# National Mortgage News

Scott Kersnar MAR 1, 2006 2:00am ET

## Test before You BUY

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Over the past few years high-profile delays and failures of enterprise LOS implementations have alerted lenders to ask more questions before buying a new system. And when they do, mortgage technology experts tell lenders shopping for new systems to ask about testing. Ask which tests scripts were used. Ask about test results. For enterprise systems, always ask about scalability testing. Too often, such advice is not followed by lenders large or small.



While some large lenders maintain their own test facilities and routinely subject new systems to neutral - and expensive - third-party testing, small lenders do not. For the smaller firms, some vendors now offer facilities where potential customers can test-ride systems to see which ones fit their needs.

And because testing is expensive, there is a growing trend toward offshore testing.

"Don't spend money on testing until everything else has been agreed to," counseled Pete Fugaro, managing director and co-founder of Prymak, a Greensboro, N.C. consulting firm with has roots in the old FiTech loan origination system.

"We would help a client select an appropriate testing lab, whether that be IBM, ATT or someone else, but a lender should ask the vendor to pay for it," he noted.

Mr. Fugaro said the most valuable testing should address "critical workflows, real pain points and real opportunities."

One of the key complaints lenders have which new systems concerns screen refresh times. "Particularly out in the branches, what works in the demos doesn't always work as well [in the actual implementation]."

Before signing a contract, he said, "Go out and talk to a high-volume user of the system" to see if they had to deal with slow screen refresh time that made them change a network

design or turn to Citrix.

"What the clients really need from a benchmarking perspective is definite process flow charts that show me how I want to work, exactly how I want to lock a loan in secondary," Mr. Fugaro pointed out.

He cited one Prymak client that used Prymak's Discover 180 process to sift through 22 LOS vendors. "After looking at the flow charts, seven vendors took themselves out of the running and six removed themselves due to budget considerations."

That process saves time and money for the vendors as well as the lender, he said. "It's expensive to come in second."

#### DOES IT SCALE?

For large lenders, the biggest failings of enterprise systems inevitably involve scaling problems. Nevertheless, these same lenders are "notoriously weak about doing scalability testing," observed Palisades Technology Partners COO David Aach. One reason he noted is "the major costs and difficulties involved in assembling the hardware, personnel and other resources necessary for scalability testing of enterprise systems." But underlying that is a chicken-egg dilemma. Given the huge risk involved in an LOS conversion, how do you test the scalability of an LOS system until implementation of the system is completed?

"Unless the system was designed to be horizontally scalable, just adding CPUs will not solve that problem," Mr. Aach stated.

"We think scalability has to designed in when the application is first conceived of," he continued. "If you are building a 12-story building you dig a very different foundation than if you are building a two-story house. Most systems were not designed to be enterprisewide applications. They were designed to be departmental systems."

Tests of Palisades' Impact system, hosted on-site at an IBM testing facility, generated over one million pages per hour and added a new loan per second as it modeled the loan fulfillment process of a top-five lender during end of month, peak usage times, said Mr. Aach.

"This was something we did with IBM to demonstrate that no matter how many concurrent users a lender needed to handle, we could put together a cost-effective platform that would support their enterprise. As lenders continue to try to move to a single lending platform across the enterprise, the ability to scale to thousands and thousands of users is one of their key concerns."

He said the tests verify that PTP has certified the system's horizontal scalability by showing that Impact can "support 500 concurrent users per CPU at 5,000, 10,000 and 15,000 concurrent users while maintaining subsecond average response time." Mr. Aach explained that whereas vertical scalability has to be achieved by "replacing the box you have with another box," horizontal scalability is achieved by adding CPUs to a server cluster as needed to maintain consistent response time. "At the 15,000-user level, we are talking

about 30 CPUs, two CPUs per server."

Eight core business scenarios simulated the production load typical of a large lender. Each scenario represents multiple data entry screens and functions and/or the execution of appropriate document generation.

