Challenge

- Telstra International wanted to introduce blade technology into its London hosting centre to resolve Power and Cooling issues, increase performance, reduce Total Cost of Ownership (TCO) and simplify manageability in a strategy to enhance delivery of its managed service portfolio.

Solution

- HP ProLiant BL460 c-Class G5 server blades
- VMware virtualisation software
- HP Insight Control management software

Results

- A high-performance, high-availability, scalable infrastructure.
- Extremely reliable HP blade servers boost computing power and ease manageability.
- The high-density infrastructure saves space as well as lowering Power and Cooling requirements and has increased server utilisation by 600 per cent.
- Service levels have increased to 99.9 per cent, satisfying customers' expectations.
- TCO continues to fall and improved manageability saves time and money.
- Rapid deployment of applications boosts profitability.
- Business growth is not constrained by power and cooling issues.
- Lower energy costs reduce Telstra's carbon footprint and enhance its 'green' credentials.

// Richardson Eyres provides solutions for data centre consolidation. It works with its customers to streamline IT infrastructures, freeing up time, resources and ultimately saving its customers' money.

Richardson Eyres develops long-term and mutually beneficial relationships working with its customers to ensure that it provides bespoke solutions to help their business run efficiently, effectively and above all, profitably.

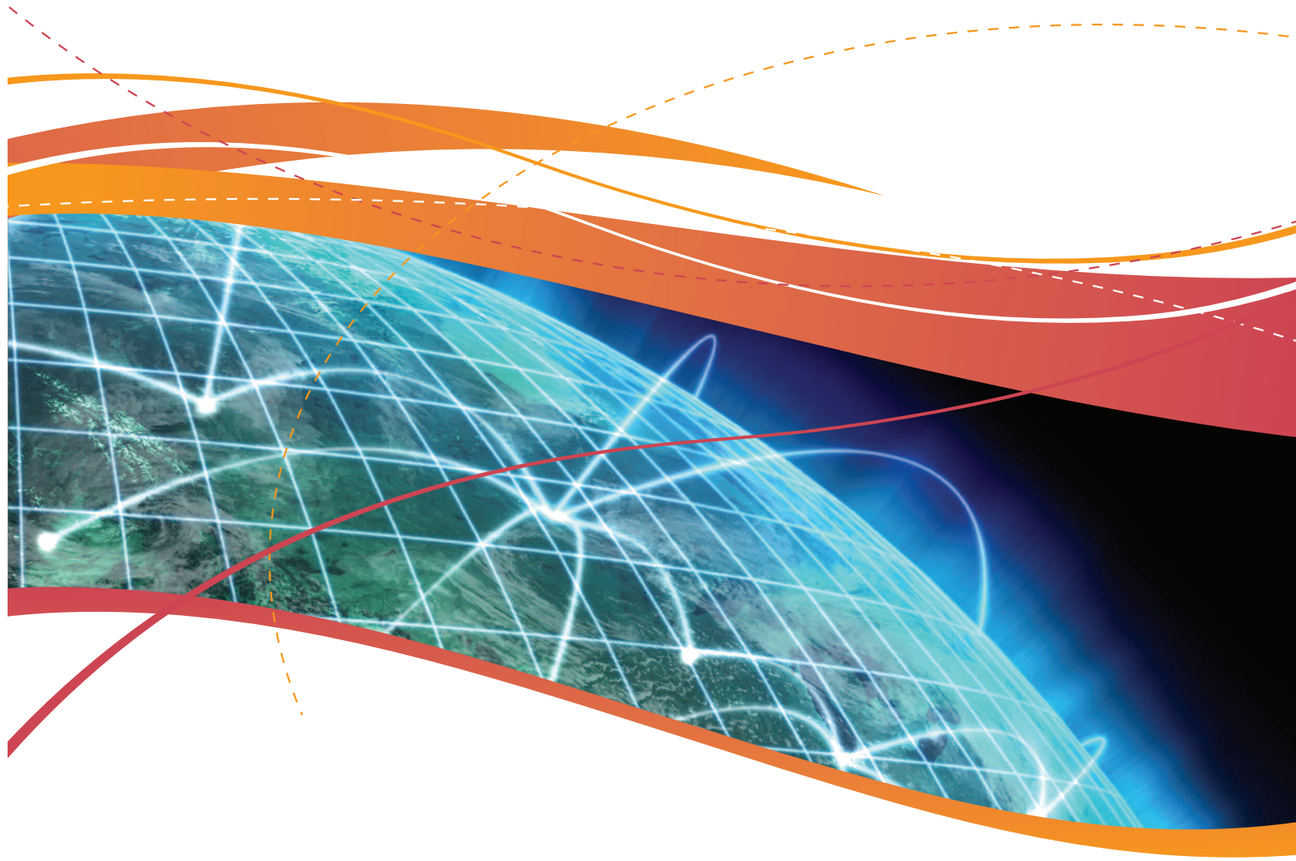
It has partnerships with HP and VMware, and is one of a small number of HP Professional Services Partners (PSP) in the UK. It also provides solutions for companies globally, from their offices in the UK and the US.

With over 20 years experience as a data centre consultant, Richardson Eyres has extensive technical knowledge and the know-how to apply this knowledge to help organisations run their IT infrastructures more efficiently. Established in 1986, the company is privately owned and its headquarters is in Chesham, Buckinghamshire.
www.richardsoneyres.com

Richardson Eyres
Unit 12 Alma Road Trading Estate
Chesham, Buckinghamshire, HP5 3HB
t +44 (0) 1494 792 002
f +44 (0) 1494 791 882

www.richardsoneyres.com

richardsoneyres
the data centre experts



//Telstra International meets growing customer demand for managed services

2009 Preferred Partner GOLD
Service Specialist
Professional Services Partner

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Service Specialist
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HP BladeSystems cut operational costs, save energy, ease manageability and aid managed services delivery for Telstra International.

