



Case Study Internode

With IBM XIV, Internode's capacity worries are averted

About Internode

Headquartered in Adelaide, Internode is the largest privately held broadband services company in Australia. Internode offers broadband nationally to around 200,000 customers via ADSL2+, FTTH/FTTP (including NBN) and fixed wireless services. It also offers 3G wireless broadband, PSTN and VoIP phone services, and has recently launched a national IPTV service.

Whether the customer is a business, corporation, government department or home user, Internode cares deeply about delivering a consistently reliable service. Internode consistently records the highest customer satisfaction ratings in Australia for its services in regular independent surveys.

About locane

For organisations who depend on their IT systems to support organisational objectives, locane provides the business solutions, professional services and supporting infrastructure that will help to ensure that every dollar invested in IT delivers the maximum possible return through the application of first class expertise, resources, understanding and innovation.

For more information on how locane's IT services can benefit your business, call +61 (8) 8413 1000 or visit locane.com.au



Innovative IT Solutions

● THE CHALLENGE

Storage capacity expansion paramount

- The current storage system was at its limit; new projects were being held back
- Maintenance was complex and time consuming

● THE SOLUTION

IBM XIV Storage System:

- 2 x 9 module 87TB XIVs
- 4 x IBM SAN40B fibre channel switches

● THE BENEFITS

- Storage capacity increased 4-fold
- Manageability without complexity
- Can perform online firmware upgrades – no interruption to users
- Power consumption reduced by 68%
- Physical footprint reduced

Storage systems at full capacity

Having quadrupled in size over the last four years, Internode's previous storage system was at capacity, unable to accommodate new projects. Key applications were slowing down, maintenance had become complex and time consuming with online upgrades impossible, and greater virtualisation required a reliable shared storage system.

"Previously, we were using a traditional SAN," says Tom Gorka, Technical Project Manager, Internode Pty Ltd. "It was extremely time consuming re-allocating space every time needs changed. Storage capacity expansion was paramount."

"The IBM XIV is a Tier 1 solution at a Tier 2 price, delivering both capacity and performance – together, a winning combination."

Tom Gorka, Technical Project Manager,
Internode Pty Ltd

IBM XIV Surprises with Performance and Energy Savings

IBM® XIV® was not on Internode's original shortlist – an entirely different design, its on-paper specifications suggested a lower performance level than required.

Tom points out that it was IBM Partner locane who convinced them to look seriously at IBM's XIV solution. "locane had worked with us on a previous engagement and were determined to help us find the best storage solution for our overall business needs."

The business case was strengthened when the Board asked for an analysis of operating costs, revealing a vast reduction in power consumption – Internode is committed to implementing environmentally responsible practices throughout their business.

The Internode solution consists of two 9-module IBM XIV units each with 87TB of capacity – accommodating the two Adelaide-based data centres. Pre-installed mainstream SAN software included data replication, snapshots and thin provisioning.

Undertaken as a three-way interaction between Internode, locane and IBM, the project was quickly underway – once the paperwork was completed, it took just two months to deliver, configure and test the system. locane and Internode worked together to migrate three different hosts. Once locane's engagement was complete, Internode's technical team took over and IBM now provides ongoing technical support.

More Powerful, yet using Less Power

Increasing storage capacity may have been the fundamental reason Internode replaced its traditional SAN systems, but the IBM XIV units have delivered far more:

- **Capacity Expansion** – a four-fold increase in storage capacity
- **System Performance** – applications are running more efficiently; the processing time of one was reduced by a factor of four
- **System Manageability** – complex, manual disk configuration is a thing of the past. With software built in, allocation and provision of extra storage takes a few minutes
- **Online Upgrades** – All systems remain operational through every upgrade, with no interruption to service
- **Environmental Impact** - power consumption was reduced by a massive 68%
- **Cost Reduction** – Internode saves thousands of dollars each year in operating costs
- **Physical Footprint** – the XIV is a single rack system, taking two thirds less space than the previous one.

"There are no more worries about capacity," explains Tom, "and we don't have to micromanage where on the storage array the data volumes come from."

"With locane's help, we have a system that really fits both our current and future needs."

Plan the 5-year Growth Rate, then Double It

Tom is more than comfortable the IBM XIV systems will accommodate the next phase of Internode's business expansion.

"This storage project is part of a five-year growth plan," he explains. "We calculated our capacity requirements for five years, added more for unexpected events, and the IBM XIV servers can accommodate double again."

The results clearly speak for themselves. Internode is extremely happy with the performance of the IBM XIV system, and with the quality of support it has received from both locane and IBM. And most importantly, in Tom's words, "There are no more worries about capacity."

"The IBM XIV is a Tier 1 solution at a Tier 2 price, delivering both capacity and performance – together, a winning combination."

Postscript: In 2011, locane received an IBM Green and Beyond Smarter Planet award for installing the new disk storage system for Internode.

