

● Softricity Case Study: Northeastern University

Streamlining and expediting campus-wide application deployment and management

The Challenge: Accelerate and simplify deployment and management of hundreds of applications on 5,000 desktops used by students, faculty and staff at four campuses

The Solution: Implement Softricity SoftGrid Application Virtualization Platform

- The Results:**
- Use virtualization to **eliminate application conflicts and regression testing**
 - Significantly streamline the lengthy and difficult process of **deploying, updating, supporting and terminating applications** across the University
 - Efficiently manage **last-minute classroom application requests**
 - **Deliver the same level of application services to remote campuses** without adding IT resources
 - **Optimize software licenses purchases**
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Northeastern University,
located in Boston,
Massachusetts, is a world

leader in practice-oriented education. Recognized for its expert faculty and first-rate academic and research facilities, it has been cited for excellence three years running by *U.S. News & World Report* and ranked among the "Best National Universities." The university is committed to offering the latest technologies to its 25,000 students and 3,000 faculty and staff, in order to enable superior learning experiences.

According to Richard Mickool, Northeastern's executive director of Information Services, "Ensuring our faculty and students have the applications they need – even when requested at the 11th hour – is critical to providing quality education, but it is also extremely challenging. SoftGrid's unique virtualization approach enables us to handle this in a simple, efficient way."

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The Challenges

Northeastern's IT department supports hundreds of applications on more than 5,000 desktops and servers, including approximately 2,000 residing in labs. Managing this diverse environment poses many difficulties:

Application Deployment and Updates

At the beginning of each semester, Northeastern receives the latest applications for teaching and classroom support, which they systematically roll-out campus-wide. In addition, throughout the semester they continually get updates, patches and new versions that need to be deployed quickly.

"We get last-minute requests for applications all the time. We try for 48-hour turnarounds, especially for critical classroom requests from Professors, but it's tough to do. Because of DLL conflicts from installation incompatibilities and the time we need to spend regression testing, doing deployments and upgrades – even planned ones – was a nightmare," said Mickool.

Northeastern ran a separate network for testing application changes and their potential impact on student, faculty, and administration desktop images – application sets – to minimize post-installation problems. Every time a change was made, a series of regression tests was conducted across multiple images and systems. In addition, because of the sheer number of applications supported in the student labs, the images can be very large, making reloading and maintaining them extremely time-consuming.

Multiple Version Support

Unlike corporate environments, where IT can mandate policies about the applications and versions it supports, universities must be more flexible to constituents' needs. For example, at Northeastern, professors who use Minitab in the Engineering program could have a different version than the course offered in the Business School, requiring IT to support various versions of the same application. Because multiple versions cannot run on the same computer simultaneously, Northeastern often had to support them with different desktops. This required additional IT management time and resources.

Remote Campus Support

In addition to its main Boston location, Northeastern has three other Massachusetts campuses. Each time one of them needed new applications or upgrades, they sent an IT technician from Boston out on location to do the install-uninstall processes on local desktops and servers. Not only was this a time drain, it pulled valuable IT resources away from other important projects.

Northeastern needed a solution that would solve its application deployment and multi-versioning issues, and enable IT to quickly and easily service needs for the latest applications.

The SoftGrid Solution

Northeastern began its search by evaluating various imaging and security patching software, but they could not handle the critical application conflict issue. Ultimately, Northeastern found that only SoftGrid could solve this problem and meet all their requirements.

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– Richard Mickool

SoftGrid transforms Windows applications from products that must be installed and managed locally into virtual services are managed centrally and deployed on-demand to desktops, laptops and servers. To eliminate application conflicts – and the need for regression testing – SoftGrid does not write files directly to the operating system files but instead accesses them via its virtual "sandbox," a protective run-time environment called SystemGuard™ that executes programs without altering the host computer. With SoftGrid, Northeastern can run any application alongside any other.

SoftGrid allows administrators to accelerate each step of the application management process by compressing the time necessary for packaging and preparing applications, deployment, patch management and updates, support and termination. Its centralized management capabilities enable administrators to make all changes from a single console, and ensure users automatically receive the latest application version the next time they log on to the network.



Northeastern University has been honored with a CIO 100 award for boldness and excellence in IT, including its use of the SoftGrid Platform



Northeastern's use of SoftGrid has also been recognized with Computerworld's "Best Practices in Enterprise Management" award.

The Benefits

Northeastern, which is installing SoftGrid servers at each campus, anticipates significant benefits:

- **Eliminating application conflicts:** Northeastern can run what were previously conflicting applications on the same client without concern – and without spending time on regression testing. This is particularly important for the lab environments, which run large numbers of applications with varying versions.
- **Accelerating application deployments:** By eliminating regression testing and on-site deployment, Northeastern can cut turnaround time for new application requests in half, enabling faculty and students to get the applications they need much more quickly.
- **Reducing image sizes:** Northeastern's desktop images are large and, as a result, take a long time to deploy. SoftGrid helps optimize image size by determining which applications go into cache as part of the standard image and which get delivered "on-demand" over the network.
- **Enhancing licensing initiative:** Northeastern is diligent about managing application licenses. Because of their wide variety of applications and licensing programs, the university assigned a dedicated staff member to this complex task. SoftGrid's real-time monitoring and reporting capabilities will enable Northeastern to more easily track license usage so they can reharvest and redeploy when appropriate, and optimize the licenses needed.
- **Simplifying remote campus support and updates:** Using SoftGrid's branch office support capabilities, Northeastern can package applications at its Boston location and then automatically update all other sites. "SoftGrid's ability to create applications as data files and replicate them to local servers is very attractive," said Mickool. It eliminates the need to send technicians to remote campuses for updates, patches and last-minute deployments.
- **Anytime, anywhere application access:** SoftGrid's ability to detach the machine from the user simplifies end-user support and enables more flexible lab management. Because SoftGrid-enabled applications can be delivered on-demand, anyone can log onto a computer at any location across campus or at Northeastern's remote sites and, via Active Directory, immediately obtain all their necessary applications, even if they were not previously available on that machine.

See For Yourself

To learn how SoftGrid can help you, please email us at info@softricity.com or call 877.763.8737.

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