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Ernie Soffronoff,  
Associate Director of Smith IT



## University of Maryland, Robert H. Smith School of Business improves classroom performance with XenDesktop

The University of Maryland’s Robert H. Smith School of Business is one of the world’s leading business schools. Its strengths in both academics and research are reflected in its rankings and other accolades. Smith maintains its own IT organization outside of the university’s primary infrastructure to manage and maintain its special requirements, campuses and remote population. Smith IT supports 150 full-time and 50 part-time faculty members, 2,950 undergraduates, 1,264 MBA students and 100 Ph.D. students.

Smith IT’s staff members support remote application access for off-campus students, and on-campus services including PC imaging in the classrooms, conference rooms and four large computer labs on a mixture of PCs and kiosks. “Our job is to keep the business school users happy,” said Ernie Soffronoff, associate director of Smith IT. “A large segment of our population are part-time students, working professionals doing their homework at their office at the end of the day. They don’t have the ability to come to a computer lab. We can’t expect them to buy software to use on only a few assignments, so we have to provide the ability for them to do their homework without having to come to campus.”

### Citrix XenApp for application delivery for ten years

Smith has been using Citrix® XenApp™ technology for more than 10 years to provide this access to a wide and growing variety of office applications and complex, bandwidth-hungry statistics, decision making and research applications. “That’s been a big success,” said Soffronoff. On campus, Smith IT used XenApp technology to build a consistent application delivery infrastructure across every classroom, conference room and lab; every PC had the same software on it.

“It’s an assumption of life here that the necessary technology will be available and will function properly,” said Soffronoff. “The problem we sometimes faced was that the in-room technology was in place, but not



always functional.” While the XenApp technology did a great job of delivering applications, sometimes the applications were unavailable due to bandwidth and other imaging technology issues. “That’s such a significant concern for our team,” said Soffronoff. “You really feel for professors who would go into a room to teach a lesson and not have the technology they were assuming they’d have.”

### Key benefits

- Significantly improved user satisfaction
- Reduced help desk demand
- Higher availability
- Faster performance
- Reduced time to image

The PCs were also cumbersome to boot up. Instructors needed to log in and it took several minutes. With only 15 minutes between classes, it could take the full time between classes to log out of the PC and then log back in for their next class session.

For Smith IT, the imaging system was labor intensive. One lab alone, with an instructor station and 40 workstations, took an average of six hours to image. The result was unacceptable classroom and lab performance. “Having a smoothly operating infrastructure is critical to a good classroom experience, to a good student experience,” said Soffronoff, “and that feeds into the rankings that make the school more attractive to the best quality students and faculty.”

### The challenge – Provide noticeably better IT services for instructors and students

Smith IT was using another campus organization to maintain its campus PCs. After being frustrated with the lack of reliability and flexibility, Soffronoff knew they needed a better solution. “The solution had to be noticeably better for the user community. That’s the key underlying fact,” he said. In addition, for Smith IT, a small group, the idea of imaging and managing 200 PCs was not a happy prospect. “There was just no way that we were going to be able to run people around and maintain them. Also, we had a very tight timeline to implement and test the new solution in preparation for the Fall semester. This is where PBT was extremely valuable.”

### Plan B Technologies, Inc., a CDI Company (PBT) guides Robert H. Smith School of Business in the right direction

Smith contacted Plan B Technologies, a Citrix partner, to help them find a solution. “Plan B Technologies helped us get up to speed very quickly. They are a great partner and were able to recognize our existing core competencies to help us integrate new technologies faster. We already know our applications inside out, so we were able to quickly move on to focus on our needs to improve delivery. We had a 30-day implementation window but were able to finish ahead of schedule with their help.”

Plan B Tech suggested that the solution would be Citrix® XenDesktop®, streamed desktops, one of the many FlexCast™ desktop delivery models available with XenDesktop. “Since we’d been a Citrix customer and heard good things about streamed desktops from everybody we asked, we picked that as the solution to take over PC imaging,” added Soffronoff.

XenDesktop streaming technology delivers a single, standard desktop image—operating system and software stack—on demand to physical desktops from a network service. The shared desktop image is configured, delivered and managed centrally; reducing costs, increasing flexibility and enabling an uncompromised user experience.