At the 15,000 maximum user count recorded, the system handled 28,742 discrete functions over the course of one hour. This high level of usage was intentionally placed on the system to prove its ability to scale to typical loads caused by end of month loan closings.

The scenarios included:

- \* Create New Loan and Print Docs
- \* Schedule Closing and Print Docs
- \* Correspondent Processing
- \* Loan Search and Status Inquiry
- \* Loan Processing
- \* Re-Price Loan
- \* Point-Of-Sale Processing and Notes
- \* Underwriting Loan and Vendor Services

The system showed itself able "to not only handle all of the functional requests placed on it, but was able to deliver subsecond response times across the board, with the exception of the resource-heavy document generation scenarios, clocking in at just over one second." PTP was pleased enough with the "groundbreaking" results of these tests to enter them as documentation for an award. "Proving linear scalability means there is no practical limit to the number of users Impact can support," said PTP's David Aach.

"It means that with the addition of appropriate hardware and CPU, incremental users can be supported," he noted.

"The only reason we stopped at 15,000 users was due to time and hardware constraints in the labs. We have proven Impact can scale to any practical level of users established by a lender," reported Mr. Aach.

"Searching for the right LOS is challenging where the incumbent vendors with the largest market shares have the oldest IT, and some have relatively small R&D budgets to complete a new Web-based LOS," noted Tower Group senior analyst Craig Focardi in commending the PTP test results.

"While many newer vendors have the right technology architecture," he said they may lack "the deep mortgage know-how to get the system to work well.

"They typically don't have a completed system out of the box, and count on their first few customers to help them complete the product. In this environment new," said Mr. Focardi, "LOS development is often a situation of the blind leading the blind."

"Any time a lender chooses a system that is less mature, that underlines the need for more rigorous testing," agreed Larry Bonifant, president of The Performance Group, Concord, N.H.

### TAKE A TEST RIDE

Though Irvine, Calif.-based Portellus traces its mortgage domain experience to LoadTrader.com and back to the pre-Web era, many potential customers view it as one of those newcomers. Getting potential clients past the first WebEx demo to take a closer look at the worth of its product offerings has been a challenge.

In late November 2005 the company created a Customer Readiness Lab as a comprehensive testing, evaluation and simulation facility that let lenders test ride the company's product offerings.

The first Portellus CRL included a testing and evaluation facility with workstations, plus three technology-focused conference rooms. A prospective customer could have a team go through a structured, step-by-step user-defined workflow, conduct hands-on testing of features, functionality and solution performance, conduct in-depth proof of concept and environment configuration, and have instructor-led training by Portellus personnel.

Executives and other key personnel at Homefield Financial, also based in Irvine, were among the first to use the test lab. Homefield provided Portellus its specific data, pricing, products and underwriting guidelines to populate the Portellus system.

Homefield was able to simulate enforcing its organizational procedures, regulations, external data, point-of-sale functions and so on. Homefield signed immediately after the CRL visit, and at this writing was scheduled to go live with the system in September 2006 following extensive internal testing.

Portellus further confirmed the competitive value of the test lab when Irwin Home Equity used it after first sending out a 290-page RFP and a seven-month search that whittled down a list of some 30 vendors to a final list of seven. The CRL experience was compelling enough for Irwin to settle on Portellus. Several other new clients quickly followed.

By June 2006, when the company moved to larger quarters, the CRL had sufficiently proven its worth that Portellus founder and CEO John Le said he fully expects the CRL process to become the standard of practice for mortgage technology vendors.

He predicted that "on-site, up-close lab experience" will become a mainstay in an industry that has "too many vendors who overpromise and underdeliver." Since then, he said, Portellus has invested "significant" funds into building a new CRL double the size of its old lab. The facility accommodates existing clients incorporating new modules into their workflow as well as prospective clients coming in to kick the tires.

"The key point is that a prospective client should not be afraid of newer technology innovation that will allow them to stay ahead of their competition," said Mr. Le.

"Our CRL helps them get over their fears of new technology," he noted. "They can bring in their business-case requirements, bring in the people who are actually doing the work on the business and IT side, and drill down to see if there is a match.

