

IBM affirms commitment to open-source technology with online Linux portal.

Overview

■ Challenge

IBM's competitive advantage and developer confidence were at stake because its online portal to open-source information and services ran on a proprietary platform, which relied on manual, labor-intensive processes to update content

■ Why Become an On Demand Business?

IBM needed to deploy a resilient, open standards-based portal to respond to developer community concerns and deliver news and information to the open-source community

■ Solution

IBM built an open, robust online portal from the ground up, enhancing it with an integrated enterprise content management (ECM) solution

■ Key Benefits

By revamping its online portal for the open-source community, IBM has strengthened its competitive advantage, enhanced credibility among its targeted audience and reduced site maintenance by up to 50% for selected tasks, while lowering costs



IBM taps into its in-house expertise and leverages the newest technology to deliver the latest in Linux news, events and information to the worldwide open-source community.

When it comes to open-source technology, IBM's position is clear—it's the way of the future. Founded in 1914, Armonk, New York-based IBM (www.ibm.com) is the world's largest provider of computer hardware and services, as well as one of the biggest software developers. With 315,000 employees and \$81 billion in sales, the company has vigorously supported the open-standards community, investing more than \$1 billion to further the development of open-source systems.

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—Ken Godfrey, Manager, Worldwide Linux Web Strategy, IBM

Anticipating and responding to customer demands in an open environment

On Demand Business Benefits

- Up to 20,000 additional page views per month—an increase of more than 38%
- Up to 50% reduction in content updating workload and associated labor costs
- Up to 42% reduction in page load time, enhancing customer satisfaction
- Strengthened competitive edge and credibility among open-source developers
- Enhanced employee productivity and ability to update content on demand
- Accepted by online Linux press community

However, even as IBM evangelized open standards, its own online portal to news, information and resources for the open-source systems community was running on a proprietary operating system—a fact that didn't escape the attention of its audience. "IBM became a major open-source proponent, yet our online portal serving this market wasn't making the most of the technology. We knew that running a proprietary platform was a problem," notes Ken Godfrey, manager, Worldwide Linux Web Strategy, IBM. "After all, if we couldn't demonstrate our support of the open-source platform to developers and earn their confidence, not only would we be unable to sell our open-source technology-based solutions to executives who make the IT purchasing decisions, we risked alienating this community of users and losing business to competitors."

At the same time, IBM's online portal relied on inefficient, manual processes that were driving down employee productivity by making it difficult to update and post new content.

Building a gateway to success

IBM had to act quickly—and practice what it preached. It had to revamp its online portal. Not only did the company risk losing hard-won credibility and, therefore, its business with the open-source community, it was draining valuable productivity from the efforts required to constantly update content. To retain its competitive position, IBM needed to deploy a resilient, open standards-based portal that it could easily update with relevant news and information for the open-source community.

To address these issues, IBM ported its online portal to an open-source Linux platform and enhanced it with an integrated enterprise content management (ECM) system. The ECM system streamlines the content publishing process and enables the company to post more original content than it could in the past—faster and easier than ever before. IBM has replaced its manual processes for content updates to the online portal with automated workflow routines, rapidly presenting fresh news, information and resources—all on an open standards-based platform.

Content owners post new information by simply clicking an edit icon from the interface and choosing appropriate categories for the target audience, such as small business or pervasive computing. The result is fast, automatic publishing to the correct pages of the open source-based online portal—and consistently up-to-date information for visitors.

"By modernizing our content publishing process using IBM software and Linux, we've eliminated the chore that it once was to update our portal while enhancing our image to the open-source community," notes Godfrey.

Automated content publishing enhances productivity

The new online portal—IBM Linux portal at ibm.com/linux—runs on two redundant, load balanced IBM @server® xSeries® systems configured as a cluster, running Apache over Red Hat Linux. The ECM solution, which integrates with the portal, runs on Linux and is based on IBM WebSphere® Application Server, IBM DB2® Universal Database™ and Java™ technology.

Custom designed by Fergus O'Daly Associates, an interactive marketing agency based in New York, the ECM solution handles all of the publishing details behind the scenes. WebSphere Application Server retrieves content using Java Database Connectivity calls to DB2 Universal Database for Linux on an IBM @server zSeries® running IBM z/VM®. The content is published to a staging server in static HTML by a Java servlet, then promoted to live HTML to whichever areas of the portal require the content.

WebSphere Application Server runs on an xSeries at the IBM Solutions Delivery Center in Southbury, Connecticut. DB2 Universal Database runs in a Linux logical partition on a zSeries in Poughkeepsie, New York.

Says Godfrey, "A Web infrastructure built on WebSphere Application Server, DB2 Universal Database and resilient @server systems means high scalability and availability. As our target audience conveys new demands, we'll be able to respond immediately with the online resources to meet them."

The open standards-based Linux and Java technology of the solution was easier to work with than alternative proprietary technologies, so IBM and Fergus O'Daly Associates were able to design and implement the ECM solution in just three months. Says Godfrey, "IBM software is optimized for Linux and together, they provide the high performance and low cost that our portal requires to be responsive to the needs of our customers."

A boon in Web traffic

IBM began to benefit from its portal's migration to Linux almost immediately. Web traffic has soared and the number of page views has increased by up to 20,000 pages per month—an increase of more than 38 percent. Page load time has been reduced from 4 seconds to 2.3 seconds, a 42 percent reduction.

"Since the site has been running on Linux, there has never been a single minute of downtime due to the server or operating system," says Godfrey. "And, in what may be the greatest compliment of all, the online Linux press community has been picking up original IBM content and publishing it on their sites."

Key Components

Software

- IBM WebSphere Application Server for Linux, Version 4.0
- IBM DB2 Universal Database Enterprise Edition for Linux, Version 7.2
- Red Hat Linux
- IBM z/VM

Servers

- IBM @server xSeries
- IBM @server zSeries

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The site includes innovative features for visitors, like self-selecting navigation, which enables them to move through the site quickly without having to register or fill in any information. By categorizing themselves, they can be routed to specific sections of the e-business resource.

On the productivity side, IBM has reduced the content-updating workload and associated labor costs by up to 50 percent. Using an open-systems environment also enhances IBM's credibility with the large Linux developer community. For instance, if IBM wants to customize a particular application, it can tap into a huge base of developers who are willing to do it in a short time frame and for a reasonable cost.

By migrating its portal to Linux, IBM has improved its online Linux resource. "It's a very tight budget environment right now, and everybody's trying to save money—Linux gives you the ability to do that," says Godfrey. "Not only that, by moving our portal to Linux and gaining greater appreciation from the Linux community, we've strengthened our sales advantage and, therefore, our competitive position."

For more information

Please contact your IBM sales representative.

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