

HP and Vodafone: bringing leading-edge server technology to the forefront of the telecommunications industry



Vodafone's decision to introduce HP Integrity servers was another step in a long-term partnership with HP. It's a decision that has led to significant improvements in business processes and operational expenditure, through bringing HP's leading-edge server technology and global experience to Vodafone's business.

Vodafone New Zealand is the country's leading mobile telecommunications carrier, providing second- and third-generation mobile services to more than 1.9 million New Zealanders. Employing approximately 1,400 people working in a fast-paced, ever-changing telecommunications environment, Vodafone is an extremely dynamic, progressive, and successful organization.

Central to Vodafone's success is the technology infrastructure that sits behind the mobile phone business. Technology stretches across everything that Vodafone does, from customer relationship management to data analysis, so strong IT systems are a must.

Technology partners that fully understand Vodafone's challenging business environment are therefore critical. HP and Vodafone (formerly Compaq and Bellsouth) have been partners since 1993, with HP providing systems, services, and solutions—from desktop and notebook PCs to back-of-house servers, consulting services, and application development.



Both HP and Vodafone are global leaders in the technology industry, with a focus on excellence, innovation, and leadership. The two organizations face similar drivers and challenges, making them ideal partners. Working together closely on a day-to-day basis, HP is able to provide Vodafone with world-leading technology and experience helping to keep Vodafone at the forefront of the telecommunications industry.

The business need

In view of Vodafone's 54 percent market share, one of the company's key challenges is to remain a market leader. To achieve this, it needs to understand its customers' needs and wants in order to develop services that enable New Zealanders in their everyday life. Receiving, storing, processing, and reporting the activity of 1.9 million New Zealanders—who use Vodafone's network to talk, send text messages and photos, surf the Web, and exchange data—is no small task.

In 2004, Vodafone recognized that its pace of growth had outstripped the ability of its server-based data-warehousing system to manage the level of activity. Likewise, the increased complexity of information, generated by a network that was quickly evolving from a second-generation GSM-based voice network to a third-generation data and voice network, was magnifying this challenge.

“We have made a lot of progress in working together to understand each others’ challenges, which is great for the future of our partnership.”

—Keith Gin, Vodafone IT resource services manager

Faced by these changing needs, Vodafone’s legacy SGI-based data-warehousing and data-processing system was at risk of underperforming, while the operational expense of supporting it was increasing significantly.

In practice what this meant was that sales and marketing managers were beginning to experience delays in receiving reports on customer behavior. Instead of having reports delivered at the start of each day, some team members were experiencing delays that impacted their ability to make informed decisions in a timely manner.

As Vodafone IT resource services manager Keith Gin describes, “. . . provid[ing] our team with the critical daily information they needed to keep our business healthy in a complex and changing environment was becoming increasingly challenging.”

With timely and accurate business intelligence reports crucial to Vodafone’s business, the organization recognized a need to make changes to future-proof its business.

What was done

Working together, HP and Vodafone looked at the possible options for meeting this challenge. Three considerations were key: lower operational expenditure and improved performance; synchronization with existing platforms and operating systems; and the desire to get organizational exposure to emerging technology and provide a foundation for ongoing IT improvement.

With these considerations in mind, Vodafone and HP assessed the options and selected two HP Integrity servers, which were installed in June 2004.

HP’s Integrity server family is based on industry-standard Intel® Itanium® 2 processors. With their modular building-block architecture, the servers are an innovation in server technology that offers simplicity, agility, and value for money. The HP Integrity servers’ industry-leading performance and mission-critical reliability support highly demanding workloads—and their industry-standard modular approach, based on the Intel Itanium 2 processor, means that they can support a wide range of operating-system choices rather than locking users into a proprietary environment.

For Vodafone, the Integrity servers offered a viable and performance-focused choice.

Vodafone installed two Itanium 2–based HP Integrity servers—the Integrity rx7620-16 and rx8620-32 servers—in its data-warehousing environment, along with the HP-UX 11i operating system. Both of these industry-leading midrange servers are designed to achieve higher performance with a focus on scalability and industry-standard architecture for investment protection and flexibility.

Vodafone seamlessly transitioned its legacy Red Brick Warehouse from the company’s existing RISC servers to the Integrity rx8620-32 server. The Integrity rx-7620-16 server was integrated into Vodafone’s preproduction test environment.

Close support throughout the planning and installation stages was provided by an 8-person team from HP New Zealand, with offshore support available to assist at the key stages. With experience in both project management and technical installation, HP was able to provide Vodafone with expertise that helped to make the installation as seamless as possible.

As Gin says, the availability of the international support team was invaluable. Not only did it mean that Vodafone had the very best expertise available on demand for what was very new and emerging technology, it also offered Gin access to people who were very close to HP’s technology roadmap.

Understanding where the technology he was investing in was heading bolstered Gin’s confidence in his decision and enabled him to comprehend what Vodafone’s future needs would be—and what the lifecycle of the technology would look like.

The project was not without some challenges. The key challenge for HP was recognizing which HP people were the best fit with Vodafone’s team and providing staff with expertise that complemented and would enhance Vodafone’s skill base and culture. This was crucial, as Gin wanted his team to have exposure to people who were knowledgeable about an emerging technology that Vodafone needed to learn more about. “Up-skilling” his team through exposure to experienced people was a key goal.

