A Hong Kong Leading University Aiming to Centralize and Improve PAM Security with PrivX
One of Hong Kong’s most prestigious universities and a leading educational establishment that works with a considerable number of third-party vendors

As an influential university in the East Asia region, the customer works with an exceptionally high number of third-party vendors, contractors and users. However, its departmental structure means that access approval is decentralised and complicated by the fact that each department utilises a distinct workflow. The university also lacked access recording capabilities, so they had no way of monitoring who accessed their systems. PrivX was introduced to standardise access management across the organisation, improve security and allow for role-based access settings.

PrivX makes password sharing a thing of the past

The customer’s previous access management system was based on a password sharing policy. For an educational establishment that interacts with a considerable number of third-party vendors and is structured around independent departments, this approach is less than ideal. It’s problematic because:

1. **There is no centralised system**

   Different departments deal with access requests and approval manually. This resulted in a situation where users could gain access by riding on emails permission and some engineers were writing down passwords for external parties on scraps of paper. It also made switching between departments or working with several departments confusing and time-consuming. When the university recognised that the sheer diversity of access requirements made the system too complicated to manage centrally, they approached SSH.com.

2. **Password sharing is not secure**

   A password sharing approach is prone to security lapses. Passwords can be lost, stolen or accidentally shared, and admins can forget to change the login details, leaving the system open to abuse.

3. **No access recording functionality**

   The university had no session recording capabilities. Consequently, there was no record of who accessed their system, when they did so or what they altered.

By adopting PrivX, the customer resolved all of these issues and now benefits from a more secure, streamlined and centralised Privileged Access Management (PAM) system. With its password-free approach to access management, PrivX saves the customer valuable time and resources, too.
Within the university, each department is responsible for determining access to its systems, and each runs its own IT projects. This means that there are significant discrepancies in the way departments manage access.

For this reason, the customer needed a PAM that helped it to centralise and standardise access management. This eradicated the complexity and conflicts inherent in a decentralised, departmental system and allowed it to tailor access requirements to individuals’ needs.

For instance, PrivX now allows the university to offer password-free access to staff, limiting the possibility of a security breach. By using the patented ephemeral certificates and Multi-Factor Authentication (MFA) to identify individuals accurately, PrivX ensures that only genuine, approved users can access the system, while also eliminating password leakage and sharing. Admins can also define the degree of access and limit access time depending on the employee’s role. This is particularly useful when it comes to granting third-party access.
Another critical benefit of PrivX to the customer is the introduction of a standardised workflow for access permission requests, refusals and approvals. Before, the university departments handled these processes however they saw fit. This was particularly difficult for any third-party vendors who worked with multiple departments and had to keep track of their distinct approval processes. It also meant there was no access approval history and no records to say why an individual had been granted access.

This resulted in an unsafe security situation. Many third-party vendors had access to the customer’s system - and there was no record of why they had received approval, who granted the access or what actions they had taken. All of this changed when the customer adopted PrivX. The system’s role-based approach allowed the customer to tailor access requirements and

Just as importantly, PrivX standardised the access approval workflow, so third-party users now request access in precisely the same way, no matter which department they’re working for. It also ensures a comprehensive paper trail that shows who requested access, why they requested it and who approved it.

The new workflow is far more efficient than the customer’s previous system, in which IT admins wasted a considerable amount of time fielding manual access requests. PrivX’s password-free approach ensures that the university no longer has to dedicate time and resources to managing passwords and password sharing.

This simplifies access management and allows admins to focus on more pressing and valuable work.
PrivX’s session recording functionality has also proven particularly useful to the client. By logging all the changes made to the university’s systems, PrivX makes identifying problems, tracing security breaches and monitoring the behaviour of third-party vendors much more manageable.

Historically, working alongside so many contractors and third-party users made it difficult for the customer to untangle the who, what and when. Now, PrivX provides a quick, easy and accurate account of all recent changes to the system, ensuring the university knows exactly who made changes to the system, what changes they made and when they did so.

As a diverse organisation, it was also crucial that any PAM solution the customer introduced was compatible with Windows and Linux. PrivX provides native SSH, RDP and HTTPS access, ensuring compatibility with all necessary operating systems and web browsers.

Monitoring system changes and web integration

Summary

PrivX has allowed the customer to streamline and centralise its access management processes, making it easier and safer to collaborate with third-party vendors. The switch to a password-free system has eliminated manual access requests, giving IT admins more time to focus on the work that really matters. At the same time, it’s allowed the university to adopt a role-based access management approach that grants it greater control over who has access, how long they have access for and what they have access to. Rather than relying on an insecure password sharing approach, the customer now benefits from a customisable PAM that gives it complete control over its digital security.
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