

## IT testing proves instrumental in reporting election results

On election night in 2004, the outcome of the presidential election rested with Ohio voters. Thousands of campaign workers, journalists and interested voters jammed the web site of the Ohio Secretary of State – the state’s chief elections officer – to track results of the presidential race and other contests around the state. At times, the Web site slowed and even locked up, frustrating visitors to the site.

Again this year, all eyes in the nation were on the U.S. presidential election. Because Ohio was a key swing state, the Ohio Secretary of State’s office knew it was critical for its Web site to provide thousands of users with up-to-the minute results on Election Day.

Upon taking office, one of Secretary of State Jennifer Brunner’s goals was to ensure that the Secretary of State’s Web site would perform with speed and accuracy in reporting election results as the votes were tallied throughout election night. She was able to accomplish that by conducting pre-election testing of the Web site’s capacity to handle visitors.

Prior to this year’s election, Brunner’s information technology staff revamped the entire Web site’s reporting system. To ensure that the system would perform well, Brunner also wanted to “conduct a series of stress-testing scenarios that provide confidence in the system to handle at least 5,000 hits a second on election night without experiencing performance issues.”

The Secretary of State’s office chose Platform Lab to do the testing based on its past performance in providing IT facilities and testing for other government departments, such as the Ohio Department of Job and Family Services, Department of Auditor and Department of Development, to name a few.

Managed and operated by TechColumbus, Platform Lab is a non-profit information technology testing and training facility.

In 2004, just 2,200 concurrent users stressed

the Secretary of State’s computer system. “Knowing that even more people would be hitting the site during this election night, the state needed to verify that the site would hold up,” said Steve Gruetter, Director of Platform Lab. “They knew they could absolutely not afford to go down on election night.”

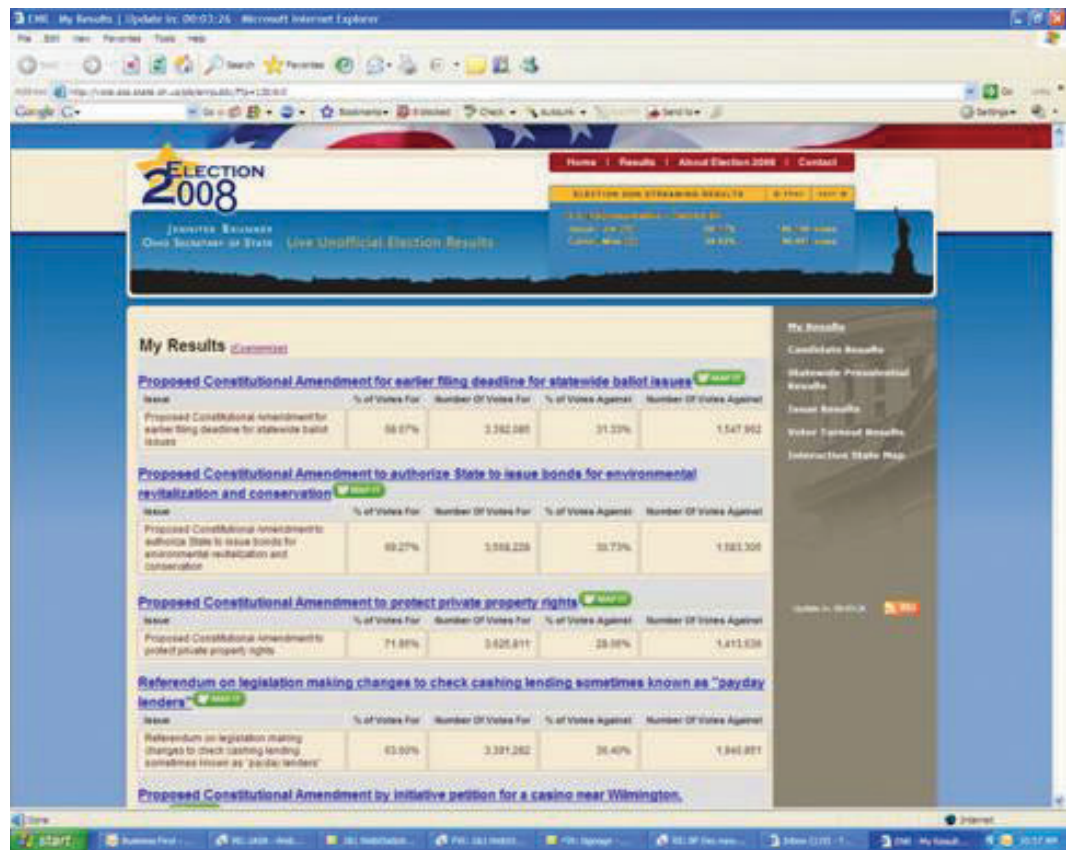
Platform Lab helped line up a consultant – Everest Technologies Inc. of Worthington – to provide manpower.

“We worked with the Secretary of State’s IT people to create a series of virtual user profiles that would simulate the traffic we anticipated on election night,” said Bob Malik, Vice President of Everest.

The stress test was conducted for two weeks prior to Election Day with Platform Lab providing the location, hardware, network, bandwidth and a software tool called NEOLoad. The test entailed loading the system with those virtual users who would hypothetically log on to various areas of the site at the same time.

“The goals of the stress test were to load and stretch the capacity of our Election Night Reporting system,” said Robert Mangan, Chief Information Officer with the Ohio Secretary of State. “We wanted to ensure performance while documenting the level at which we would experience operational problems that would have required us to activate our backup site in our Cleveland office as election returns continued to come in throughout the night.”

The test showed that re-engineering the site was the right move for the Secretary of State’s office and that the in-house IT staff’s hard work was well worth the effort. In the end, the test showed that 7,500 users could be logged on at the same time on the state’s Election Night Reporting site without a slowdown or crash. “We didn’t have to fix anything – the site was perfect,” Malik said. “We’ve been doing this kind of testing for 12 years and you don’t see a perfect site very often.”



know what those breaking points are until you stress the system.”

### GET Connected

**Ted Ford**  
President & CEO  
tford@techcolumbus.org  
614-340-3353

**Tim Haynes**  
Vice President, Member Services and Marketing  
thaynes@techcolumbus.org  
614-340-1698

**Will Indest**  
Vice President, Capital Access and Formation  
windest@techcolumbus.org  
614-487-3700

**Cindy Groeniger**  
Director, Member Services  
cgroeniger@techcolumbus.org  
614-340-1697

**Leslyn Wheelless**  
Membership Sales Manager  
lwheelless@techcolumbus.org  
614-340-1688

**Rick Focht**  
Director Incubation Services  
rfocht@techcolumbus.org  
614-375-3693

1275 Kinnear Rd. Columbus, Ohio 43212  
614.487.3700 • [www.techcolumbus.org](http://www.techcolumbus.org)