

ADMIRAL GROUP plc

Overview

The need

Admiral Group's aggressive growth plans predicted ever-increasing demands for capacity, performance and scalability. It needed a new solution that would increase capacity, cut costs and introduce long-term infrastructure to enable the next decade of growth.

The solution

Working with Applied Technologies, an IBM Premier Business Partner, Admiral Group commissioned and implemented four IBM Power 720 Express servers, provided bundled with IBM PowerVM software used to create virtualized partitions on each server.

The benefit

System performance was boosted by six-fold at just over double the price – a price-performance gain of 300 percent. Response times were cut by 20 percent and web servers can be provisioned in just four hours, compared to the previous time of four days.

Admiral Group ensures superb performance and scalability

With smarter computing from IBM

Admiral Group specializes in offering direct motor insurance to traditionally higher-risk customers, such as the younger motorists and those living in cities. Founded in 1993, the company now serves approximately 2.4 million customers, around a tenth of the UK market through its Admiral, Bell, Diamond and elephant.co.uk brands. It also owns the price comparison site Confused.com. Employing 4,500 people, Admiral Group is headquartered in Cardiff, Wales, with other company sites in Swansea and Newport (Wales) and Halifax (Canada).

Managing rapid growth

Admiral Group is a fast-growth business, with the number of online quotations it provides increasing continually. The existing IT infrastructure was approaching end of life, and the company's aggressive growth plans predicted continually increasing demands for capacity, performance and scalability. With the company's web servers bringing in an estimated 95 percent of sales, the technology decision could not be taken lightly. Transitioning to new systems presented very large business risks, and Admiral wanted to increase capacity, cut costs and introduce long-term infrastructure that would enable the next decade of growth.

Boosting performance with IBM POWER7

Initially, Admiral Group leveraged micro-partitioning virtualization techniques to extract maximum capacity from its existing IBM System i 595 servers. The release of the latest generation of IBM processors led IBM Premier Business Partner Applied Technologies to suggest that the company deploy POWER7[®] processor-based systems to transform its web server architecture.

Following due diligence and extensive testing, Admiral Group was impressed by the huge cost savings and boost in power promised by re-architecting its web server landscape and moving to IBM POWER7 technology.



Designed for Data

- Admiral Group plans to introduce the IBM Optim solution as part of a comprehensive data warehouse solution, to be used to analyze, sift and explore millions of transactions for new customer opportunities.

Tuned to the Task

- Moved customer-facing web services to the IBM Power 780 servers, which offer exceptional price-performance and scalability, ideal for Admiral Group's needs. Workload for business-critical back-office and administration processes was allocated to existing high-performance IBM System i 595 servers.

Managed in the Cloud

- Leveraging unique IBM PowerVM virtualization technology, Admiral Group can provision and allocate capacity to meet peaks and troughs in demand without being constrained by the underlying physical resources. IBM WebSphere Application Server balances workload across its global web servers with minimal effort and complexity.

Driving Innovation

- The IBM solution offers the scalability and flexibility to support Admiral Group's rapid growth. By re-engineering the way IT staff provision new capacity the solution makes it possible for Admiral Group to respond more quickly and efficiently to fluctuating demand, delivering better response times to website users.
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Working with Applied Technologies, Admiral Group commissioned and implemented four IBM Power 720 Express servers, two in each of its Cardiff and Swansea locations. The company's IT department upgraded the IBM i operating system from version 5.4 to 7.1, and IBM WebSphere Application Server 5.4 to 7.1. The IBM Power 720 servers were provided bundled with IBM PowerVM Standard Edition, which provides a secure and scalable virtualization environment for the company's web servers.

One host and two guest partitions, containing the web servers, have been created on each of the 16 POWER7 processors. When the business demands more capacity, rather than building a web server from scratch each time, Admiral Group clones an existing web server partition and deploys it to a new partition. This simple and largely automated process enables Admiral Group to respond quickly to demands for more capacity during peaks in online traffic.

With IBM WebSphere Application Server as the core web environment, Admiral Group balances workload across all its web servers with minimal effort and complexity, ensuring the lowest possible response times for customers working online.

Web workload was then removed from the existing IBM System i 595 servers, which previously handled both web and back-office workload, making it possible for Admiral Group to maintain its web server environment completely separate from other processes. This ensures that any issues affecting the web servers do not disrupt business operations. The IBM Power 720 solution also has a large degree of inbuilt redundancy, with up to four web servers able to fail at any one time with no effect on performance.

Admiral is planning to introduce the IBM Optim™ solution to manage enterprise application data through every stage of its lifecycle. This will enable a comprehensive data warehouse solution, to be used to analyze, sift and explore millions of transactions for new customer opportunities.

The new solution offers three times as much capacity as the previous infrastructure. Deploying IBM Power 720 enables easy scalability, equipping Admiral Group to handle future expansion.

Benefiting from superb price-performance

A single Admiral Group POWER7 processor-based web server, running on half a processor on the IBM Power 720 infrastructure, can handle the same throughput as three processors on the previous servers – a six-fold boost in capacity. This is achieved at a cost increase of just over double, a price-performance gain of 300 percent. The performance increase can be seen in the major improvement in response times, with more than a second shaved off the time taken to generate a quote online, a reduction of approximately 20 percent.

Solution Components

Software

- IBM® WebSphere® Application Server
- IBM PowerVM™
- IBM i

Servers

- IBM Power® 720 Express

IBM Business Partner

- Applied Technologies.
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Provisioning of web servers is now considerably easier, and can be completed in just four hours, compared to two man-days on the previous infrastructure.

Both the IBM Power 720 servers and IBM i operating system include integrated security features that guarantee a resilient and virus-resistant environment for the company's business critical web servers. This makes it easier for Admiral Group to meet compliance targets, and specifically PCI DSS certification, which helps its customers feel comfortable making payments online. Since implementation, Admiral Group has experienced no downtime.

With separate web and back-office environments running on the most appropriate processor infrastructure, the new solution has simplified management significantly, enabling Admiral Group to move away from more expensive monitoring tools and boosting IT employee productivity.

By choosing to work with IBM Premier Business Partner Applied Technologies, Admiral Group found a partner that was committed to developing a long-term relationship, recommending solutions that could offer the ideal price-performance ratio to suit the client. Highly responsive and with extensive engineering expertise, Applied Technologies played a key role in this project.

For more information

To learn more about smarter computing from IBM and how we can help you integrate, automate, protect and transform your IT, contact your IBM sales representative or IBM business partner, or visit:

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