Petroc College – Case Study 2023

Founded in 2008 following the merger of North Devon College and East Devon College, Petroc College is one of the largest in the Devon county, with 750 staff teaching more than 4,000 students.

About the Petroc College

5,000

Users Protected

2,000

Devices Secured

65,000

Threats Prevented every 30 days

Introduction

Founded in 2008 following the merger of North Devon College and East Devon College, Petroc College is one of the largest in the Devon county, with 750 staff teaching more than 4,000 students. The college is now made up of two campuses after closing a third earlier this year, offering a variety of courses for students of all ages and abilities, including A Levels, vocational courses, T Levels, degrees, apprenticeships and industry short courses. With a focus on student wellbeing, the college acts as a focal point for thousands of students living and studying within the Devon area.

The Challenge:

As with many other industries, the education sector was hugely affected by the pandemic in 2020, forcing many schools, colleges and universities to evolve their learning experiences in order to continue teaching and to deliver courses. This led to the widespread adoption of hybrid and fully remote ways of working for both students and staff. At Petroc, this meant thousands of devices needed to be protected outside of the campus' perimeter.

This trend of hybrid working has continued despite the UK education sector emerging from the pandemic. A recent study by SchoolsWeek found that the number of children in home education has increased by 60% when compared with pre-pandemic numbers, as thousands more pupils continue to be removed from school each year.

These changes have caused massive challenges for education centres, both from a logistics and security perspective. In the past, schools, colleges and universities mostly needed to provide cybersecurity and access to online mental health and wellbeing services on local devices, which were used solely by students on-premises. However, the line of defence has now changed, and with thousands of devices moving in and out of campuses every day, keeping users secure has never been more complex.

With this new way of working and learning, students are now operating 'outside of the fence', multiplying the risk of an online assault and forcing security teams to adapt. According to the government's Cyber Breaches Survey 2023, half (50%) of higher education institutions and three in ten colleges reported experiencing online breaches or attacks at least once a week. Furthermore, nearly half (45%) of higher education institutions state that their accounts or systems were compromised and used for illicit purposes, an outcome which, in contrast, is only mentioned by 8% of large businesses.

As a result of these cybercrimes, over 60% of higher education institutions and a third of colleges were impacted by material loss such as money or data stolen while over 60% of both organisations experienced major disruption from staff having to divert their time to deal with the attack or to inform customers and stakeholders. These statistics demonstrate the serious threat of cybercrime upon the education sector.

PETROC

Petroc College's previous IT security model comprised of on-premises equipment which required extensive time and resources to manage, as well as separate access solutions for staff and students based in various locations across the three campuses during that time. Through a partnership with iboss and Microsoft specialist INTEGY, Petroc were able to move their IT capability to the cloud. This resulted in a transformation that has led to the adoption of a cloud first model, aligned to Zero Trust. With all devices now using Azure Active Directory as a primary logon account, applications & data securely stored within the Azure cloud, the natural next step was to focus on edge security. The college has a small IT team which, with the rapidly evolving threat landscape and historic, incumbent on-premises system, soon realised a need for external specialist cybersecurity support; specialists to upgrade their cyber defence strategy as well as improve student safeguarding, an area which is key for the college.

The college has recently expanded its perimeter again, adding a new site at a local leisure centre. Under its previous IT system this would have meant further investment in additional infrastructure to set up and secure the new site – another reason to modernise.

The Solution:

In July 2023, Petroc was introduced to cybersecurity, Zero Trust and web monitoring specialist, iboss, through Integy, one of the UK's leading IT companies and the college's IT partner. By this point, Petroc's IT team understood that their current operating system was no longer fit for purpose. To remain on top of their security, the college would need to onboard a new security partner and upgrade their cybersecurity stack.