Telstra International, a leading global telecommunications provider, delivers global network connectivity and a broad portfolio of scalable data hosting and managed services to enhance the competitive advantage of multi-national businesses around the world.

Based in Cambridge and London, its European operation provides over 3,000 customers with data, voice and complex managed network and hosting services. The company is able to offer its customers scalable and cost-effective network and managed services, thanks to its award-winning Reach network which covers the Asia Pacific region. Currently, Telstra International delivers global managed networks to more than 225 multi-national companies. Services include Internet, hosting, Wide Area Network and voice solutions as well as Multi-Protocol Label Switching (MPLS) and Internet Protocol Virtual Private Networks (IPVPN).

Capacity, power and cooling, manageability and cost concerns

Specifically designed to support complex, high-end data and web hosting and co-location services, Telstra's advanced London and Cambridge hosting/data centres have a combined floor area of over 115,500 square feet. Both UK centres employ rigorous security precautions and sophisticated climate control and fire suppression systems. To ensure service continuity, they receive power directly from the National Grid and boast uninterruptible power supply systems and backup generators whilst the company's network backbone provides redundant interconnectivity to maintain resilience.

Traditionally, Telstra has employed various rack-mounted HP servers at its data centres to deliver its managed services portfolio. However, to satisfy customer expectations and a growing demand for services, the company decided to gradually incorporate new server technology into the hosting centres. The first phase of this improvement strategy addressed concerns at its London facility.

"Our London hosting centre faced the usual constraints relating to data centres. Capacity for conventional servers was decreasing, power and cooling were impending issues and, to satisfy our environmental policy, we wanted to address our carbon footprint," explains Mike Rivers, hosting and security product manager Telstra International, EMEA, "We simultaneously wanted to lower the operational costs and improve the manageability at the centre and within our internal IT department.

> "HP BladeSystems with virtualisation technology are more cost-effective, less power hungry and easier to manage. Server utilisation has typically increased 600 per cent, downtime is minimal and Total Cost of Ownership (TCO) continues to fall as we introduce more highly reliable server blades. However, most importantly, they allow us to deliver effectively the managed services demanded by our customers."
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> Mike Rivers, hosting and security product manager, Telstra International EMEA.

"We required a more sustainable server infrastructure to augment our existing server environment; one that could handle our expanding managed services portfolio, satisfy customers' service level expectations and offer an excellent balance between price and performance with improved manageability," continues Rivers. "Moreover, we had to provide customers with the technology they demanded. Many preferred the scalability, reliability and availability of blade servers. Consequently, this technology seemed the best route to aid business development."

After deciding to implement blade technology at its London hosting centre, Telstra approached three well-known vendors to discuss its requirements. Richardson Eyres, a highly accredited HP Partner, provided consulting and technical services throughout the project.

"We trialled two of the three proposed blade solutions and chose the HP solution because it offered the best price/performance ratio and manageability, and would lower the Total Cost of Ownership (TCO) to a greater extent as we introduced more and more HP blades. In addition, the synergy between our businesses was very good," comments Rivers.

"In addition, the quality of consultancy provided by Richardson Eyres surpassed our expectations and provided the foundation to Telstra's corporate-level managed virtualisation services."

HP BladeSystems and virtualisation

The HP Adaptive Infrastructure solution involves several modular, scalable HP BladeSystems and virtualisation software. The BladeSystems currently comprise HP ProLiant BL460 c-Class G5 server blades whilst VMware provides the virtualisation platform. HP Insight Control software manages all the infrastructure's components.

With its BladeSystem c-Class server blades, this solution epitomises HP's vision of the next-generation, high-performance data centre. It incorporates a common set of server and power and cooling system management tools; allows automatic deployment, change, fail-over and movement of servers without administrator involvement; and greatly reduces power and cooling requirements. The powerful, high-availability server blades with their energy-efficient components will help Telstra to drive down TCO and energy costs whilst simultaneously providing the flexibility to respond to changing business needs.

More effective managed network services delivery

Telstra's London hosting centre now benefits from a modern high-density, high-performance server infrastructure that matches the service expectations of current and future customers whilst simultaneously satisfying the company's internal IT needs.

> "Our London hosting centre faced the usual constraints relating to data centres. Capacity for conventional servers was decreasing, power and cooling were impending issues and, to satisfy our environmental policy, we wanted to address our carbon footprint."

Compared to alternative blade technologies, the HP server blades are 26 per cent more energy efficient and TCO will fall further as Telstra deploys additional server blades. Power and cooling issues therefore no longer constrain business growth and the energy cost savings generated by the 'green' technology reinforce the company's commitment to reduce its carbon footprint.

Moreover, HP Insight Control management software reduces the complexity of Telstra's operations, saving time and money. It ensures availability by proactively monitoring the server environment and automatically applies virtualisation, which has dramatically increased server utilisation. Extra computing power is therefore accessible on-demand and, compared to standard servers, increased availability boosts service levels.

"This cost-effective, high-performance HP solution occupies less space, uses less power and is much easier to manage; fewer service engineers are required to support the infrastructure," says Rivers. "In contrast to traditional server solutions, to date, service levels have increased from 99.5 to 99.9 per cent, server utilisation has climbed six-fold."

"Moreover, deploying new applications is more rapid because HP blade technology is simple to install and configure. Combined with virtualisation, it helps us to deliver new managed services more effectively to our customers. I am looking forward to introducing many more HP server blades throughout our organisation," concludes Rivers.