HP customer case study: Trinity Mirror plc deploys an HP BladeSystem with HP storage technology to create a high-performance publishing system to safeguard business continuity

Industry: Publishing, Communications and Media Industry

HP BladeSystem keeps the presses rolling at Trinity Mirror plc

Trinity Mirror plc

"With the HP BladeSystem solution in place, our publishing system never struggles with the high volumes of data generated by our editorial and advertising staff. Its high performance ensures system availability and, by getting newspapers out on time, we are safeguarding business continuity. There is no room for things to go wrong in this business." Peter Raettig, IT operations manager, Trinity Mirror plc

Objective:

Trinity Mirror plc wanted a reliable, high-performance server infrastructure with a suitable backup facility for its newspaper publishing system.

Approach:

- Assessed the limitations of the existing server technology.
- Consulted with a well-known independent advisor.
- Decided to implement an HP solution comprising HP BladeSystem with c-Class server blades and HP StorageWorks Enterprise Virtual Array (EVA) 6100.
- Chose to build a new data centre with HP technology to consolidate its centralised services.
- Decided to construct a second data centre to further safeguard business continuity.

IT improvements

- The new infrastructure with its HP BladeSystem boosts computing power and provides a highly-available, high-performance publishing system.
- An HP StorageWorks EVA6100 provides secure data storage and shared storage.
- HP Virtual Connect simplifies and virtualises the Storage Area Network (SAN).
- Operatiing systems now consolidated to Microsoft Windows® and Red Hat Enterprise Linux.

Business benefits:

- A high-availability HP BladeSystem safeguards business continuity, ensuring that Trinity Mirror publishes it's newspapers on time protecting revenue streams.
- The highly reliable HP server blades are easier to manage, freeing up resources of Trinity Mirror's IT infrastructure.
- HP server blades will lower the Total Cost of Ownership (TCO), more specifically power and cooling costs.
- Establishing that HP technology is the correct approach allows Trinity Mirror to plan a new publishing system for its proposed Birmingham data centre.

Based at Canary Wharf in London, Trinity Mirror plc is the UK's largest newspaper publishing company. Created in 1999 through the merger of Trinity plc and the Mirror Group, it publishes over 150 regional newspapers, 200 websites and five national newspapers including The Daily and Sunday Mirror and The People, which have a combined weekly circulation approaching 10.9 million*. Trinity Mirror Publishing Ltd provides the backbone to the highly specialised requirements of the Group's titles via nine strategically located sites throughout the UK.

Limited publishing system performance

Like most modern publishing organisations, Trinity Mirror employs a sophisticated technological infrastructure to help its editorial and advertising staff compile publications before they go to press. The publication system's hardware is comprised of dedicated servers, numerous desktop PCs and storage devices linked by a Local Area Network (LAN).

Although HP has been Trinity Mirror's technology partner for some years, the original publishing system used servers produced by Sun Microsystems. These

Customer solution at a glance

Primary applications

- Helios Ethershare®
- QuarkXPresss®

Primary hardware

- HP ProLiant BL480 c-Class server blades
- HP StorageWorks Enterprise Virtual Array (EVA) 6100

Primary software

- HP Virtual Connect
- Microsoft Windows® operating system
- Red Hat Enterprise Linux operating system

servers employed the UNIX® and Microsoft Windows® operating systems whilst two applications, Helios Ethershare and QuarkXPress, formed the prepress platform. After taking independent advice from Gartner, a leading technology research and advisory company, Trinity Mirror decided to reinforce its partnership with HP and safeguard its business by replacing the ageing Sun Microsystems servers with modern HP server blades and simultaneously introduce HP storage technology. To lower infrastructure costs further, the company also chose to migrate from UNIX® to Red Hat Enterprise Linux® operating system. The prepress platform still comprises of Helios Ethershare and QuarkXPress.

Trinity Mirror employs its publishing system for over 21 hours-per-day and, whilst compiling national titles, frequently replicates data off-site to safeguard business continuity in the event of a systems failure.

"Over the years we have upgraded the publishing system's network infrastructure and workstations to cater for an ever-increasing volume of information," explains Peter Raettig, IT operations manager, Trinity Mirror plc. "However, as the servers attempted to handle the increased traffic volumes, staff saw a significant reduction in performance at their desktops; it often took minutes to save files. The servers were also getting more expensive to maintain.

"The servers simply could not cope and, in order to meet tight publishing deadlines, we frequently had to disable the backup facility for up to two hours so that they could handle the high data volumes. Although this practice gets the newspapers published on time, it is unacceptable from a business continuity point of view. If any problems did arise during these periods, we were potentially jeopardising a considerable amount of revenue. We needed a publishing system with high-performance servers that could readily process massive amounts of data."

After taking independent advice from Gartner, a leading technology research and advisory company, Trinity Mirror decided to reinforce its partnership with HP and introduce HP blade and storage technologies to safeguard its business. To lower infrastructure costs further, it also chose to consolidate its operating systems to Microsoft Windows® and Red Hat Enterprise Linux®.

New server and storage environments

The HP solution is based on an HP BladeSystem contained within two chassis, each holding six HP ProLiant BL480 c-Class server blades with multi-core processors, which run the publishing system's two operating systems. An HP StorageWorks Enterprise Virtual Array (EVA) 6100 based Storage Area Network (SAN) with 26 terabytes of storage provides dedicated storage and virtualised shared access to the servers.

Compared to the earlier servers, a high-performance HP BladeSystem with its consolidated, scalable design is more affordable and offers increased efficiency. HP Virtual Connect simplifies and virtualises the SAN connections to the server blades, reduces cabling and allows administrators to add or replace servers without affecting the network. This highly reliable technology lowers Total Cost of Ownership (TCO) and reduces power and cooling requirements.

Migrating to HP c-Class server blades

After employing its former infrastructure to produce the national newspapers for 17 years, Trinity Mirror recently produced the Daily Mirror for the first time with HP blade technology at the heart of its publishing system. Staff immediately experienced an increase in performance and the EVA-based SAN frequently backed up the data to safeguard the business. Today, Trinity Mirror is producing three of its national newspapers with this high-performance system.

"By refreshing our publishing system with an HP BladeSystem we knew we could enhance its performance and reliability and I am confident that we will lower TCO. Moreover, the user-friendly EVA 6100 offers a highly available, scalable on-line storage solution to protect business continuity," adds Raettig.

HP BladeSystem - the future of publishing

As part of its technology strategy to consolidate applications, Trinity Mirror also decided to build a new data centre based on HP technology at an existing site in Birmingham, which has good Wide Area Network (WAN) connectivity. To safeguard business continuity further and aid disaster recovery, the company also plans to build a second data centre in Reading.

"We want to centralise group services such as sales, advertisement booking and advertisement production within the new data centre whilst simultaneously planning for the introduction of a new publishing system. We will employ specially developed applications and HP blade technology for the new system," comments Raettig.

"Refreshing our existing publishing system with HP server blades was an excellent move. We have had no performance or reliability issues and HP proved that they are the best way forward for our new publishing system. With HP, you are dealing with a reputable organisation that offers quality solutions and delivers

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