"It's a step beyond the typical RFP approach. We are seeing the same old vanilla RFP being recycled over and over." The problem with that traditional process, said Mr. Le, is that it relies too heavily on the vendor's actually following through on contractual promises to deliver a system that works in the end.

To avoid disappointment, he echoed Prymak's Pete Fugaro in identifying three "cornerstones" that need to be addressed proactively: technology due diligence, application due diligence and implementation due diligence.

### OFFSHORE TESTING

While vendor-supplied testing is an advance over PowerPoint presentations and WebEx demos, it can't take the place of independent testing. When a lender brings in a consultant to help conduct testing, said The Performance Group's Larry Bonifant, a weak link in the chain often is "getting clients to put enough people on the test process. Testing and training also get squeezed at the last minute to keep an implementation on deadline." Because clients ask vendors to add enhancements and addition features, "scope creep is another issue that has to be addressed as it impacts testing," Mr. Bonifant stated.

As a result, he said, PTP consultants have become "sticklers" at making sure clients follow testing procedures. "We've developed over the years a best-practices approach in test scripts to enable developing scripts faster."

In recent months, he said, The Performance Group has been working with an offshore provider to develop testing processes for new systems and ongoing enhancements.

"One benefit [of offshoring] is that testing can be done in a more controlled and costeffective process, instead of depending on a client's employees that have to be pulled away from processing loans and other tasks."

He identified three primary spots where the savings comes from with offshore testing:

- (1) a 50% savings over having expensive consultants and clients' employees doing testing,
- (2) a shorter testing period achieved by using resources permanently dedicated to do the testing, and
- (3) elimination of risk by assuring that a thorough testing process is followed, with no short-cutting of steps to rush new systems into operation.

Offshoring itself creates a need for testing. Cupertino, Calif.-based Borland (www.borland.com) lets PHH Mortgage harness offshoring to support its existing place as

the mortgage industry's leading provider of private-label mortgage services.

Providing outsource services on the scale it does means PHH Mortgage has to operate 15 different internal business units. Incorporating new mortgage regulations requires software releases every six or seven weeks from distributed internal and outsourced development teams in Jacksonville, Fla.; Mount Laurel, N.J.; Bangalore, India; and Calcutta, India.

Borland product marketing manager Matt Klassen said none of the challenges Borland addresses are unique to offshoring. "Any software team has to be able to handle them in any product of any size. Offshoring simply magnifies those factors."

Thanks to its new tracking system PHH Mortgage no longer worries about missing deadlines for software releases, said PHH configuration management team lead Ed Briggs.

"We have implemented a system to give us a full audit and better metrics. It allows the business to actually do testing and report defects. Mistakes are caught further upstream. The Borland tools allow consistent processes between the folks working here and those working offshore," Mr. Briggs explained.

Because failure to identify project requirements upfront is a leading cause of failure for major software projects, in April 2006 Borland launched a new tool that lets business analysts visually specify functional requirements and automatically generate test cases.

### **TEST BEFORE YOU BUY**

Failed and flawed implementations are on everyone's mind these days. We can expect that the standard of practice for mortgage technology vendors increasingly will have to embrace in-house and third-party testing alike.

Mr. Le said he is well aware of the scalability tests Palisades conducted in conjunction with IBM.

"That test certainly addresses one component, scalability with a high number of users," he commented. "But the lender's issue is not just whether the system scales but whether it supports a lender's business needs.

"Our CRL facility doesn't offer the stress test or give arms-length third-party verification, but it offers a holistic approach that enables simulating lender-defined processes," he pointed out.

"The point of tests like theirs and ours both is that the vendor should be able to demonstrate through various benchmarking and testing methods what the system will support," Mr. Le concluded. "That shouldn't just be left to a contractual agreement [between lender and vendor]." (c) 2006 Mortgage Technology and SourceMedia, Inc. All Rights Reserved. http://www.mortgage-technology.com http://www.sourcemedia.com



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