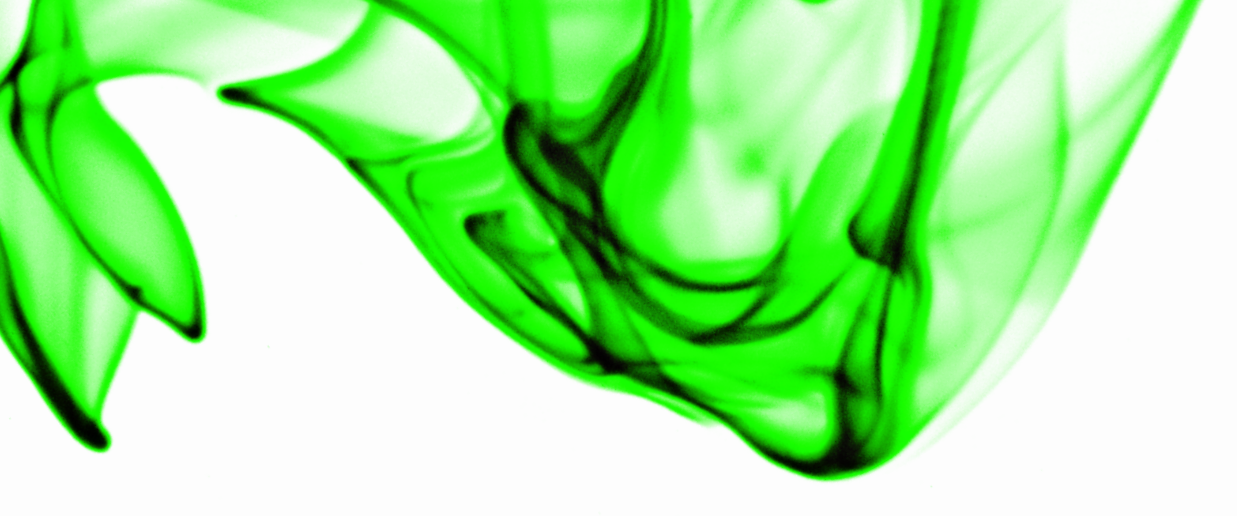

Customer Case Study

First American Corporation

Solution:
Server Virtualization

Product:
BEA WebLogic Server®
Virtual Edition

Industry:
Information Services

Business challenge

To reign in server sprawl and develop a unified infrastructure for the entire company that enables First American to improve service levels, simplify application and system manageability, and keep operating costs in check.

Solution

A virtualized server environment that allows consolidation of multiple applications onto fewer physical servers and eliminates the operating system as a deployment hurdle, giving data centers unprecedented flexibility to meet evolving business demands.

Results

Instances of applications can be brought online in less than an hour, compared to days or weeks in the past. First American expects to cut server costs by 50 percent. Additional savings to be realized due to the need for fewer racks and cards, and less fibre, in the data centers.

Customer Brief

The First American Corporation (NYSE: FAF), a Fortune 500® company that traces its history to 1889, is America's largest provider of business information. First American's information products support the major economic events of people's lives, such as getting a job, renting an apartment, buying a car or house, securing a mortgage and opening or buying a business. First American operates within five primary business segments, including: Title Insurance and Services, Specialty Insurance, Mortgage Information, Property Information and First Advantage. With revenues of $8.5 billion in 2006, First American has approximately 2,100 offices throughout the United States and abroad. More information about the company can be found at *firstam.com*.

Business Challenge

First American's corporate IT group acts as a service provider to many lines of business throughout the company. The IT group operates two large data centers—one in Texas and one in California—that are each capable of supporting the entire organization. The data centers include over 4,000 physical servers running hundreds of applications.

Over the years, First American has grown in large part through acquisitions, and this approach continues to be a key part of the company's growth strategy. Acquisitions can lead to a heterogeneous IT environment with a lot of server sprawl. Today, however, the corporate IT group is moving toward a common infrastructure for the entire company with an eye towards improving service levels, simplifying manageability and integration, and keeping costs in check.

"BEA WebLogic Server Virtual Edition is extremely easy and intuitive to use. There was almost no learning curve for me. It is very similar to the 'traditional' WebLogic Server. BEA WebLogic Server Virtual Edition's ease of use, combined with the fact that there are very few manual steps, makes it nearly error-proof."

Mark Vaughn, enterprise architect at First American Corporation

In order for this strategy to succeed, the unified infrastructure must deliver maximum efficiency, scalability, reliability and flexibility. The company's lines of business touch tens of millions of transactions every month. That's multiple transactions every second of every day. First American's centralized application infrastructure must be able to handle that volume without any hiccups or risks to ensure that the business will continue to operate smoothly and predictably.

"Our business is as much about technology as it is about the information products we provide," said Mark Vaughn, enterprise architect at First American Corp. "Delivering vast amounts of information to a wide audience isn't simple. We must provide data security and timely delivery. We have to integrate a wide array of applications and systems and we have to come through when people need us. For all parties in a given transaction, their transaction is the most important one. They must be able to count on us."

Solution

Senior IT staff at First American recently heard about a new application platform that might be able to help the company build out a unified IT infrastructure. The new platform is known as BEA WebLogic Server Virtual Edition.

