

IGEL SUCCESS STORY: SALEM STATE UNIVERSITY

Salem State University Teams with IGEL, Citrix and Nutanix to Deliver Digital Workspaces



Constrained IT resources drive need for the IGEL's robust management features; maturity of Citrix virtual desktop infrastructure, and the simplicity and time-to-value for Nutanix's hyperconverged infrastructure offering make the combined solution a no-brainer for the university.



FEATURE QUOTE

“The manageability, ease of use, security features and level of support were top deciding factors in selecting IGEL, Citrix and Nutanix at Salem State University,”

~ Jake Snyder, Director, Centralized Desktop and BYOD Application Management Salem State University

SUMMARY

The Customer

Salem State University is a four-year public university located in Salem, Massachusetts offering undergraduate, graduate and professional and continuing education programs.

The Challenge

- Need to provide a digital workspace experience with anytime, anywhere access to applications that is as good as, or better than what a traditional PC can offer
- One full-time IT person to manage the university's VDI and virtual apps
- No clear migration path to Windows 10

Goals and Objectives

- VDI creates the possibility of reassigning five ITS open labs to new classrooms.
- Power savings
- Reassignment of student employee labor for computer repair and deployment to other needed campus areas
- Reduction in SCCM Windows patch management
- Elimination of “special builds” or custom imaged desktop computers
- Reduced expense for technology deployments in new and renovated buildings

Murky Migration Path from Windows 7 to Windows 10; need for greater security and ease of management; and anytime, anywhere access to digital workspaces leads university to consider VD

When Jake Snyder joined Salem State University's IT department, the public university located just outside of Boston, Mass. was only using traditional PCs. "95% of the PCs were still on Windows 7 and there was no clear migration path in sight to Windows 10," recalls Snyder. "Additionally, all updates to these aging desktop computers were being done locally in the university's computer labs. Management was difficult and time consuming."

The university realized something had to change, and that was one of the reasons why they brought Snyder on board - to upgrade its end-user computing environment to VDI. Salem State was looking for the security and manageability that a VDI solution could provide. "One of the biggest challenges that the university had been experiencing was managing desktop imaging and applications," said Snyder. "They wanted to be able to keep their student, faculty and staff end-points up to date and secure, while at the same time easing the patch management and troubleshooting process. They weren't able to do any of this with their previous set-up."

Salem State University also liked that VDI would consume less energy, require less cooling and that it would level the playing field by providing all students with anytime, anywhere access to their digital workspaces and applications. "Our students would no longer be required to purchase expensive hardware to gain access to high-end graphics software such as Adobe Photoshop, AutoCAD and other applications. With Citrix and IGEL they can login to any device, on-campus or from home, and complete homework assignments using these software programs."

IGEL's robust and customizable management console seals the deal at Salem State

As a "one-man" operation overseeing Salem State's VDI environment and virtual apps, it was up to Snyder to select an endpoint solution that would offer the ease of management and security that the university desired, while at the same time providing an exceptional experience for its end-users.

Snyder first saw a demo of the IGEL solution at the final BriForum event in Boston in 2016. "It was great to see IGEL at that event as I had heard a lot of good buzz around their products and solutions, especially from other colleagues in the industry," said Snyder. "After BriForum, I went back and ordered some evaluation units to test out within our EUC environment."

"We are very proud of the fact that the IGEL UMS is a single endpoint management solution that provides IT with automated backend control," said Jeff Kalberg, Technology Evangelist, IGEL. **"Purpose-built to simplify the management of complex**

- Improved experience for all students and faculty
- Improve software licensing efficiency by only purchasing only what is needed to distribute applications to active users versus purchasing a license for every computer

The Solution

- IGEL OS
- IGEL Universal Management Suite (UMS)
- IGEL UD Pocket
- IGEL Universal Desktop (UD3 and UD6)
- Citrix XenDesktop and Citrix XenApp
- Citrix NetScaler
- Citrix Storefront
- Nutanix Enterprise Cloud OS
- FSLogix for profile management and Office 365 container management

Key Benefits

- Longer warranty period
- Environmentally friendly
- Levels the playing field by providing all students with anytime, anywhere access to applications
- Significant reduction in logon times
- Policy-based access to applications
- Ease of management via a centralized management console
- Multiple layers of security with IGEL, Citrix and Nutanix

enterprise environments, IGEL UMS supports both IGEL and Windows operating systems. Further, this smart, simple and secure management software lets IT organizations easily manage any remote endpoint.”

