FCE leverages IBM and OpenDemand technologies for application-performance testing solution.

Overview

■ **Challenge**

Existing business processes for ensuring the performance of its transaction processing system was preventing Foreign Currency Exchange Corp. (FCE) from maximizing growth opportunities

■ **Why On Demand?**

The company needed a resilient, scalable and open standards-based infrastructure — capable of integrating data from multiple sources — to test its CurrencyTeller.com applications before deploying it live to new customers

■ **Solution**

FCE implemented OpenLoad, a Web-based performance-testing solution that simulates complex real-world user scenarios in a resilient, realtime operating environment, ensuring 100% uptime

■ **Key Benefits**

Guaranteed customer satisfaction through maximized system availability; lower administration costs; system scalability paves way for future growth

By leveraging IBM and OpenDemand technologies, Foreign Currency Exchange Corp. can ensure maximum system performance of CurrencyTeller.com, the company's online currency conversion system.

As any experienced traveler knows, it's always a good idea to have some of the local currency in your pocket when visiting a foreign country. But, for U.S. travelers, getting a hold of, say, a few Euro or British Pounds before traveling abroad often involves a trip to a currency exchange business on the far side of town.

Hoping to minimize such inconvenience is the Foreign Currency Exchange Corp. (FCE). The Orlando, Florida-based company, which has

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—Brian LeGros, Web Applications Manager, Foreign Currency Exchange Corp.

On Demand Benefits

- New solution enables FCE to respond to its customers' need for a high-performance and reliable Web-based currency exchange site with zero downtime
- Open standards-based architecture provides ability to test any Web application
- Resilient xSeries® system allows FCE to scale application to accommodate new growth opportunities

"IBM has truly leveled the playing field for small and medium-sized businesses, enabling them to have the tools to compete effectively."

–Donald Doane, Vice President, Sales and Business Development, OpenDemand Systems

102 employees and is part of the $100 billion asset Bank of Ireland Group, provides foreign currency exchange services to North American banks and hotels through an online application called CurrencyTeller.com. By providing its application as an online service, FCE (*www.fceco.com*) eliminates many of the time-consuming processes and administrative costs that have typically encumbered banks and hotels providing currency exchange. Consequently, banks and hotels that work with FCE can more readily extend this quick and convenient service to their customers.

"If you were to walk into a bank to have Euro converted to dollars, the bank would likely be one of our clients and utilizing our online software," explains Brian LeGros, Web applications manager, FCE. "The easy-to-use application simply guides tellers through the whole currency exchange process."

FCE already provides online currency exchange services to more than 10,000 outlets, a number that will multiply over the next few years as a result of FCE being recently purchased and now globally supported by the Bank of Ireland Group.

Ready for the real world

Welcoming the projected and challenging growth, FCE wanted to both guarantee and enhance the performance of its online platform. Previously, the company's IT department had ensured the reliability of the Web platform through a combination of proprietary software applications and in-depth analyses of Web logs and usage patterns. But these business processes are becoming gradually outdated in the wake of the Bank of Ireland acquisition.

"With the explosive growth we are experiencing, we needed to ensure that our systems delivered peak performance in increasingly high-volume traffic scenarios," explains LeGros. "We had been relying on in-house analyses to figure out traffic counts over different timeframes for our application. But it was difficult to account for unique occurrences that could affect performance. And with the onset of high-volume traffic, there is always a cost associated with the performance of the application serving that traffic."

FCE needed to guarantee peak application performance of CurrencyTeller.com. Assigning additional human resources for performance testing was not an option, because the IT staff needed its developers to focus on application feature enhancements. What the company wanted was an automated solution, a resilient and scalable performance testing system capable of integrating data from multiple resources—and backed by a strong information management foundation.

Handling high user volumes with ease

After considering several testing solutions, FCE selected one from IBM Business Partner OpenDemand Systems. Based on open standards and powered by a comprehensive database, the robust solution enables FCE to simulate complex real-world user scenarios in a resilient, realtime operating environment. Now the company can detect potential system bottlenecks before they affect application performance, enabling FCE to guarantee that CurrencyTeller.com will be available and providing maximum system performance whenever customers log on.

"From what we have seen, we believe that handling large-volume traffic will present no concerns," says LeGros. "The IBM-OpenDemand solution is going to help us achieve our goal of peak performance 24x7, regardless of the number of users."

New solution based on IBM and OpenDemand technologies

The OpenDemand solution, called OpenLoad, is based on IBM DB2® Universal Database™ Express Edition, Version 8 (DB2 UDB Express), and IBM WebSphere® Application Server - Express running on IBM @server® xSeries. DB2 UDB Express serves as the back-end information management system, while WebSphere Application Server - Express provides the runtime environment for the solution's Java™ technology-based components.

OpenLoad—developed specifically for small and medium-sized businesses—provides reporting mechanisms to identify performance bottlenecks, thereby allowing FCE to optimize particular areas of the application so it may run more efficiently.

"We selected DB2 UDB Express and WebSphere Application Server - Express as the foundation for our OpenLoad tool because they help us deliver high-end database functionalities and features to small and medium-sized businesses at a cost structure that matches their needs," says Donald Doane, vice president, sales and business development, OpenDemand. "Our clients are very surprised to hear that they don't need to be experts at DB2 or WebSphere or do anything to maintain the infrastructure. IBM has truly leveled the playing field for small and medium-sized business, enabling them to have the tools to compete effectively."

"While performance testing and tuning are absolutely critical to the successful deployment of any Web application, they are also largely perceived to be costly, time consuming and difficult," adds LeGros. "But our new solution gives us the ability, in a simple and scalable way, to concentrate on our specialized test cases, rather than the setup and details of the testing solution. That helps us reduce costs and get our product to market more quickly."

Key Components

Software

- IBM DB2 Universal Database Express Edition, Version 8
- IBM WebSphere Application Server - Express

Hardware

- IBM @server xSeries

IBM Business Partner

- OpenDemand Systems

FCE currently only uses its IBM-OpenLoad system to test CurrencyTeller.com, but plans to use it to test any new Web-based applications which may involve high-volume traffic. The fact that the system uses IBM's open standards architecture means FCE has the ability to test any Web application regardless of the technology on which it is based. And by running on a resilient and reliable xSeries system, FCE can scale its application to support the tremendous growth expected over the coming years.

Increased customer responsiveness
FCE expects to complete its rollout of OpenLoad in the next few months. However, the solution is already lowering administrative costs and improving the company's IT environment. Says LeGros, "All we do now is run the test tool and fix the bugs in the code. Previously, our system administrator had to wait until 2 a.m. to monitor application performance and usage. We have seen a significant increase in employee productivity and operational efficiency at FCE as a result of our IBM-OpenDemand solution."

FCE believes that the OpenLoad deployment will also result in an improvement in its responsiveness to customers because the test tool enables it to successfully customize its application for its customers. "Our Web application is written in such a way that we can quickly change features in accordance with customer requirements — everything from how transactions are processed to the screen colors. With a reliable test tool and plan, we can test our application over and over again so that it delivers peak performance," says LeGros. "That will help us to attract and retain customers as we grow our business."

Concludes LeGros: "No company can afford to waste time and money deploying Web applications that won't perform to meet customer expectations. Now, thanks to IBM and OpenDemand, that's no longer one of our worries. As a result, we can confidently cater to a larger customer base and operate more efficiently and cost-effectively than ever."

For more information
Please contact your IBM marketing representative, IBM Business Partner or IBM Direct at: 1 800 IBM-CALL.

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For more information about OpenDemand Systems, visit:
www.opendemand.com