

CASE STUDY

Enhancing security at Pembroke College, Cambridge: Strengthening MFA and identity security with Silverfort



BASED

Cambridge, UK



INDUSTRY

Higher education



USERS

250+



ENVIRONMENT

Active Directory, Azure Entra ID



Pembroke College
Cambridge

Founded in 1347 by Marie de St Pol, Countess of Pembroke, Pembroke College is the third oldest of the University of Cambridge's 31 constituent colleges. Today, it is a vibrant academic community comprising approximately 473 undergraduates, 295 postgraduates, 78 Fellows, and 175 staff members. The college is renowned for its excellent teaching and research, consistently achieving high academic standings within the university.

THE CHALLENGE:

Achieve comprehensive identity security for all Active Directory users

- Enforce MFA on privileged accounts in on-prem infrastructure
- Gain visibility and control over service account behaviours
- Implement security measures without disrupting existing IT operations

THE SOLUTION:

Enhanced protection for privileged and service accounts

- MFA enforcement extended to on-prem privileged accounts
- Improved visibility into service account activities and risks
- Seamless integration with existing environment

The challenge: Strengthening on-prem infrastructure and service account management

Pembroke College's IT department recognised the growing risk of unauthorised access to privileged accounts and the limited visibility into service account activities. The team identified a gap in their security infrastructure, as existing measures did not fully address developing risks for protecting on-prem applications and Active Directory authentication processes.

The IT Department sought a solution that would enforce MFA on all privileged users, provide visibility into service accounts, and integrate smoothly with their existing environment without causing disruptions.

“We needed to enforce MFA across all privileged accounts and legacy applications while also improving visibility into identity security gaps. Our existing setup didn't provide us with the ability to monitor service accounts in real time, and we knew that had to change.”

– Andrew Baughan, IT Director at Pembroke College, Cambridge

Finding the right identity security partner

As a regular trusted supplier to Pembroke College, C-STEM has worked closely with their IT team over the past few years. Following a conversation around MFA and privileged access, Tyrone Isitt, C-STEM's Account Director, introduced the Silverfort solution to Andrew Baughan, Pembroke College's IT Director, who recognised its potential value after evaluating it alongside other options. Following this assessment, C-STEM showcased the solution at the CITC (Cambridge IT Colleges) event, where other institutions including Trinity College first encountered Silverfort and became a customer.

After the Pembroke College IT team's careful evaluation, they selected Silverfort for its proven success in seamless MFA enforcement, real-time authentication insights, and agentless integration with Active Directory. The collaborative relationship between C-STEM and Pembroke's IT department facilitated a smooth adoption process. The IT Department began deploying with a proof-of-concept (POC) on a single domain controller, ensuring a smooth transition before expanding Silverfort across the entire environment. The platform's ability to analyse authentication requests in real-time and enforce security policies made the implementation efficient and non-disruptive.

"After reviewing Silverfort's capabilities, I thought it would be a good fit not just for Pembroke, but potentially for other colleges as well."

– Andrew Baughan, IT Director at Pembroke College, Cambridge

The solution: Implementing MFA and service account protection with Silverfort MFA protection and adaptive identity protection policies

As Andrew Baughan noted: "Silverfort has significantly strengthened our identity security, reducing risks and giving us greater confidence in our security posture. The additional visibility into privileged account activity and the ability to enforce MFA on legacy systems have been game-changers for us."

Service account protection and lateral movement prevention

The implementation transformed Pembroke's service account management through:

AUTOMATED DISCOVERY AND CONTROL

- Intelligent mapping of service account usage
- Continuous real-time monitoring of service account behaviour patterns
- Real-time detection and prevention of suspicious lateral movement attempts

MFA protection and adaptive identity protection policies

The implementation delivered the following key security capabilities:

ADVANCED RISK-BASED AUTHENTICATION

- MFA enforcement for access to sensitive resources from unfamiliar locations
- Securing legacy authentication protocols to prevent unauthorised access

COMMAND-LINE AND RDP SECURITY ENHANCEMENT

- MFA enforcement for access to sensitive resources from unfamiliar locations
- Securing legacy authentication protocols to prevent unauthorised access

"Rolling out Silverfort was incredibly straightforward. We quickly saw value in its ability to enforce MFA on legacy systems without requiring additional software. We also gained crucial insights into our service accounts, which we hadn't had full visibility into before."

– Andrew Baughan, IT Director at Pembroke College, Cambridge



Beyond MFA, Pembroke leveraged Silverfort's behavioural analytics capabilities to detect and address unusual login activities. The team implemented service account segmentation, ensuring they could only authenticate in predefined, secure patterns. This significantly reduced the attack surface and prevented potential lateral movement attacks.

By deploying Silverfort, Pembroke College successfully mitigated identity-based threats, secured privileged and service accounts, and improved its overall cybersecurity resilience. Their collaboration with C-STEM and Silverfort has been key in building a strong cybersecurity framework.

About Silverfort

Silverfort secures every dimension of identity. We are the first to deliver an end-to-end identity security platform that is easy to deploy and won't disrupt business operations, resulting in better security outcomes with less work. Discover every identity across every environment, analyze exposures to reduce your attack surfaces, and enforce security controls inline to stop lateral movement, ransomware, and other identity threats.

About C-STEM

C-STEM is a value centric Zero Trust Architect (ZTA) MSP that provide complementary services combined with fully operationalised best of breed technology, specifically aimed at improving Detection, Compliance & Response (DCR) effectiveness to meet your business outcomes. Our mission is to help business leaders worldwide more easily achieve a secure and consistent user experience for everyone everywhere.