In the end, Gin says, these challenges were overcome because at the end of the day, the people got along well and were committed to getting the job done.

Gin says that HP constantly focused on aligning its people and practices with Vodafone’s and on working together as a team.

The business result

A year later, HP Integrity servers are delivering significant results to Vodafone. Performance-wise, Gin says that the system has more than met the need for stronger, more flexible data processing and management. Where once, in some cases, daily reports didn’t arrive on management desks until around midday, today they are available at the beginning of the working day, giving management



the crucial information they need to do their jobs.

The system produces meaningful, timely reports covering trend analysis data, billing information, and sales and financial data. As Gin says, “There have been improvements of up to 60 percent to the reporting system enabled by the Integrity servers. This is extremely significant and is enabling our business to make better, more informed decisions. There are real benefits in terms of effectiveness and timeliness to the way our sales and marketing teams can now operate.

“Additionally, the timely delivery of these reports is now a part of an internal service-level agreement between departments.”

The agility of the system helps ensure that this benefit will not decrease should Vodafone continue to experience increases in capacity, as it has in the past. The Integrity servers are designed to offer plenty of scalability as workload increases, and more processing power can be added as needed.

Furthermore, HP says that should Vodafone wish, it will easily be able to upgrade multiple versions of operating systems throughout the boxes' lifecycle to beyond 2011. Jonathan Drake, HP's New Zealand marketing manager for Integrity servers, says that because the HP Integrity servers are based on industry-standard Intel Itanium 2 processors, they provide Vodafone with the ability to upgrade its operating systems to whatever will work best for them, today or in the future. Vodafone is not locked into a proprietary system and has the flexibility to adapt its business on an as-needed basis, knowing that the systems will adapt to any business changes Vodafone may need to make.

The industry-standard nature of the Integrity servers is also providing Vodafone with distinct benefits at an operational expenditure level. As Drake explains, "Because the servers are industry-standard rather than being based on proprietary architecture, overall costs are significantly impacted. Basically, the costs of actual components are lower and therefore the upfront costs are lower. Likewise, the cost of maintenance is less than what you would find with proprietary alternatives."

Future scope

While the upgrade to HP Integrity servers was based on the need to produce real day-to-day benefits at a productivity and value level, the investment decision was with a longer-term perspective in mind.

One of the biggest movements in information technology today is the drive towards consolidation. The Integrity servers provide Vodafone with the right environment to consolidate IT resources over the longer term. Because they are inherently flexible and agile, business processes can be improved by migrating further applications and solutions onto the servers.

From its experience to date with the Integrity servers, Vodafone sees them as a good platform for ongoing consolidation and improvement. The insight and understanding the company now has into what the servers mean for its business are enabling Vodafone to make well-considered investment choices for the future. With a continued focus on controlling Vodafone's operational expenditure and improving business performance and productivity, the HP Integrity servers are playing an important role in Vodafone's IT plans.



Challenge

- Vodafone serves 54 percent of New Zealand's mobile phone market, and its customers are increasingly demanding new and more complex services as telecommunications technology becomes more advanced.
- In this complex environment, Vodafone more than ever needs to understand what its customers need and want in order to provide them with services that enhance their daily lives.
- Vodafone's data-warehousing and data-processing system was coming under pressure to deliver timely and accurate business intelligence reports to provide insight into its customers and enable effective decision-making.

Solution

- Vodafone and HP installed two Itanium 2-based HP Integrity servers—the rx7620-16 and rx8620-32—in its data-warehousing and data-processing environment.
- Vodafone's legacy Red Brick Warehouse system was seamlessly transitioned from a RISC server environment to the Itanium 2-based HP Integrity rx8620-32 Server.
- The Itanium 2-based HP Integrity rx7620-16 Server was integrated into Vodafone's preproduction test environment.

Results

- A 60 percent improvement in the timeliness of business intelligence reports, enabling more effective decision-making and better understanding of its customer activity
- Timeliness of reports, now a part of Vodafone's SLA
- Decreased operating costs
- Improved agility and scalability for ongoing growth
- Opportunity for ongoing consolidation of Vodafone's server environment

Customer at a glance

Industry:	Mobile telecommunications
Name:	Vodafone New Zealand
Headquarters:	Auckland, New Zealand
Founded:	1998 (acquired from Bellsouth by the Vodafone Group in November 1998)
Telephone:	+64 9 355 2007
Number of Employees:	1,400
URL:	www.vodafone.co.nz

Why HP?

- Flexible partnering and team approach; sharing of best practices and global experience; best total customer experience
- Industry-standard architecture; multivendor and multiplatform, providing simplicity, agility, and improved price/performance
- More than \$2.5 billion annual enterprise R&D; 11 HP patents per day; innovative solutions, business models and partnerships

Key metrics

- HP Integrity rx7620-16 Server
- HP Integrity rx8620-32 Server
- HP also provides Vodafone with systems, services, and solutions, from desktop and notebook PCs to back-of-house servers, consulting services, and application development.



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