully redundant secondary or 'Shadow Service' that is ready for immediate deployment in the event of a primary failure but which only incurs traffic charges where used.

"We chose a simple architecture which included two links each into Sydney and the larger of the two Melbourne data centres," Mr. Foster said. "They are connected directly to Nextgen's national fibre network and then there are two separate connections between the two Melbourne data centres."

"It is a fully-redundant service with each location having dual, physically separate connections that each offers Gigabit capacity Internet access. Under the Shadow Service agreement, the primary services are paid for on a pre-determined monthly fee while the secondary connection is on a 'pay as you go' basis."

Nextgen the sole traffic carrier for BlueCentral

After completing testing in conjunction with Nextgen, BlueCentral went live with the Nextgen Internet services in May 2008 and has subsequently switched off all other services. All of BlueCentral's Internet traffic is now managed over the Nextgen network.

"Since the deployment, every page that we serve up from our hosting centres is carried over the Nextgen Network," Mr. Foster said. "We have radio stations and TV stations streaming digital media content as well as a range of large businesses depending on us to be able to provide them with connectivity to the Internet and to serve electronic information resources up to their online customers."

The comfort of scalability and reliability

Mr. Foster said there have been a range of direct and indirect benefits enjoyed by BlueCentral since it deployed the Nextgen Internet services.

"The fundamental benefit here is that we now have confidence the Internet service at the core of our business is both scalable and reliable," he said. "Peace-of-mind is the most prominent benefit. We no longer worry if the Internet will be working tomorrow and we have a faster, modern network that is gigabit capable across the board."

"Meanwhile, from a simplicity perspective, we have an MPLS core which basically means that human error is less likely to cause problems to our Internet service. Our network engineers no longer have the distraction of identifying and solving upstream Internet connection issues. It just works and they are able to focus on more strategic developments that support our business objectives."

"These network performance benefits have a direct impact on our bottom line. We operate under strict SLAs with our customers so downtime equals lost revenue for BlueCentral."

Mr. Foster has also discovered that the simplified network architecture engineered via the Nextgen Internet services has delivered a faster flow of data for its customers.



"Without having to spend any money on new hardware, the simplified network architecture and connectivity to a higher quality, more modern network has yielded a 15 per cent improvement in utilisation just by switching over. More throughput is directly related to billable revenue for us, so we are thrilled with the results."

Indirect benefits also mounting up

There have also been a range of intangible benefits for BlueCentral including being able to position itself as a premium hosting service and offer an expanding range of value-added services.

"It is a differentiator for us in the market-place to start talking about the quality of the network that underpins our services," Mr. Foster said. "We can tell our existing and prospective customers that at the core of the services we offer is a very modern, reliable and sophisticated network."

"Then there are the indirect benefits that come with not having to find problems and communicate them to customers as well as being able to offer far more flexibility to accommodate IP address portability for new customers."

"In the past we were unable to manage this process in-house. We would have to rely on the wholesale service provider and that was a barrier to us influencing prospective customers to change from another hosting provider to our services. With the Nextgen service we can quite simply manage this value-added service from our end."

Expanded service offerings

Yet another indirect benefit of the Nextgen deployment has been identified in an opportunity for BlueCentral to offer an expanded range of billable services to its customers.

“We are now looking at implementing a disaster recovery strategy between our three Australian data centres which is something we never considered until we migrated to this network,” Mr. Foster said. “Because we are now connected to the Nextgen national network, we now back-haul services between our data centres and can offer that service to our customers.”

“There would be some infrastructure capital investment required but it has encouraged us to start looking at the business case for offering fully redundant hot sites that are available for immediate switch-over if there is a problem.”

Excellent service, superior technical know-how

BlueCentral has also been very pleased with the level of technical knowledge and customer service that it has enjoyed since partnering with Nextgen Networks.

“We have had nothing but excellent service from Nextgen,” Mr. Foster said. “We have been very impressed with the technical skills and service mentality of the people we have dealt with. It was plainly obvious from the outset that we were dealing with a highly professional, technically-sound organisation and that added a high degree of comfort to doing business with them.”

“Nextgen has been very responsive and very straight up and down in all of our dealings with them through the tender process, testing and then deployment. That is something that you can easily take for granted but past experience suggests that it is certainly not always there.”

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ABOUT NEXTGEN NETWORKS:

Nextgen Networks is a specialist provider of high performance data services and solutions. A member of the Leighton Group, Nextgen Networks owns and operates Australia's third largest fibre optic network and Australia's first national VPLS network. Its customers include managed network service providers, network integrators, carriers, corporations and government agencies.

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