

Regione Lazio delivers e-government in 60 days with IBM @server zSeries running Linux.

Overview

Challenge

Bring e-government to Italy's Lazio region to connect citizens, businesses and municipalities to the regional government; consolidate IT infrastructure to reduce total cost of ownership (TCO)

Solution

Regione Lazio Portal, an e-government Web site running under Linux[®], that integrates content and backend applications and enables inter-organizational workflow

■ Why IBM?

History of success with IBM Lotus[®] Domino[™] and IBM servers; IBM's support for Linux; breadth of IBM solutions for expanding the portal

Key Business Benefits Portal launched in just 2 months; reduced TCO through use of Linux and server consolidation



The central Italian region of Lazio consists of the cities of Rome, Frosinone, Latina, Rieti and Viterbo.

In Napoleon's day, all roads led to Rome, and for those captivated by the city's beauty and history, they still do. But for the 5 million citizens who live in the Italian capital and the 380 surrounding towns that make up the Lazio Region ("Regione Lazio"), the roads to government run increasingly through cyberspace.

For five years, the Regione Lazio Web site—driven by IBM Lotus Domino on two Microsoft® Windows® servers provided a wealth of information to citizens, businesses and municipalities. "We had only two months to ready the Web site for online transactions and demonstrate the portal's capabilities. So we turned to IBM, the company whose servers and software had helped make Regione Lazio's legacy applications and previous Web site so successful."

– Giulo Gargano, Regional Minister for IT, Regione Lazio



Key Components

Software

- IBM WebSphere[®] Application Server, Version 4.0.4
- IBM DB2[®] Universal Database[™], Version 7.2
- IBM Lotus Domino
- SuSE Linux V7, 31 bit

Servers

Existing IBM mainframe and a new IBM
@server zSeries[™] 800

Services

IBM Global Services

- Business Integration Services
- Integrated Technology Services

"Linux made sense for us because it was open source. And the e-mail, firewall, FTP and proxy server functions embedded in the Linux operating system gave us a costeffective, integrated solution for a portal that is very easy to manage." Recently, the regional government decided to transform its Web site into an e-government portal that would not only deliver information, but also provide Web self-service applications for citizens and businesses and connect the regional government to all its municipalities.

Regione Lazio's move towards e-government is part of a national campaign in Italy to increase government efficiency and improve responsiveness to customers. The plan is to Web-enable and integrate all levels of government (municipal, regional and national) in order to automate and streamline business processes. The central government realized that the success of such an ambitious initiative would depend on the cost and interoperability of the technologies the various government organizations used. So, in its guidelines to the organizations, the government recommended adherence to technology standards and the selection of open-source software whenever possible.

Approximately one year ago, Regione Lazio established a corporation, Laziomatica SpA, as its IT arm to spearhead the region's e-government effort. "To secure funding for the project from the Italian government, and to satisfy other constraints, we had only two months to ready the Web site for online transactions and demonstrate the portal's capabilities," explains Giulo Gargano, regional minister for IT. "So we turned to IBM, the company whose servers and software had helped make Regione Lazio's legacy applications and previous Web site so successful."

Leveraging excess capacity on Regione Lazio's existing IBM mainframe, Laziomatica used IBM WebSphere Application Server and IBM DB2 Universal Database as the foundation for the Regione Lazio Portal, which currently runs in 14 Linux partitions. "Linux made sense for us because it was open source," says Gargano. "And the e-mail, firewall, FTP and proxy server functions embedded in the Linux operating system gave us a cost-effective, integrated solution for the portal that is very easy to manage."

e-government ready to go—and ready to grow on Linux

Working with two IBM Global Services teams—Integrated Technology Services (ITS) and Business Integration Services (BIS)—and Laziomatica staff, Laziomatica had the new Regione Lazio Portal (*www.regione.lazio.it*) up and running within the required two-month timeframe. With dynamic Java[™] components running

-Giulo Gargano

under WebSphere Application Server, the portal enables residents and businesses to apply for a variety of permits and respond to bids for various government contracts. The bid process allows local organizations to publish bids in the system. Any private company can read the relevant documents and soon will be able to print them. Within a year, Laziomatica will add 10 new online self-service applications, including a central scheduling system for healthcare appointments.

The Domino server continues to manage and deliver all application content for the Web site. However, within the next few months, Laziomatica will move the Domino content from the Windows servers to a Linux partition on the mainframe.

A strategic move to zSeries

Laziomatica's decision to use the existing IBM mainframe for the Regione Lazio Portal was primarily driven by the need for rapid time to market and the existence of available hardware resources. But far from deeming it a short-term solution, Laziomatica views the IBM mainframe as the ideal central platform for the region's business applications. "The regional government has accumulated multiple platforms, including Windows and Solaris," says Vincenzo Bianchini, Laziomatica general manager. "But we don't want to manage so many dedicated servers anymore. We want to run all our core applications on one scalable server that's easy to manage and lowers our total cost of ownership. That's why we're looking to the zSeries." Laziomatica has recently upgraded the existing IBM mainframe to a new IBM @server zSeries 800 system to maximize application performance, availability and security, and take advantage of its attractive price/ performance benefit.

In addition to the Domino content, Laziomatica has already earmarked applications running on some 30 other Windows servers—such as Samba file and print serving—for consolidation onto the mainframe under Linux. Taking advantage of IBM's Capacity Upgrade on Demand feature offered by the zSeries server, Laziomatica will be able to make a relatively small initial investment to cover its current needs, while having much more capacity on the server ready to be "switched on" at a moment's notice. "We don't want to manage so many dedicated servers anymore. We want to run all our core applications on one scalable server that's easy to manage and lowers our total cost of ownership. That's why we're looking to the zSeries."

– Vincenzo Bianchini, General Manager, Laziomatica SpA



Trevi Fountain is one of the famous sites that captivates visitors of Rome.

Teaming with IBM Global Services to meet a deadline

With a staff of 20 seasoned IT professionals, Laziomatica also relied on the e-business expertise of IBM Global Services to ensure delivery of a working portal in just 60 days. "When you've got a deadline to meet, it's best to have a reliable vendor," Bianchini says. "IBM has worked really well with us—we've made a great team."

Business Integration Services helped Laziomatica design and architect the new portal, as well as develop a plan for migrating Regione Lazio's existing technology to meet the central government's guidelines. Integrated Technology Services provided capacity planning and hardware design services to help Laziomatica gauge what upgrades the existing mainframe would need in order to support both the portal and the region's legacy applications. IBM then implemented the changes, reconfiguring the server for Linux. IBM also helped develop the portal applications using WebSphere software and showed Laziomatica's developers how to make the most of the Java technologycompliant Web application server.

Web services may lead to more seamless government

At this time, WebSphere Application Server manages the transactional portions of Regione Lazio Portal, while Domino handles content serving and workflow. In the future, however, Laziomatica is considering using WebSphere Portal as a means of integrating the two technologies, providing a single point of access to transactional applications, documents and inter-organizational workflows.

Regione Lazio Portal already provides some level of workflow integration between the regional government and its municipalities, but extensive interorganizational workflows will require reconciliation of disparate data formats, application logic and platforms. In its guidelines for e-government, the Italian government has specified the use of Web services standards for interaction between government organizations, and Laziomatica is looking to WebSphere software to provide the necessary Web services support. "We have just begun a project using XML and UDDI [Universal Description, Discovery and Integration]," Bianchini says. "Regione Lazio was the first regional government in Italy to integrate workflows across organizations using Domino software. With IBM's latest e-business technologies, we may just be the first in Web services, too. From servers to software and services, IBM has certainly been there to support our e-business evolution."

For more information

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