Case Study

education services



ProctorU

Ricoh upgrades ProctorU's technology infrastructure from start-up stature to systems savvy

It was always in the back of my mind to work with Ricoh if I needed help at ProctorU."

> – Matt Jaeh Chief Technology Officer ProctorU Birmingham, Alabama

ABOUT THE CUSTOMER

In 2008, startup ProctorU emerged in the online testing and assessment world with the mission to protect the academic integrity of online programs around the world. Growth came quick.

In less than a decade, ProctorU has already administered more than 2 million exams for educational and corporate test-takers in 129 countries and partnered with nearly 1,000 institutions. Its tests are administered by a staff of approximately 600 housed in four U.S. offices plus an international support center in the Philippines. Through the years, ProctorU has made a name for itself by merging innovative digital solutions such as identity and exam management technology with people-centric services that lend intuition, efficiency and cost-effectiveness to its offering.



As a once small, entrepreneurial-minded startup turned global online testing juggernaut, ProctorU was experiencing the usual growing pains. How much should it invest in its technology infrastructure? Were new technology solutions needed to support its current business platform and provide more room to grow? Should they hire additional IT people or find an outsourced partner to modernize its technology to transform information and remove productivity barriers for employees?

The time had come to address these questions.

CHALLENGE

- Time-consuming workstation management
- On-going security updates and patches
- Aging operating systems, no automated workstation disaster recovery
- Dedicated workstations inhibit productivity

SOLUTION

- AWS cloud-based and local domain controllers
- VPN connections to all four sites
- Windows® 10 upgrade, offsite data backup
- Roaming profiles in lieu of dedicated workstations

RESULTS

- Centralized systems and management
- Fast, easy updates, patches and OS installs
- Improved employee productivity and client satisfaction
- Right-sized technology infrastructure, delivered under budget





CHALLENGE

As ProctorU continued its upward trajectory, it became increasingly difficult to keep its workstations up to date and ensure software was properly installed. While the number of workstations continued to grow, its peer-to-peer network of IT staff at each site remained minimal—typically one person per location.

If something went wrong at one workstation, the on-site IT staff member had to localize the issue to track down the problem and install software updates one by one. This could take up to two hours per workstation, slicing into both IT staff's time and the productivity of each employee validating test results.

Security was also a concern. While the network was reliable and ProctorU had strong security on the software it writes and controls, the company relied on manual security audits for patches and operating system updates. These manual audits and updates were time consuming and required constant attention.

Additionally, ProctorU employees were still working on computers equipped with a Windows® 7 operating system. While not unsupported by Microsoft just yet, an update to a Windows® 10 environment was imminent.

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ProctorU also wanted its executives who travel between offices to be able to log into its systems without interruption. And with employees bound to dedicated workstations, work would grind to a halt if problems arose with their device.

Furthermore, ProctorU didn't have a seamless way to replicate information on its workstations to ensure a backup of the data was readily available in case of a catastrophic event.

Matt Jaeh, Chief Technology Officer at ProctorU, knew technology upgrades were needed. But he was also aware the C-suite had other spending priorities to address.

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SOLUTION

Ricoh put together the winning plan and price structure to significantly upgrade ProctorU's technology infrastructure. Key to the plan was setting up and connecting four local domain controllers as well as establishing and integrating a fifth AWS cloud-based domain controller to meet backup and security requirements. The domain controllers are tied to each site through VPN connections, which allows ProctorU to replicate active directory work groups for centralized workstation management and redundancy.

"AWS domain controller integration, offsite backup and site-to-site VPN were key parts of my user requirements," said Jaeh. "If something catastrophic happens, we now have active directories to restore the servers."

With the imaging capabilities of the domain controllers, ProctorU can update workstations, apply applications and patches and image new workstations remotely in about 20 minutes—and multiple workstations can be updated simultaneously.

This solution also provides roaming profiles that enable ProctorU's employees to log into any station at any site and quickly and securely access the information they need to work. Roaming profiles is a Windows® architecture that transmits a complete copy of employee data to the server during login and logoff at a workstation. No information is stored on the device, eliminating the need for dedicated workspaces.

With the domain controllers and networked connectivity throughout the sites, ProctorU has the ability to centrally manage password policies, push out group policies to workstations and recover data if a workstation crashes. Ricoh also helped ProctorU upgrade its first wave of workstations from a Windows® 7 operating system to more modern, sustainable Windows® 10 platform.

Along with the Windows® upgrade, the imaging capabilities of the domain controllers were leveraged to make imaging workstations going forward much easier and faster for ProctorU. Ricoh created a Windows® 10 unified image that ProctorU IT staff can use to centrally update workstations, apply applications and patches and image new workstations at any of its sites.

"It's a lot faster and easier to reinstall OS with a unified image that allows us to see a remote image and reinstall with all the correct drivers," said Jaeh.





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Now we're managing the workstations."

RESULTS

With its new technology infrastructure in place, ProctorU has already noticed far-reaching benefits. Employees are able to be more productive and stay on task, which helps them deliver a better experience for ProctorU clients. From an IT perspective, central management of systems has increased IT staff efficiency in locating and fixing problems, updating systems and applying patches in a timely manner—with limited resources.

"Our workstations used to manage us. Now we're managing the workstations," said Jaeh.

Faster installation, time to troubleshoot

With a Windows® unified image and central management, ProctorU has dramatically reduced the time it takes to install or reinstall Windows® 10 on its workstations. A process that used to consume up to two hours of IT time on site can now be accomplished in about 20 minutes—and multiple workstations can be updated simultaneously. This has freed ProctorU's IT people to concentrate on helping its employees when problems do arise.

"The ability to have our ProctorU IT people free to assist our employees is huge," said Jaeh.

Fast-tracked installation, under budget

Jaeh had a very specific timeline in mind when he requested quotes in the spring for upgrading the technology infrastructure at ProctorU. With a heavily academic customer base, everything had to be complete prior to fall mid-term and finals test schedules. The aggressive timeline was not only met, but their entire solution was also delivered below its original quote.

Proportional spending, best practices in place

ProctorU is now spending what it should on technology for a business its size and has the right technology in place to support its capabilities today—with room to grow. Best practices are established to keep its workstations up and running with centralized systems management. And if new needs arise, ProctorU knows who to call.

"I would definitely work with Ricoh again if we need to roll out new technology or features," said Jaeh. "They would be my first call."

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