

Microsoft® SoftGrid® Application Virtualization

Microsoft®
Desktop Optimization Pack
for Software Assurance

Case Study: Swedish Medical Center

Create a centrally managed environment that supports quick roll-out of enterprise applications and enables easy roaming for users



THE CHALLENGE:

Enable doctors and nurses to have their applications and data roam with them from device to device; efficiently migrate over 400 applications to XP and deploy a new clinical application; and eliminate regression testing.

THE SOLUTION:

Implement and deliver applications virtually via the Microsoft Desktop Optimization Pack for Software Assurance using the SoftGrid Application Virtualization technology.

THE RESULTS:

- Cut deployment time from 2-3 months to 3 days
- Reduced time to replace PCs from nearly 8 hours to just a few minutes
- Saved \$1 million-plus in deployment and support-related activities
- Enabled truly universal roaming
- Improved license tracking
- Reduced 20 desktop images to 3
- Improved Citrix management



Company overview:

Swedish Medical Center, formed in 1910, is one of the largest, most comprehensive nonprofit health providers in the Pacific Northwest. Based in Seattle, Washington, it has three hospital campuses and multiple specialty and primary care clinics, as well home care services. In an independent research study conducted by the National Research Corp., Swedish is consistently named the area's best hospital, with the best doctors, nurses and care across a variety of specialty areas.

Challenges

Swedish Medical Center's IT department supports more than 500 applications on 4,500 desktop and laptop PCs and 150 thin terminals. Its clinicians and administrative staff are spread across multiple hospital campuses and clinics. Deploying and supporting applications for users who need to work from many different locations was incredibly challenging:

1. **Time-consuming deployments:** It typically took Swedish weeks, if not months, to deploy applications. Applications were deployed in one of two ways: 1) Enterprise applications were delivered using Novell Zenworks. To handle the many different operating systems in use (including Win95, WinNT 4 and Win2000), IT would have to not only create different packages for each OS, they would spend weeks packaging and testing all the applications before they could be deployed. And after they were deployed, conflicts with existing applications on local devices would often cause applications to break. "These things exploded into incredibly long engagements just to deploy a single application," said Mike Criss, manager of infrastructure engineering for Swedish. "Before rolling out an application, we'd do some testing and then wait until it went into production to see what broke. It was a brutal way to test. It wasn't uncommon for new deployments and the resulting conflicts to shut down functionality, such as key features in Word or Excel macros." 2) For applications that were only going to be used by a small group of people, IT would send a staffer to install them on-site on each desktop because packaging for Zenworks would have taken too long. This resulted in many manhours spent in the field, diverting resources that could have been used more strategically.

- 2. Limited patching and updates:** Although Swedish wanted to deploy patches and updates on a continual basis, they didn't because "doing so was so painful. We were very resistant to these kinds of roll-outs," according to Criss. Rather than deploy point releases, for instance, Swedish would wait for the full upgrade of the next major version of an application before initiating deployment processes.
- 3. Constrained access for roaming users:** Swedish has multiple campuses and many applications were localized on servers for each campus. As a result, when users went to another campus their applications wouldn't be available. "We had a broken environment for roaming users. It was a common complaint," Criss noted.

To upgrade its environment, Swedish worked with Kennedy Consulting, who developed a strategic plan for improving their overall efficiencies and effectiveness. With Kennedy's assistance, Swedish decided to migrate from Novell Netware and the older versions of Windows OS to Windows XP SP2 and Microsoft SMS for patching, upgrades and other functions. Swedish knew that migrating 400+ applications to XP would be incredibly resource-intensive because of all the regression testing they would have to do. They considered outsourcing the migration and got a bid for \$500,000 for this one-time project. Swedish would then have to spend even more resources any time they wanted to roll-out a new application following the migration.

During the planning process, Criss and his team came across articles about SoftGrid Application Virtualization. They thought it might solve their anytime/anywhere roaming and regression testing issues. Kennedy Consulting saw the greater value it would bring to Swedish. According to Sean Kennedy, partner at Kennedy Consulting, "SoftGrid's business value was just so apparent. It enables companies to rethink their people and processes, simplify infrastructure management, and gain efficiencies that just haven't been possible in the past. It's ideal for the new-generation, centrally managed desktop environment."

Criss noted, "We worked with Kennedy Consulting to do a SoftGrid proof-of-concept with four of our toughest applications—McKesson STAR, ESI, IDX Lastword and Kronos timekeeping—and SoftGrid worked exactly as promised." Also important, it eliminated the need for the expensive outsourcing of regression testing.

The Microsoft SoftGrid Application Virtualization Solution

Microsoft SoftGrid Application Virtualization transforms applications into virtualized, network-available services, resulting in dynamic delivery of software that is never installed, never conflicts, and minimizes costly application compatibility testing. Users and their application environments are no longer machine-specific, and the machines themselves are no longer user-specific, enabling IT to be flexible and responsive to business needs, and significantly reducing the cost of PC management.

