A2U helps Butler Community College Shift from 5% to 100% Remote Learning in Days

College uses Citrix Virtual Apps and Desktops and Citrix ADC to recover from a massive cyberattack and move thousands of students online.

What would be tougher for your IT organization: recovering from a devastating cyberattack or shifting your entire campus to remote work in a matter of days? The team at Butler Community College (BC3), a 3,500-student public college near Pittsburgh, didn't have the luxury to choose. They got to take on both, one right after the other, in less than three weeks.

Responding to a major disruption

It started in mid-February, when a vicious ransomware attack brought down huge chunks of BC3's IT stack. Critical applications, file-sharing, the Citrix database powering student and faculty workstations—everything was knocked offline. Fortunately, BC3 had everything backed up. Even luckier, it was spring break. They could rebuild the entire environment before students returned to campus—if they worked around the clock. Facing a huge task on a short timeline, BC3 brought in A2U, one of the region's leading IT solution providers and an expert Citrix Solutions Advisor, to help.

"They had lost access to Citrix, their SQL database, and their entire remote application platform was down," says Jamar Tyler, senior technical specialist with A2U. "We immediately started to build a brand-new Citrix and SQL infrastructure, knowing we had a narrow window to get everything back online."

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>
> — Jamar Tyler, Senior Technical Specialist, A2U

Working nonstop, Tyler and the BC3 team stood up a completely rebuilt Citrix and SQL environment—with all BC3's unique applications, desktops and nuances—in a few days.

"It was remarkable," says Bill Stegner, virtual systems specialist for BC3, who handles the institution's virtual infrastructure. "We worked over 24 hours and had everything back up when the students returned to campus."

No rest for the weary

The BC3/A2U team deserved a vacation after that effort. Fate had other plans. Less than a week after the project wrapped, Stegner was calling Tyler with a new problem.

"On March 9, we received an email that everyone was to leave campus due to the growing COVID-19 pandemic," says Stegner. "Within three days, BC3 leadership decided we were going to go all-in on remote learning. We were going to finish out the semester and put everything online."

At that point, just 5 percent of BC3 courses were online. For the most part, the entire school was built around in-classroom learning. Now, BC3 had to transition everyone—thousands of students and hundreds of faculty and staff—to 100 percent remote learning. And, if students were going to finish their courses on time, they had about a week and a half to do it. Once again, Tyler and the BC3 team sprang into action.

Building a better foundation

The timing of the ransomware attack turned out to be fortuitous for BC3. Not only had A2U restored the Citrix Virtual Apps and Desktops and Citrix ADC solutions, Tyler ensured they'd be even stronger than before.

"While I was rebuilding, I took steps to align the entire environment with Citrix best practice," says Tyler. "I made sure that the right policies were configured, added high availability in places they didn't have it before, load balanced all Citrix services, fine-tuned their Citrix ADC. We also fine-tuned the Citrix Gateway to provide a more secure user experience, taking them from a B-minus on their SSL Labs test to an A+. Just small things to help future-proof the infrastructure."

Now, as Stegner more than doubled the capacity of the Citrix platform, those small steps added up to a major benefit. BC3 was able to make the full range of campus workstations—Windows 10 desktops, CAD workstations, Adobe Graphic Design Desktops—remotely accessible to every user. "Our goal was to show students, especially power users among the faculty, that remote work

The solution

- Citrix Virtual Apps and Desktops enabled the college's full range of desktops and workstations to be available remotely to all students and faculty.

- Citrix ADC ensured that the college's applications could be delivered to a diverse, 100-percent remote user base with high performance and a phenomenal user experience.

was not just feasible, but that it could be done with the same experience they would get in the classroom," says Tyler. "I didn't want users complaining to Bill and writing tickets every day saying, 'This is slow,' or 'These videos I'm working on are pixelated.' We had to make sure everything was optimized for that remote connection."

Preparing for the future

Once again, Tyler and Stegner found themselves working round the clock. But, within days, BC3 was delivering full-featured remote learning to thousands of students.

"Citrix Virtual Apps and Desktops was instrumental in the success of completing the spring semester," says Stegner. "We went from 5 percent to 100 percent remote learning within 10 days, and everything just came together. Students can use the same desktops whether they are on campus or at home. Faculty gets the same experience as well, along with the ability to securely connect to their workstations in the office. There have been no major hiccups."

Now, the school is a model of the digitally-connected college. Whether students return to campus full-time in the fall, continue to learn remotely or anything in between, BC3 is ready.

"Citrix Virtual Apps and Desktops is a great tool to keep continuity throughout the institution, and we'll be prepared if this ever happens again," says Stegner. "Looking forward, the advantages of the Citrix solutions can only help us. We have the ability to scale as needed very quickly. If a similar situation arises in the future, we have the ability to take our whole operation remote within a few hours. Now that users are more familiar with how the systems work and their reliability, we may see bigger adoption of remote learning. Distance education could also potentially grow due to the ease of access from around the globe.

About Citrix Partner A2U

A2U is a national leader in IT solutions, providing some of the industry's best solution architects to solve clients' security, application delivery and VDI needs. Through A2U's unique, trusted advisor approach, they commit to understanding clients' businesses and delivering deep technical expertise. It's that commitment that allows A2U to maintain high customer satisfaction ratings and keep clients coming back for continued IT support.

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