In most corporate data centers today, 80 percent or more of hardware server capacity is unused. Individual applications are often housed on their own servers to ensure peak performance. Not only does this drive up hardware cost dramatically, it adds complexity to the IT environment, it slows the pace of change and innovation, and it contributes to data isolation.

By contrast, server virtualization allows one physical server to be divided into many independent virtual machines, unlocking the potential of the unused server capacity. This allows consolidation of multiple applications onto fewer physical servers, reducing complexity and giving data centers unprecedented flexibility to meet the ever-changing demands of the business.

"There are many costs associated with data center operations, and virtualization helps us address almost all of them. We need less hardware. We're consuming less power. We can stretch our physical real estate further. And we're able to utilize fewer software licenses in many cases. As we continue to expand virtualization, we expect to save millions each year."

Mark Vaughn, enterprise architect at First American Corporation

First American deployed BEA WebLogic Server Virtual Edition to take these benefits of virtualization even further. BEA WebLogic Server Virtual Edition helps First American go beyond basic virtualized servers. BEA WebLogic Server Virtual Edition is a middleware appliance that effectively eliminates the operating system as a potential hurdle to application deployment. This is due to LiquidVM, an important component of BEA WebLogic Server Virtual Edition. LiquidVM takes the place of the traditional operating system environment.

Any Java application can be deployed on any virtualized server running BEA WebLogic Server Virtual Edition, and the deployment can be done in minutes or hours rather than days or weeks. Removing the operating system from the virtualized environment eliminates the bugs, configuration complexities, and other risks to application availability that are inherent in every operating system.

"BEA's extension to server virtualization provides us with greater portability, which is extremely valuable for disaster recovery and business continuity," said Vaughn. "BEA's approach also allows us to scale up or down as business conditions change, and helps us meet strict service-level agreements for high availability that we've established with internal and external customers."

Among the applications that First American has deployed in a virtualized environment is a solution that tracks taxable entities across the United States. This is a critical application for First American, which specializes in providing financial information to businesses, lenders and real estate professionals. First American has also deployed a website monitoring application on BEA WebLogic Server Virtual Edition to help the company manage its websites that provide 24/7 customer self-service.

Portions of the BEA WebLogic Server Virtual Edition environment utilize the HP BL460c blade server, which is powered by two quad-core Intel Xeon processors. The server runs 64-bit Red Hat Enterprise 4 Linux. Hardware virtualization is done with VMware Infrastructure 3.0.

"We've been impressed with the entire BEA solution," said Vaughn. "It really enhances the manageability of our application environment. For instance, BEA WebLogic Server Virtual Edition supports VMware's VMotion technology. We can move an entire running virtual machine instantaneously from one server to another. That gives us tremendous flexibility and eliminates possible concerns about problems with one virtual machine affecting another virtual machine."

Results

The BEA WebLogic Server Virtual Edition approach to virtualization is giving First American new levels of business agility by providing a fully preinstalled and preconfigured software environment. Instances of applications can be brought online in less than an hour, compared to days or even weeks there were required previously, addressing the rapidly changing needs of First American's applications in near-real time.

For example, if transaction volume for a particular application tends to spike monthly or seasonally, First American can add and then remove application instances as necessary. This can help ensure outstanding performance and customer satisfaction without requiring First American to over-commit resources permanently.

Vaughn added, "BEA WebLogic Server Virtual Edition is extremely easy and intuitive to use. There was almost no learning curve for me. It is very similar to the 'traditional' WebLogic Server. BEA WebLogic Server Virtual Edition's ease of use, combined with the fact that there are very few manual steps, makes it nearly error-proof."

In addition to increased scalability, flexibility and manageability, BEA WebLogic Server Virtual Edition can help deliver enormous cost savings. In First American's case, the company expects to realize dramatic savings of up to 50 percent on server hardware alone. There will be additional cost savings due to the need for fewer racks, fewer cards, and less fibre in its data centers.

This reduction in the need for server gear will allow the company to stretch its data center's physical capacity. Compared to applications running on standard Java Virtual Machines (JVM) in standard operating system environments, BEA WebLogic Server Virtual Edition allows applications to accomplish up to twice as much work on the same amount of hardware.

Much of that efficiency gain can be attributed to BEA WebLogic Server Virtual Edition's ability to streamline OS functionality. This frees up resources such as memory and disk space, enabling First American to increase resource utilization.

Another area where First American expects to save big is power, which has become an increasingly burdensome cost for large companies. The U.S. EPA reports that energy consumption by data centers doubled from 2002 to 2007, and will double again by 2011. The same report notes that for every watt consumed by computing resources another watt is consumed in cooling the same equipment.

"There are many costs associated with data center operations, and virtualization helps us address almost all of them," said Vaughn. "We need less hardware. We're consuming less power. We can stretch our physical real estate further. And we're able to utilize fewer software licenses in many cases. As we continue to expand virtualization, we expect to save millions each year."

About BEA

BEA Systems, Inc. (NASDAQ: BEAS) is a world leader in enterprise infrastructure software. Information about how BEA is enabling customers to transform their business by building a Liquid Enterprise™ can be found at *bea.com*.

Join the BEA community

To join one or more of the BEA communities, simply register online at *bea.com/register*.

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