## CASE STUDY

## Nerdio Bolsters New Era of Remote Learning for Penn State University

Discover how the public research university both expanded remote learning capabilities for 1000+ monthly active users across the globe and saved +71% on AVD spend with Nerdio Manager for Enterprise.





For more than 150 years, the Pennsylvania State University has been dedicated to providing a top-rate education to its students. With 24 physical campuses across the state and its virtual World Campus, the IT team plays a crucial role in delivering University resources to students around the globe in the most efficient way possible.

To do so, historically, Penn State used a product that provided only remote access to individual applications. But withthe onset of the pandemic in 2020, IT needed a solution that allowed users to access physical labs from off campus. This supported a vision where World Campus students would have access to the same resources as those conducting their studies in person. However, the technology the University had in place at the time simply wasn't built to accommodate the scale and scope of this undertaking.

As a result, the Penn State IT team invested in Azure Virtual Desktop (AVD) to enable a few different use cases — the World Campus being a leading priority.

The team started to script the service's automated scaling in- and out- of session hosts but found it a bit cumbersome to manage. The image creation process also was not as streamlined as the IT department needed it to be, so they opted to put a management solution in place that could simplify their AVD tasks and operations.

# A MASTER CLASS IN EFFICIENCY

In August 2021, Penn State partnered with Nerdio to leverage the Nerdio Manager for Enterprise platform in tandem with AVD. Immediately, the team appreciated Nerdio's intuitive GUI (graphical user interface) and was impressed with the ease and speed of implementation.

"The transition was totally painless," said Ian Cohn, Systems Design Specialist, Penn State. "Nerdio Manager layers on top of AVD in a non-disruptive manner to manage the underlying resources without getting in the way of any native Microsoft services, which was a real selling point for our IT team."

Following roll-out, Cohn and his team were able to dig into the platform and fully realize how much more efficient management of AVD could be with Nerdio. For instance, burstable and multi-trigger auto-scaling cut down on required man hours and allowed Penn State the ability to pre-stage its hosts and schedule image updates.

Scripted Actions have been another big time saver for Cohn and team. Using the plethora of out-of-the-box PowerShell scripts contained in Nerdio Manager, they were able to extend and customize the functionality of the platform while spending less time on manual configuration.

Cohn found Nerdio's REST API to be incredibly helpful and full-featured. This set of API calls enabled admins to integrate Nerdio with other IT service management platforms. This allows the Penn State IT team to customize actions and tasks inside the platform and automate monotonous work, like management of session hosts.

### **LESSONS LEARNED**

Penn State's implementation of Nerdio Manager for Enterprise has its IT staff working smarter, not harder. Not only did the platform streamline administrative tasks so IT could focus on more critical initiatives that further the mission of the University, but its detailed reporting and summary dashboard have been leveraged to inform IT strategy and improve the cost optimization of Azure.

"The data Nerdio Manager provides as part of its standard offering has been invaluable," Cohn commented. "I can quickly and easily provide high-level insights to my superiors and other key decision makers within the organization when it comes to matters that impact costs, like host pool sizing and purchasing reserved instances. We can then optimize our performance while reducing our overall spend."

In September 2023, Penn State reached over 1,000 active users leveraging AVD and Nerdio. It saved more than 71% on its AVD bill.

"Nerdio greatly reduced our burden and time to adopt," concluded Cohn. "I can't speak highly enough of the technical capabilities of the platform, but also the Nerdio support team. It's partners like Nerdio that help Penn State continue to provide top-notch educational resources to students around the world."



## **ABOUT NERDIO**

Nerdio adds value on top of the powerful capabilities in Azure Virtual Desktop, Windows 365, and Microsoft Intune by delivering hundreds of features that simplify management, ensure efficient operations, and lower Azure compute and storage costs by up to 80% via automation.

Enterprise IT professionals can deliver and maintain a wide range of virtual Windows endpoints and Windows applications across hybrid workforces with ease and fine-tune end-user computing (EUC) approaches for maximum effectiveness using powerful monitoring and analytics capabilities.

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