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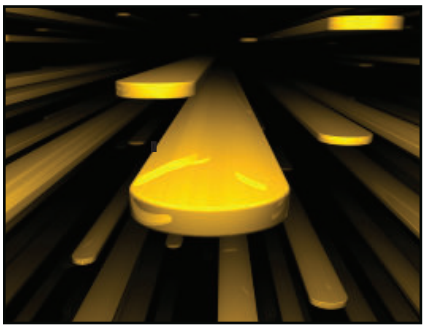
## Application Quality: HP LoadRunner Implementation



# City Of Boston

David Nero, Director of Enterprise Applications for the city of Boston, Mass., has seen his department's responsibilities mushroom in recent years. The reason: the city has been finding more ways to use IT to manage its operations and enhance the services it offers to citizens. For Boston's 20,000 city employees and the residents who increasingly depend on the city's IT to do business with the city, that's all good. But an expanding IT infrastructure also means that Nero's team has to be smarter about how it manages its IT systems—which is why the city has turned to Melillo Consulting and HP.

## Challenge

The city's IT growth comprises both inward and outward looking applications. Internally, it has increasingly adopted additional PeopleSoft modules as ERP tools. "We project that our PeopleSoft user population, which is around 2,000 today, could grow tenfold within the next few years," Nero says. In addition, Boston residents increasingly rely on the city's website. They use it to access municipal regulations and procedures, request permits, pay taxes and parking fines, and access public service information ranging from crime prevention tips to information on upcoming cultural events. As the user base of the city's infrastructure grows, Nero and his team are determined to ensure those users have the best possible experience with city applications.

## Solution

The city's first step toward more-proactive application management was to validate application performance prior to deployment. When it first implemented PeopleSoft, the city contracted with Melillo Consulting to perform this task. Melillo used HP LoadRunner software to perform "stress tests" on applications before they went live. Later, Nero decided to license LoadRunner so the city could test applications in-house. "As demand for applications went up, we realized we should support them in a more robust fashion," Nero says. "Having the ability to load test in-house means we're prepared to support upgrades or enhancements whenever the need arises."

Implementing LoadRunner wasn't something Nero wanted to try alone, so he turned to Melillo for help. Melillo began by running a pilot to simulate 250 PeopleSoft users. The load tests revealed some configuration issues with the

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David Nero,
Director of Enterprise Applications
City of Boston

# Application Management: HP LoadRunner Implementation (cont'd.)

**Objective**

As its IT infrastructure becomes more complex, the city of Boston seeks ways to optimize performance and availability to ensure high standards of end user experience.

**Solution**

Melillo has helped the city implement key HP Software management tools.

**Results**

- Some WebLogic scripts run 10 times faster than expected
- IT has better visibility into infrastructure performance, availability
- Improved user perceptions of system availability
- Virtualized deployment of Business Availability Center reduced capital investment costs
- Improved availability reporting helps set city IT priorities
- Foundation in place for driving improved performance, accountability

city's BEA WebLogic settings. Once those were fixed, the business processes ran 10 times faster than the city had expected. "It suggests we're correct in assuming that HP LoadRunner software will pay for itself in terms of improved application performance," Nero says.

Satisfied with the results of the pilot, the city worked with Melillo to implement the software and train the city's IT staff. "Melillo helped us come up to speed on LoadRunner more quickly," Nero says.

## Results

Today, the city uses HP LoadRunner software to test application performance and to analyze what impacts that performance. While it is still too soon to attribute overall IT performance improvements to the software tool, Nero believes it has changed user perceptions. "We've demonstrated our commitment to improved performance and availability," he says. "Having LoadRunner has increased awareness about system availability and the value we place on it."

## Next Steps

Now that LoadRunner is helping the city's development teams improve application performance, Nero's next step will be to look at tools for monitoring and managing ongoing performance and availability for production applications. One of the most important steps the city is taking, is to implement HP Business Availability Center software. The city is implementing the suite incrementally. "As a public sector organization, we need to budget small changes at a time," Nero says. "We are growing our investment in the software, and as we do so laying a foundation for a more comprehensive approach to IT monitoring."

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As a result, the city is now using a number of foundation pieces of the HP Business Availability Center software suite. One is HP System Availability Management software. "System Availability Management lets us look at different layers of technology within key applications, giving us insight into our infrastructure that

# Application Management: HP LoadRunner Implementation (cont'd.)

**Application**

*PeopleSoft ERP infrastructure*

*BEA WebLogic web portal*

**Software**

*HP LoadRunner*

*HP Performance Center*

*HP Business Availability Center*

*HP Business Service Level Management*

*HP System Availability Management*

*HP Business Process Monitor*

*PeopleSoft*

we didn't have before." Another is the suite's Business Process Monitor module. The city uses it to run synthetic transactions on a handful of remote desktops to simulate the end user experience. The city also uses HP Business Service Level Management software to proactively manage its service levels.

Eventually, the city of Boston will build on this foundation to monitor both its infrastructure and all of its end user transactions. The city plans, as well, to integrate Business Availability Center with HP ServiceCenter Service Level Management software; this will enable Nero's team to quantify service levels across applications.

Once Business Availability Center is fully implemented, Nero continues, the city will be able to meet several key goals. One is better analysis, "We'll have the ability to measure availability and pinpoint any outages, with 24x7 visibility into our IT infrastructure," Nero says. "It's the kind of information that is power to an IT support organization It will let us prioritize the city's efforts and focus our resources on initiatives that will yield the greatest improvements for our end users." In addition, Nero expects HP software will improve his team's reporting capabilities. "Today, we're required to report on system availability on a monthly basis. With HP software, we can replace our manual reporting with automated processes. It will save us a little time, but more important, we'll have increased confidence in the validity of our data."

These tools allow the city of Boston IT to optimize end-user experience by supporting performance and availability across its pre-production and production environments. "Combined, LoadRunner and Business Availability Center give us the broad foundation we need to ensure continual improvement within our IT service delivery," Nero says. "And that's the ultimate payoff for any IT management tool."

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