

The Chronicle Herald reports savings and faster application performance with IBM BladeCenter and Linux.

Overview

Application

Server and operating system infrastructure supporting business processes of automated newspaper operation

- Business Benefits
 Faster performance for all applications moved to IBM
 @server® BladeCenter®, enhanced employee productivity; savings in licensing fees, server and storage maintenance costs, paper, and manual archiving efforts
- Servers
 IBM@server BladeCenter;
 IBM@server xSeries[®];
 IBM TotalStorage[®] FAStT600
 Storage Server
- Software Red Hat Enterprise Linux 3
- Business Partner
 IMP Solutions



Today a fully automated newspaper operation reaching 333.000 readers, The Chronicle Herald has its roots in the 19th century as a voice for the miners, farmers and fishermen of Nova Scotia.

Founded in 1875, The Chronicle Herald is not only the largest newspaper in Nova Scotia and the other Atlantic Provinces, it is also the biggest independently owned newspaper in Canada. With 400 employees, it produces daily provincial and city editions that collectively reach 333,000 readers. During its 180 years of operation, the newspaper has faithfully-and sometimes tenaciously-monitored the history of Nova Scotia. It has never missed publishing, even through the 1917 Halifax Explosion, when a munitions ship exploded in the harbor, devastating much of the city.

"Our organization is still evolving after 180 years as a successful newspaper business. And with IBM BladeCenter and Linux, we'll continue to meet challenges by being responsive to our employees' needs for effective and resilient technology solutions."

–Paul Williams, Director of Information Technology, The Chronicle Herald



The highly available IBM BladeCenter running Red Hat Enterprise Linux 3 is ideal for a newspaper operation that prides itself on never having missed a day in 180 years. Today, The Chronicle Herald is a thoroughly automated newspaper operation, from its writing and editing processes to layout and printing. Its mission-critical applications support the workflow and publishing systems that keep productivity high and costs low. However, these applications, as well as back-office systems such as financials, circulation, human resources and e-mail, require a highly available server and operating system to keep operations moving 24x7.

As early as 1997, The Chronicle Herald's search for a reliable, robust and cost-effective infrastructure led the company to the IBM @server family of servers running Linux. Pleased with the initial results, The Chronicle Herald has expanded its xSeries and Linux server farm over the years to a total of 12 machines running various versions of Red Hat Linux.

Recently, the company decided to enhance operational efficiencies through server consolidation.

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-Paul Williams

It migrated many of the applications on its xSeries systems and on a Sun Enterprise 3000 server to IBM *@server* BladeCenter, with five dualprocessor blades running Red Hat Enterprise Linux 3. IBM TotalStorage FAStT600 Storage Server keeps application availability high by storing the vast quantities of data required to run the newspaper operation. IMP Solutions, an IBM Business Partner and reseller headquartered in Halifax, provided the hardware, enabling on-time delivery.

In addition to e-mail and Web and file serving, the BladeCenter powers the company's Oracle Financials applications, and soon will host Oracle Application Server 10g and Oracle Collaboration Suite. These applications produce a substantial workload for the server, but according to Paul Williams, director of information technology at The Chronicle Herald. "Our applications perform better on BladeCenter. In particular, our Oracle Financials software and database run faster on the BladeCenter than on the Sun Enterprise 3000. In fact, with the 2.6 GHz processors of the BladeCenter, they scream."

Lowering costs through a more powerful IT solution

In terms of savings, the move to BladeCenter has also been an outstanding success. "The Chronicle Herald will save CA\$14,000 (US\$10,500) over three years in maintenance costs alone compared to the Sun Enterprise 3000 server," says Williams. "In addition, we saved CA\$25,000 (US\$18,800) by selecting Samba and Sendmail for our file system and e-mail software, as opposed to Microsoft[®] Windows NT[®] and Microsoft Exchange."

And these are not the only savings the company has realized. The Chronicle Herald's intranet provides business intelligence (BI) applications to help managers make better business decisions in all facets of the company. With the scalability of the BladeCenter and FAStT600 Storage Server, the company can provide online data for all the reports it needs—reports that used to be published in hard copy and stored on the premises.

"It was a waste of good trees," says Williams. "We could put enough storage on the xSeries system to provide the BI tools on the intranet. But now we have shared storage across all five blades of BladeCenter, giving us enough capacity to end our reliance on paper storage completely and eliminate the associated costs. In addition, we're drastically reducing disk storage maintenance expenses."



The Chronicle Herald is consolidating its business applications on an IBM BladeCenter running Red Hat Enterprise Linux 3 which it knows is a low-maintenance, trouble-free solution.

For the data center, the BladeCenter has proved to be a labor-saving step towards autonomic computing. Requiring less staff effort to enable availability, the hot swapping power supplies and Light Path Diagnostics features of BladeCenter mean fewer interventions and less time spent searching for problem spots.

"Autonomic computing features are very important to us. We're also looking forward to IBM's release of hot swappable memory and processors to further enhance the value of BladeCenter," says Williams.

Flexibility and reliable uptime through Linux

In its previous mixed server environment of Intel and UltraSPARC processor-based servers, the data center team lacked the flexibility to integrate applications on different server platforms easily. "Getting our front ends to talk to our back ends was definitely a problem that could have slowed down productivity when we moved into the client/server environment," according to Williams.

"Fortunately, that didn't happen because one of our employees convinced me to add Linux into the mix. It proved itself so well that we've ended up using it for many of our applications. Because we publish every day, the reliability of Linux is extremely attractive. And when IBM made a specific commitment to support Red Hat, hardware support for Linux servers became available, too. At that point we decided that IBM servers would be our Linux platform because the support is excellent. IBM's corporate commitment to Linux is outstanding, and our experience has been virtually trouble free."

Now The Chronicle Herald's IT staff enjoys smooth, "one-click" installations of new Linux software. With the device drivers already installed in Red Hat Enterprise Linux 3, finding the right drivers and compiling files are automatic. In addition to Samba and Sendmail, the company uses a front-office point-of-sale application written in Perl and running on Linux. "Our Web server is Apache, which is rock solid and so good that IBM uses it with its middleware," says Williams. "And now that we have Dynamic Host Configuration Protocol (DHCP) running on Linux and the IBM @server xSeries 345 system, it also is much faster, helping us to reduce dramatically the time we spend assigning TCP/IP addresses to our employees' desktop computers."

In the near future, The Chronicle Herald will use the Linux grid-enabled Oracle Application Server 10g, which will provide automated resource sharing with IBM BladeCenter. "The grid-enabled BladeCenter will allow us to provide load-balancing across the BladeCenter, which will better enable application availability at peak periods," says Williams. "Our organization is still evolving after 180 years as a successful newspaper business. And with IBM BladeCenter and Linux, we'll continue to meet challenges by being responsive to our employees' needs for effective and resilient technology solutions."

For more information

Please contact your IBM sales representative or IBM Business Partner

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For more information about IMP Solution, visit: *www.impsolutions.com*



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