



Helping students succeed, protecting patient data

The College of Dental Medicine at Nova Southeastern University improves training and complies with regulatory requirements using a virtualized desktop solution and thin clients



Higher Education

United States

Business needs

The College of Dental Medicine at Nova Southeastern University (NSU) wanted to give its students better, more powerful training technology and improved patient care while also enhancing device security.

Solutions at a glance

- [Cloud Client-Computing](#)

Business results

- Helps students take full advantage of the college's 3D software
- Complies with HITECH regulatory requirements for patient privacy

Deploys updates
in minutes
instead of hours



50%
Reduction in costs



Every day, students at Nova Southeastern University (NSU) College of Dental Medicine use radiographs, 3D imaging and powerful practice management software to receive training in the latest dental techniques. However, these students were limited by the PCs used to support the software. “We needed to have larger screens and better resolution for radiographs (X-rays) and 3D images,” says Dr. Joel Slingbaum, assistant professor and director of information technologies at the college.

Securing patient data was another major concern, especially in light of the Health Information Technology for Economic and Clinical Health (HITECH) Act. “When the act was first passed, we were switching to a new software and we wanted tighter control,” Slingbaum says. “Violation of the act could result in thousands of dollars in penalties, so we had to ensure we were in compliance. We needed to install machines that could be easily maintained and secured.”

Additionally, the college wanted to reduce the technology footprint at each dental training and clinical station. “Students have a limited area to work in, so we wanted to get rid of the towers with wall-mounted PCs,” Slingbaum says.

Implementing more than 300 thin clients at eight locations

Because the college had already been using Dell EMC PowerEdge servers and Dell EMC Storage SC Series technologies in its data center, it decided to evaluate Dell thin client desktop solutions. “We did consider other thin client vendors as well, but we have had a great experience with Dell from a technology and customer service perspective,” Slingbaum says.

The college specifically chose to deploy Dell Wyse 5040 All-in-One Thin Client desktops, which operate on the fast and virus-resistant ThinOS and deliver high-end graphics and HD multimedia capabilities. “The Dell Wyse solution provides a 21.5-inch screen, which is 3 inches larger than our previous PCs. And the resolution is greatly improved,”

says Slingbaum. “The technology met our needs perfectly.” The college installed 100 Dell Wyse 5040 desktops at its main clinic and deployed another hundred more at its seven offsite clinics throughout south Florida. The college has also implemented 130 Dell Wyse 5040 desktops in its dental simulation lab on the main campus. First- and second-year dental students train in the lab to replicate real-life dental procedures on patients.

“Previously, doing updates required a team of IT employees at each of our clinics. That process took many hours to complete. Now, we can do it all in minutes because of the centralized management of the Dell Wyse 5040 All-in-One desktops.”

Dr. Joel Slingbaum
Assistant Professor and Director of
Information Technologies,
College of Dental Medicine,
Nova Southeastern University





Giving students better training using state-of-the-art dental software

The NSU College of Dental Medicine is now able to support the training needs of students at all levels. “Our students have larger screens and improved resolution using the Dell Wyse 5040 desktops, and that makes training more effective,” Slingbaum says. “They can get the most out of our practice management software. 3D dental images and radiographs are more diagnostic, and the bigger screens mean they can review training videos and live presentations on the same screen.”

Additionally, because they can run educational applications and practice management software from the Dell screens at each station, students no longer need to rely on PCs or laptops. “Students can use more of the space at their stations for working on patient simulators, or on a real patient in the simulation labs,” says Slingbaum.

Helps college comply with HITECH regulations

The college can better comply with HITECH regulatory requirements with the Dell solution. “We can easily comply with the HITECH law using the Dell Wyse 5040 All-in-One desktops, because nothing is stored on the local machine,” says Slingbaum. “There is no way of storing patient data locally. By using our Citrix virtual desktop software on the back end, we can contain all the patient information in the data center. We can control access to the desktops, what applications are being used, and what data is accessible through those applications.”



Deploys software updates in minutes instead of hours

IT administrators at the college are taking advantage of centralized desktop management to set up new machines and deploy software updates faster and easier than ever before. “It’s very easy to manage the desktop environment because everything is session-based and centralized in the data center,” says Slingbaum. “When we need to make a change, it takes effect as soon as the thin clients boot up. With these capabilities, we have been able to eliminate the need to do manual, station-by-station modifications. Previously, doing updates required a team of IT employees at each of our clinics. That process took many hours to complete. Now, we can do it all in minutes because of the centralized management of the Dell Wyse 5040 All-in-One desktops. We’re much more efficient and productive.”

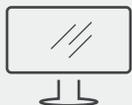
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Cuts costs by 50 percent

The college is also saving money by replacing its previous solution. “We are saving at least 50 percent of our costs by using the Dell Wyse 5040 desktops, because we don’t have to purchase full PCs and monitors and deploy them at each station,” Slingbaum says. “Overall, by using upgraded back-end Dell EMC hardware and the Dell thin client solution, we can give our students everything they need. We can give them a better opportunity to learn and apply their knowledge and techniques to their educational and clinical goals.”



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