

Beating the Outage Blues

By Deena M. Amato-McCoy

(September 1, 2008) When a customer spends more than five seconds waiting for a transaction to process, it can seem like an eternity—especially during the stressful holiday shopping season. Virgin Megastores agrees.

“If a customer stands at the register too long they could abandon the sale,” explained Robert Fort, VP IT, Virgin Entertainment North America. “Then you have to rectify a bad shopping experience, and how the customer relates that to the brand.”

By adding a business-transaction intelligence system, Virgin monitors potential networking issues in real time and makes proactive remediations before issues take a toll on the shopping experience.

To streamline its operations, approximately two years ago the Los Angeles-based entertainment retailer transitioned to a VoIP (voice over Internet protocol) network, or a pipeline that converges data, voice and video information over the Internet. Telephone calls, credit-card processing and file transfers are among the many operations supported by the network.

These many “moving parts” made it difficult for Virgin to stay ahead of potential outages—an issue that could cost a company dearly. For example, application-performance issues could impact corporate revenues by up to 9%, or an average of \$117 million annually, according to Aberdeen Group.

While it didn’t happen often, Virgin did report a couple of outages during the 2007 holiday shopping season. “These translated into frustration for shoppers in the store, and that impacted our revenue,” Fort said.

While Virgin always monitored systems, “We were missing a way to get the granular level of the business transactions themselves,” said Fort.



Digital music samples are one of many applications that Virgin Megastores’ network supports.

Fort began evaluating the importance of business-transaction intelligence (BTI), or a monitoring solution that identifies application-performance issues in real time, before end-users are impacted.

“Our organization is moving toward service-oriented architecture and the solutions that run off of it,” he said. “We wanted a solution that could monitor all of the moving parts of our enterprise and know we are working to keep systems up and running.”

Since this is an evolving concept, few companies provide this solution. One company committed to the technology is Vancouver, B.C.-based INETCO, which Fort encountered at this year’s annual NRF convention in New York City.

In April, Virgin deployed the solution on its network. Data flowing from all applications running on the company’s network filter through the INETCO server, then the solution delivers all performance data and alerts in a multi-dimensional dashboard.

To date, Fort, the head of applications, the help-desk administrative team and associates overseeing store systems receive the information.

Initially, the system began monitoring credit-card transactions. By breaking down traffic by store and credit-card type, “The solution revealed how many credit transactions we had over time, and the duration of transactions,” Fort said. “This also revealed if there were slow connections at specific stores.”

For example, the reports revealed that one store was taking longer than five seconds to process transactions. “After drilling down further, we learned that a specific register was to blame,” he noted.

“We are currently analyzing the problem, which can be anything from bad wiring to corrupt data,” Fort said. “This system gives us insight way before the store calls to alert us to the issue, and we can fix it that much faster.”

The chain quickly realized that its BTI solution can solve more than credit transactions. “Since we can apply it to any system supported by our network, we are now applying it to our kiosk traffic,” Fort explained.

Kiosks enable shoppers to search for merchandise by title and artist. The swipe of an item’s barcode gives shoppers the chance to sample music, movies and games.

In Virgin’s Times Square store in New York City, however, the units can use up to 80% of the network’s bandwidth.

“We will drill down into where the problems lie and rectify the problem so we know the units won’t cause an issue during the upcoming holiday shopping season.”