



## Whitepaper

# Why Build When You Can Borrow?

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**How hosted data centre services eliminate the daily pain and frustration of managing your IT infrastructure**

**October 2010**

## Table of Contents

<b>Introduction.....</b>	<b>1</b>
<b>The problem with onsite data centres .....</b>	<b>2</b>
<b>How you will benefit from hosted data centre .....</b>	<b>3</b>
<b>Introducing Hosting Solutions from Macquarie Telecom .....</b>	<b>5</b>
<b>About Macquarie Telecom .....</b>	<b>7</b>

## Introduction

For the modern chief information officer (CIO), maintaining a competitive enterprise is becoming more challenging every day. According to Gartner, IT budgets declined by 8.1 percent in 2009 and have stayed relatively flat this year, increasing by only 1.3 percent worldwide, which placed them at 2005 levels.<sup>1</sup>

This is partly due to the global financial crisis (GFC), which put the squeeze on technology budgets. Capital expenditures that were once allocated to new IT infrastructure initiatives have been reduced or redirected to other projects, putting added pressure on CIOs to keep a lid on costs, improve staff productivity and maintain better control of systems and resources. According to Gartner, reducing enterprise costs was the number two business priority for 1,586 CIOs surveyed worldwide last year.

Nowhere is this truer than in the data centre, where CIOs are forced to make use of tight budgets to keep hardware up to date and ensure applications are always available to their users and external customers.

More and more, CIOs are discovering that by turning to managed hosting services they can curb the capital and operational costs associated with the data centre, free up staff to focus on core business and make their organisations more agile in the face of changing market conditions.

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### IT's new reality

Information technology is the lifeblood of revenue generating activities within most businesses. Yet even as IT budgets are shrinking, the demand for online and near-instantaneous access to both customer-facing and internal applications continues to rise.

If you're a medium to large organisation in Australia, you can't afford to have your financial systems, online payment gateways or other business critical applications down for even the smallest amount of time. And in today's post-GFC world, chief executive officers (CEOs) and other senior managers want assurances that any new technology projects will deliver fast return-on-investment – and do it while guaranteeing high levels of service and maximum uptime.

Even if IT is your core business, setting up and maintaining your own data centre is an expensive exercise, both in terms of money, time and human resources. Apart from the high capital costs, there are the significant expenses associated with day-to-day data centre operation. This delicate balancing act is leading many CIOs to question whether they should build and maintain their own data centre or let others run it to help control costs and enable growth.

<sup>1</sup> 'Gartner EXP Worldwide Survey of Nearly 1,600 CIOs Shows IT Budgets in 2010 to be at 2005 Levels', *Gartner*, January 19, 2010  
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[www.macquarietelecom.com](http://www.macquarietelecom.com)

This whitepaper discusses why moving in-house data centre operations to a hosted service provider can take the pressure off your IT department, cut costs and free you to focus on strategic projects that add real value to the business and help grow market share.

## The problem with onsite data centres

Maintaining your own data centre is time consuming and expensive. Providing backup power and connections to multiple power grids, server redundancy in case of hardware failure, and keeping operating systems and applications constantly updated with the latest patches requires a suitable budget and people with the right skills.

Rising power costs, for instance, are a real concern for government departments and enterprises. According to recent report in *MIS*, The Department of Finance in Australia wants to extend whole-of-government power purchasing agreements to its data centre strategy to cut costs.<sup>2</sup>

Hiring and keeping staff with the right skills is costly. Organisations may need to employ staff with certifications and skills in virtualisation, maintaining Windows, Linux, or Unix operating systems, networking equipment and servers manufactured by multiple vendors, firewalls and other security applications and appliances, as well as networking equipment.

Most modern software applications are resource-hungry, which is forcing IT departments to buy expensive servers just to run the latest operating system and application releases. For example, servers range from \$5,000 for entry-level models to upwards of \$100,000 for high-end blade systems.

Keeping up with changes to industry-specific standards – particularly around electronic and physical security and online payment gateways – can also be difficult.

For instance, data centres run by government departments need to comply with the DSD (Defence Signals Directorate) standard that protects government systems and data from external threats. Companies that run servers and applications for ecommerce websites that hold credit card information also need to comply with the PCI DSS standard for the payment card industry.

Finally, many organisations are only now realising the importance of having a disaster recovery strategy by mirroring their data centre infrastructure at a secondary site to ensure systems are kept running and information won't be lost in the event of a failure at their primary site. For some, this realisation occurs only after they experience an outage and they have lost precious company data or even customers.

*Keeping up with changes to industry-specific standards – particularly around electronic and physical security and online payment gateways can also be difficult if you are managing it internally.*

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<sup>2</sup> 'Power Costs Put the Squeeze on Govt IT', *MIS*, 6 October, 2010  
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## How you will benefit from hosted data centre

There are seven key reasons why you should choose a hosted service provider to manage your data centre:

### 1. Guaranteed uptime with redundant systems

Maintaining your own data centre takes valuable time and resources away from your core responsibility, which is to deliver fast and reliable applications to your staff and customers.

By passing the responsibility for infrastructure management to a hosted data centre service provider, you can guarantee that your core applications will be up and running 99.99% of the time. In the worst case, this is only 4 minutes of downtime every month. Most internal IT departments can't guarantee that service level and service providers, such as Macquarie Telecom, offer service level guarantees (SLGs) that provide financial compensation for non-compliance.

Data centre hosting providers also utilise redundant power components to guarantee power is always available. Macquarie Telecom, for instance, uses a mix of uninterruptable power supplies and other battery backup, as well as diesel-powered generators to provide power when there is an outage resulting from transmission system failures and occasionally severe weather.