What Snyder quickly discovered during the evaluation period was that the IGEL Universal Management Suite (UMS) was not just plug-and-play, like he had expected. “The IGEL UMS was a very customizable solution, and I liked the robust interface,” continued Snyder. “Despite competitive solutions, it was clear from the start that the IGEL devices were going to be easier to use and cheaper in the long run. IGEL really was a ‘no-brainer’ when you consider the management capabilities and five-year warranty they offer on their hardware.”

Snyder has also found he can rely on the IGEL Community for support and advice. **“The IGEL community has been a bonus, they are really doing a great job with this program,”** said Snyder. **“I give it top marks for the tips and scripts, and it offers a great forum for sharing/exchanging ideas and also helping each other troubleshoot.”**

Maturity and cost-effectiveness of Citrix VDI makes it the university’s top choice for supporting its apps anywhere digital workspace solution

While Snyder was evaluating endpoint hardware to replace Salem State’s aging desktop infrastructure, he was also evaluating VDI software to support the university’s Apps Anywhere digital workspace solution.

“The primary reason I chose Citrix was due to its maturity within the marketplace,” said Snyder. “Citrix XenApp and XenDesktop offered all we needed and much more to deliver our Apps Anywhere solution to Salem State’s students, faculty and staff.”

With Apps Anywhere, Salem State’s students, faculty and staff now have anytime, anywhere access to the Microsoft Office Suite, excluding Outlook. Students also have access to applications used in their classrooms such as high-end graphics, math, sciences – which is forthcoming, and more. For e-mail support, the university leverages an FSLogix Office 365 Container with profile management. “Thanks to Citrix VDI, we can now offer these apps in what feels like a desktop environment – end users don’t even realize it’s an app,” said Snyder.

One of the biggest surprises for Salem State with the deployment of Citrix VDI on the IGEL solution was the dramatic reduction in login times. “Logins could take upwards of 1 minute and 30 seconds, and we’ve

reduced them to less than 20 seconds. Additionally, we had one statistics application used by our math classes that had been taking more than 10 minutes to launch on a desktop. We moved it over to the Apps Anywhere on the IGEL endpoint and the login time was reduced to less than 30 seconds. These vast improvements, which resulted in greater productivity, helped me make the case for IGEL and Citrix at Salem State.”

“At Citrix, we are committed to building the workspace of the future by engineering comprehensive, integrated digital workspace solutions that help customers transform how they work,” said John Panagulias, Director, Citrix Ready, Citrix. “Working with IGEL, we are bringing Salem State into the next phase of end-user computing with a solution that provides an end-user computing experience that is a step above a traditional PC environment.”

Salem State is currently leveraging Citrix XenDesktop and XenApp within its EUC environment. “Cost savings has also been another big discovery for us,” continued Snyder. “Using XenApp radically reduces the cost of Windows licensing for us as it helps us to avoid the VDA license requirement and instead purchase RDS client access licenses.”

Nutanix ties it all together; adds another layer of security

Salem State was also interested in leveraging hyperconverged infrastructure as part of its VDI deployment. “We looked at a number of solutions but found that Nutanix really stood out from the crowd,” said Snyder. “They ranked high on the Gartner Magic Quadrant and had a good reputation in the industry.

“We like to work with partners like Citrix to take the guesswork out of application and desktop virtualization,” said Venugopal Pai, Nutanix. “We are happy to be working with Salem State University to help deliver their Apps Anywhere solution, while at the same time reducing the complexity of their IT infrastructure.”

Snyder first engaged with Nutanix when he brought them in to consult with the Citrix VDI deployment. **“The level of support and implementation assistance they provided was key. Their experience in working within the Citrix infrastructure helped the process go much more smoothly for us.”**

The security capabilities of the combined IGEL, Citrix and Nutanix solution also help Salem State better secure its EUC environment and keep student data safe. “We approach security in the same way as peeling an onion,” continued Snyder. “We have different layers with the

design of our solution. When traffic leaves the Citrix sub-net, there is another application firewall in place.”

Other security measures used by the university include profile management for VDI. Once a quarter, the Salem State security team scans the VDI infrastructure for PCI compliance and security issues. Among the tools they use for this include Tenable’s Nessus and McAfee Move anti-virus software.

Summary

Salem State University currently has 400 IGEL Universal Desktop software-defined thin clients deployed on its campus including 360 UD3 thin clients, which are the workhorse of the IGEL portfolio, and 40 UD6 thin clients, which support high-end graphics capabilities for multimedia users. Salem State has also purchased IGEL UD Pocket micro thin clients which they are now testing.

“ The IGEL community has been a bonus, they are really doing a great job with this program. I give it top marks for the tips and scripts, and it offers a great forum for sharing/exchanging ideas and also helping each other troubleshoot. ”



Visit us online at [igel.com](https://www.igel.com)

Revolutionary in its
Simplicity