Bryant University Delivers Classroom Apps on Virtual Desktops

Bryant is a New England university with more than 3600 students. Its business program ranks in the top 10. Six months after graduation, nearly all graduates are employed or enrolled in graduate school.

Challenge: efficiently deliver classroom applications to students

Bryant enjoys a reputation for academic innovation. Case in point: a new concentration in Applied Analytics that teaches skills relevant to careers in business, public health, and social sciences, arts, and humanities. As part of the curriculum, students gain hands-on experience with Statistical Analysis System (SAS) software, leading to resume-boosting SAS certification.

“We needed a way to deliver SAS software to students without burdening either the students or the IT team,” says Carlos Samayoa, manager of infrastructure services at Bryant.

Initially, students dropped off their laptops at the helpdesk, where a student staffer would install and configure the software. But configuration errors frustrated students. And who wants to give up their laptop for several hours?

Solution: deliver classroom applications on virtual desktops

The IT team came up with a better idea: deliver the SAS software and databases on virtual desktops. Students would visit the class lab to check out a virtual desktop on a thin client, do the assignment, and check the desktop back in.

For the pilot, the IT team used the university’s existing Cisco Unified Computing System™ (Cisco UCS™) servers. The virtual desktop pilot was a rousing success with students and a relief to the student helpdesk staff. Bryant decided to move ahead with 30 virtual desktops for the lab, and another 30 to replace library kiosks.

Where to host the virtual desktops?

“At first we tried desktop as a service from a cloud provider,” Samayoa says. “Performance was good, but costs were prohibitive. We didn’t want to purchase a per-user license every academic quarter without end.”

To keep IT simple, Bryant decided to host virtual desktops on all-in-one hyperconverged infrastructure. After
With Cisco HyperFlex, Bryant University:

- Improves IT services for students
- Cuts lab desktop costs by 87 percent
- Saves time for IT team

evaluating leading platforms, Bryant chose Cisco® HyperFlex System.

“Cisco HyperFlex has everything needed for virtual desktops: Cisco UCS servers, storage, and also networking,” Samayoa says. “We can quickly cable up a new node if we later add more users or applications. And our staff didn’t have to learn a new management interface because they already know Cisco UCS Manager very well.”

Desktop costs dropped by 87 percent
For less than the cost of eight desktops, Bryant bought 60 thin clients for the lab and library. Thin clients generally last up to three times longer, multiplying the savings. Helpdesk volume plummeted because logging off and then checking out a fresh desktop resolves most issues. And all virtual desktops fit in just one rack unit, reducing space and power requirements and cooling costs.

Students like the experience
Students are thrilled to not have to drop off their laptops at the helpdesk to get SAS software. The virtual desktop includes all applications and databases needed for assignments. Any changes that students make disappear when they log out, so students get a pristine desktop every time. “Performance is fantastic,” says Samayoa.

A few faculty and staff users have their own virtual desktops, which preserve their settings from one session to the next. In the library, virtual desktops provide a catalog and browser.

IT says “yes”
Before, IT could only accept faculty requests for new classroom applications at the beginning of the semester. Building a new desktop image took too much time. Now the IT team can consider requests any time.

“Building and configuring desktops is so much faster with HyperFlex because it’s built for VDI,” Samayoa says. “We haven’t had one error in deploying a desktop, and we can create dozens of clones in seconds.”

Recently, the IT team delighted a faculty member by granting her midterm request to add a collaboration forum for students.

What’s next: more virtual desktops and more applications
Bryant leaders keep thinking of new ways to enrich campus IT with the Cisco HyperFlex platform. For example, more faculty and staff are trying out virtual desktops.

The university plans to host other classroom applications on the Cisco HyperFlex platform. Adding storage for additional students and compute for more applications will be as simple as connecting a new node or blade server. No cabling. And no need to manually move desktops to the new node because HyperFlex does it automatically.

“Delivering virtual desktops from Cisco HyperFlex creates a great experience for students, teachers, and staff while making life easier for IT,” says Samayoa.
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Carlos Samayoa
Manager of Infrastructure Services, Bryant University

Bryant University
Higher Education

Products and Services

Unified Computing
- Cisco HyperFlex HX220c M4
- Cisco UCS B-Series Blade Servers
- Cisco UCS Manager

Desktop Virtualization
- VMware Horizon 5.5