“We found it to be very easy to install, configure and administer. PC reliability has improved and the new solution is much less susceptible to failures in other parts of our infrastructure. The speed is just amazing. With our old solution, in some particularly bad classrooms, it took us upwards of four hours to re-image a single PC. With XenDesktop, they boot in 45 seconds. It was a remarkable fix for our infrastructure. So we have higher availability, the PCs are faster, and it’s more flexible than it was before: we’re able to make changes as needed.”

The solution met the needs of Smith IT’s key issue: user satisfaction.

“The improvement was primarily in user satisfaction, and that’s the whole focus of our organization,” said Soffronoff. “We are here to provide a service to the business school community, and we’re better able to provide that service with XenDesktop. People are really happy with the solution.”

The faculty are happy that they always have the software they need to teach. Last minute software updates are no longer a problem. Getting the streamed desktop, with a clean environment at every reboot, frees time in between classes for the instructors to talk to students or to get their lecture notes together or other activities.

XenDesktop has also made Smith IT more efficient. “It definitely reduced our help desk load. Things aren’t broken as often. And when we do need to make a change, it’s very quick,” said Soffronoff.

A recent issue proved the value of XenDesktop. When daylight savings time came, the system got stuck in a reboot loop. The reboot was set for 4 a.m., and it would reboot, set the clock back to 3 a.m. and when 4 a.m. came again, it would reboot and set the time back to 3 a.m. So it was looping between 3 and 4 a.m.

“We had to fix the PCs in a hurry. With our old tool, that may have taken a whole day. With Provisioning Services™, we got it fixed within one class period,” said Soffronoff.

## Expanding use of XenDesktop in the future

Desktop streaming is just one of the many desktop virtualization delivery models incorporated in XenDesktop. Smith IT plans a continuous rollout of more XenDesktop functionality going forward.

Smith IT has been supporting MacIntosh® devices for over six years through XenApp. “They wanted to be able to run the school’s Windows® software, so the Mac® compatibility’s been a big feature for us,” said Soffronoff. Smith IT plans to extend its desktop to the Apple® iPhone® and iPad® in the next few months. Also on the near horizon are publishing its XenApp applications via XenDesktop as part of the school’s standard desktop, and creating a VDI environment for its finance and research labs.

## XenDesktop delivers as promised for Smith

“The flexibility of the solution is definitely a key differentiator. Reliability is a second key differentiator. But performance is the cherry on the top because the solution had to be flexible and reliable. The fact that it performs much, much better than our old solution is fantastic,” Soffronoff concluded.

**Worldwide Headquarters**

Citrix Systems, Inc.  
851 West Cypress Creek Road  
Fort Lauderdale, FL 33309, USA  
T +1 800 393 1888  
T +1 954 267 3000

**Americas**

Citrix Silicon Valley  
4988 Great America Parkway  
Santa Clara, CA 95054, USA  
T +1 408 790 8000

**Europe**

Citrix Systems International GmbH  
Rheinweg 9  
8200 Schaffhausen, Switzerland  
T +41 52 635 7700

**Asia Pacific**

Citrix Systems Hong Kong Ltd.  
Suite 6301-10, 63rd Floor  
One Island East  
18 Westlands Road  
Island East, Hong Kong, China  
T +852 2100 5000

**Citrix Online Division**

6500 Hollister Avenue  
Goleta, CA 93117, USA  
T +1 805 690 6400

[www.citrix.com](http://www.citrix.com)

**About Plan B Technologies, Inc., a CDI Company**

Plan B Technologies, Inc., a CDI Company (PBT) is a unique engineering and full-service "cradle to grave" IT solutions provider offering a wide variety of services from consultation, assessments, advanced network design and integration to full-service support and maintenance. From the desktop to the datacenter, PBT offers expertise on multiple platforms including virtualization (server, desktop and application virtualization), security, storage (backup, contingency planning and disaster recovery), network infrastructure and Microsoft services as well as a full complement of support services. For more information, visit: [www.planbtech.net](http://www.planbtech.net)

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Citrix Systems, Inc. (NASDAQ:CTXS) is a leading provider of virtual computing solutions that help companies deliver IT as an on-demand service. Founded in 1989, Citrix combines virtualization, networking, and cloud computing technologies into a full portfolio of products that enable virtual workstyles for users and virtual datacenters for IT. More than 230,000 organizations worldwide rely on Citrix to help them build simpler and more cost-effective IT environments. Citrix partners with over 10,000 companies in more than 100 countries. Annual revenue in 2010 was \$1.87 billion.

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