SoftGrid's unique ability to virtualize all key components of any Windows application 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. Users automatically receive the latest application version the next time they log on to the network.

"SoftGrid resulted in huge benefits right off the bat, including the ease and speed of deploying applications, true roaming experiences, and the ability to easily swap out desktops. It's been a fantastic solution for us."

MIKE CRISS
MANAGER OF
INFRASTRUCTURE ENGINEERING,
SWEDISH MEDICAL CENTER

The virtualization of applications happens with the SoftGrid Sequencer, a wizard-based tool that packages Windows application for real-time streaming as network services. The Sequencer uses a once-per-application process to protect the application's integrity and does not modify its source code.

SoftGrid is an integral tool in the Microsoft Desktop Optimization Pack, a dynamic desktop solution that helps reduce application deployment costs, enable delivery of applications as services and better manage and control enterprise desktop environments.

The Results

SoftGrid has transformed the way Swedish manages applications and supports its diverse user base:

- 1. Fast deployments and continual updates:** SoftGrid, which Swedish used to virtualize approximately 500 applications, eliminates the need for extensive compatibility testing, enables applications to be assigned centrally through Active Directory, and automatically provides the newest version of authorized applications every time a user logs onto a PC. Now, instead of taking several months to deploy an application enterprise-wide, it takes less than three days: "One day for sequencing, one day for testing, and then we just turn on the AD group and let it go. It's truly that fast," according to Criss. "We go from packaging to virtually instant roll-out." In addition, whereas in the past Swedish wouldn't roll-out updates or patches on a regular basis, now IT handles about five deployments every week. "We're so much more agile and flexible with our roll-outs and upgrades." Swedish also doesn't have to send IT staff on-site to install applications for smaller groups. Everything is handled centrally.
- 2. Anywhere access for roaming users:** Because SoftGrid follows the user, not the machine, nurses, physicians and staff can now roam from campus to campus and access their applications without worry. "We interviewed users after the SoftGrid deployment to ask whether their experience had changed. They consistently cited the ability to get their desktops no matter where they were working. They had no idea what we did to fix it, but were very happy with the results," Criss said.
- 3. Accurate application licensing and tracking:** With SoftGrid, Swedish knows every version of software that's deployed on its clients and exactly how people are using each one. As a result, Swedish ended up eliminating a few applications because nobody was using them. With other applications, they adjusted the licensing to reflect actual use. For instance, Swedish had 150 licenses for a clinical application but found out through SoftGrid that only 25 people used it concurrently. Not only did they save money on the license reduction, they saved on ongoing maintenance fees as well.
- 4. Instant desktop replacement:** Prior to using SoftGrid, Swedish IT had 20 images that they had to support and manage. They since trimmed that to just three images. Now when a desktop must be replaced, IT sends it out with a base image and when the user logs onto the network he automatically gets all his applications. Before it often took 3-8 hours, if not days, to get a desktop up and running, and it wasn't even always fully functional. "With SoftGrid, desktops become agnostic devices that, when attached to the network, get everything the user needs instantly," Criss explained.
- 5. Cost savings:** In addition to saving the \$500,000 that Swedish would have spent on outsourcing the XP migration, SoftGrid helps save money on licensing and on personnel-related tasks such as testing, deployment and associated helpdesk support. In all, Swedish saved more than \$1 million in the first year alone.



\$1
million in
savings

Swedish Medical Center saved \$1 million-plus in deployment and support-related activities.

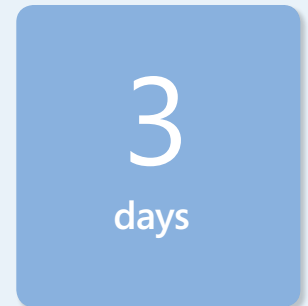
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6. Improved Citrix management: SoftGrid has enabled Swedish to reduce the headache associated with managing silos on its Citrix sever farm and has given them more flexibility in the way they manage terminal services. Whereas in the past they could only run a few applications on a single Citrix server, today they can any of the 500 SoftGrid-based apps. "If a SoftGrid-enabled application works on XP it will work on Win2003 via Citrix. There are no conflicts, and we don't have to silo the way we did in the past," Criss noted.

Postscript: Swedish currently uses both SoftGrid and SMS to centralize application delivery and management. They are planning to integrate the two products via the SoftGrid SMS Connector, which will enable Swedish to realize even greater efficiencies and cost savings.

See For Yourself

To learn how Microsoft SoftGrid Application Virtualization and the Microsoft Desktop Optimization Pack for Software Assurance can help you, please visit: www.windowstvista.com/optimizeddesktop.



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