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### 2. Around-the-clock monitoring

A hosted data centre provider will proactively monitor your equipment around the clock and provide alerts when servers are reaching their thresholds or a piece of equipment is about to fail or has failed. This is done through a portal that lets you to analyse statistics around server utilisation, enabling you to make changes to suit your business activities.

### 3. Access to trained staff

Hiring staff with the right technical skills is expensive and time consuming. To do this properly, you may need to employ multiple staff with specialised skills in managing each brand of operating system, server, and piece of networking hardware to ensure your data centre runs smoothly 24 hours a day, seven days a week.

A hosted data centre provider takes this burden away by providing highly-skilled engineering staff with the relevant certifications to ensure that your business critical applications are almost always online.

### 4. Reduced operational and capital costs

Data centre hosting services are usually provided for a monthly service fee, which turns expensive capital into a simple, consistent, operational expense.

For instance, it may potentially cost you \$100,000 or more per annum to hire a technical specialist to manage and monitor a web server that runs your online payment gateway. You may even need more than one person, which will increase the cost further. In contrast, a hosting provider may charge \$1000 per month or \$12,000 a year to manage that server. Hosted data centre services save time and money.

## 5. Security compliance

When your data centre is managed in-house, it can be extremely difficult to keep up with threats, which are emerging daily. Hosted service providers have systems in place to deal with many different types of security threat.

Macquarie Telecom, for instance, was the first hosting provider in Australia to be certified by SAI Global to ISO 27001 accreditation, which certifies that the company has implemented a system to secure information and has the right policies and procedures in place. This is audited against a global standard by an independent third party.

Macquarie Telecom employs technical specialists and experts that are certified and accredited with industry recognised international professional qualifications to help you secure your organisation.

## 6. Increased scalability

Perhaps one of the most appealing benefits of hosting your data centre operation is the ability to scale up your infrastructure as your business expands.

For instance, if you want to deploy new applications, you can simply purchase more server and storage space for a fixed monthly fee without having to outlay potentially thousands of dollars on new systems that may not necessarily be utilised.

Conversely, it's just as easy to switch off server infrastructure if the resources are no longer required.

## 7. Access to new, innovative technology

It can be difficult to keep up with the latest technological developments that may benefit your business. A hosted data centre service provider can typically deploy innovative technologies, such as server virtualisation, quickly and easily whenever you need it.

This enables you to take advantage of any new technology at the lowest possible cost and without the high capital costs.

Today's CIOs are spending too much time simply keeping their data centres running rather than focusing on initiatives that enables them to deliver real value to their businesses at a lower cost.

If this sounds like your business, Macquarie Telecom can help.

*It could cost you \$100,000 or more per annum to hire a technical specialist to manage and monitor a web server.*

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## Introducing Hosting Solutions from Macquarie Telecom

For the past eight years, Macquarie Telecom has designed, implemented, operated and managed hosted data centres for a range of private enterprises and government departments around Australia.

The Macquarie Hosting service is managed from a world-class data centre in Sydney that supports the highest level of security and uptime available for your organisation.

Our hosting solutions include:

### **Enterprise managed hosting/application hosting**

Design, implementation and operation of high-availability infrastructure for online or non-online applications. This involves a blend of dedicated physical and virtual servers.

### **Managed co-location services**

Provides server rack space in conjunction with managed services such as Internet, firewall security protection, storage and tape backup.

### **Internet Network Core III**

Ensures the fastest route to the Internet and your end users by multiple carriers with diverse domestic and international paths. All carriers are connected at Gigabit speeds.

### **Managed perimeter security**

Offers various layers of security protection to support the integrity and availability of your data. Your network is supported by a dedicated firewall, anti-virus and anti-spam filtering for your email and web content. An additional intrusion prevention service also provides the ability to report, detect and block security events in real time.

### **Managed server infrastructure and enterprise virtualisation**

A team of engineers monitor your servers, storage devices and networking equipment around-the-clock. You also have the option of using virtual servers, which enable you to expand your infrastructure quickly and easily.

*"A few years ago our mornings were filled with trepidation as we checked to see if our website was still operating. Now it is unusual for there to be any problems.*

**David Clarke,  
Managing Director,  
Webjet.  
Macquarie Telecom  
Hosting customer  
since 2004**

### **Managed server load balancing**

Allows a URL or server name to be serviced by multiple servers with mirrored content. This directs traffic to the least busy servers and offers automatic failover protection because traffic is distributed across multiple servers. If one server fails, it is automatically taken offline.

### **Storage and tape backup**

A cost-effective, high-availability on-demand storage services based on high-performances storage systems.

### **MacquarieView and InView**

A management tool portal that provides complete visibility into your managed hosting and data network.

### **Hosted disaster recovery**

Provides additional levels of availability for your mission-critical online applications if there is an unforeseen disaster at your primary facility. This is achieved by building a replica of your production environment on a virtual server platform located at an alternate certified hosting facility.

Ultimately, running a data centre is not your job. It pays to hand over responsibility to an organisation like Macquarie Telecom to free up your internal resources so you can focus on more strategic business initiatives.

Contact Macquarie Telecom on 1800 011 062 or visit [macquarietelecom.com/hosting](http://macquarietelecom.com/hosting).

## About Macquarie Telecom

Founded in 1992, Macquarie Telecom is Australia's only business-specific hosting and telecommunications company. Working with and supporting some of Australia's best-known organisations including SBS, Cricket Australia, Webjet and the Australian Rugby Union, Macquarie Telecom provides data network services, mission critical hosting facilities and telecommunication services underpinned by industry-leading customer service.

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