Petroc College needed a cloud solution to help keep students and staff safe online when working remotely, as well as a system that would allow them to upstand and continually improve their safeguarding obligation to students. iboss felt like the perfect solution, able to improve the college's stature on both fronts.

iboss provides cloud security solutions that enable users in any location, using any device, to securely connect to critical resources such as applications and data within an organisation. As a specialist in handling security and safeguarding for education centres, especially in the United States, iboss also aligns itself to specific safeguarding principles when it comes to its policy and web filtering. It incorporates resources such as the Prevent Framework, which allows teams to identify and flag any at-risk behaviour from students that could indicate a safeguarding or wellbeing issue.

Initially Petroc chose iboss Web Monitoring to provide the IT team with detailed, live logging and reporting for clear visibility into web use across the college's network. The college also has future plans to also install iboss Zero Trust SASE, a consolidated cloud security platform that replaces the capabilities of VPN, Proxy appliances, and VDI with next-gen ZTNA, Security Service Edge, and Browser Isolation.

The Results

Due to the rapid integration capabilities of iboss, Petroc College saw immediate benefits from the new iboss solution, which addressed its previous IT challenges.

iboss provides a powerful Secure Web Gateway, so the Petroc IT team can quickly and easily control and restrict access to potentially harmful content for students. Social media safety is also a main focus for the safeguarding team. With iboss' Web Monitoring solution, they are now able to gain full visibility of students' online activity across multiple platforms.

On top of this, due to iboss' containerised architecture, which provides users with dedicated and fixed IP addresses, Petroc is now better equipped to identify and investigate online safeguarding issues across their entire network. Any alarming activity is captured within the iboss User Risk Dashboard and from here, iboss can identify and flag high-risk students, making it significantly more efficient for the safeguarding team to get vulnerable individuals the help they require. This is one of the solution's key differentiators, meaning iboss can protect all public and private resources whilst aligning with Zero Trust, as defined by NIST 800-207.

iboss has also given the IT team greater flexibility when it comes to accessibility. For example, if a student is investigating a sensitive topic such as suicide or abuse, which is prohibited from being accessed by other users, the IT team is able to grant that individual's device permission to view that topic. In a setting where students are learning about hundreds or thousands of different areas across the network, this control is critical for the Petroc IT and safeguarding teams. It can also be used to prevent devices accessing the network from specific locations, or from entering specific applications or websites.

From a cybersecurity perspective, iboss has already made an instant impact in mitigating cyber-threats. As of August 2023, the platform is tracking and destroying 65,000 cyber-threats every 30 days. Using the most advanced SASE (Secure Access Service Edge) and Zero Trust platform in the world, iboss now protects more than 2,000 devices and 5,000 users connected to Petroc college's network, allowing students and staff to be able to study and work from home with ultra-fast and secure connections to all cloud applications.

Our move to a fully managed web filtering system with iboss and Integy was incredibly smooth, ensuring security for all our devices, no matter where they are. In today's security-driven world, it's the peace of mind we need. Plus, the advanced safeguards give us a deeper insight into our digital landscape.

Neil Tanton
Head of IT, Petroc College

As an iboss partner, orchestrating the deployment of iboss for the college was a race against time. We collaborated closely with the iboss team to ensure a seamless transition from the incumbent product to iboss across a multitude of platforms, including Windows, iOS, Android, and Chromebooks. With confidence in iboss' capabilities, we believed it would meet the college's needs, and we're thrilled to report that it not only met but exceeded expectations.

Ryan Jewell
Head of Modern Work, Integy

Highlights

iboss' world-leading Web Monitoring solution has given Petroc unparalleled control over access permissions for students and staff, ensuring they only see suitable and appropriate content across multiple platforms.

Total safeguarding control – iboss has given the Petroc safeguarding and IT teams total control over what their students are able to view and share, allowing them to prohibit harmful content while also providing supervised support for sensitive investigations.

iboss' Secure Web Gateway is able to quickly identify and flag at-risk behaviour from users, collating their information and activity within the User Risk Dashboard. From here, safeguarding personnel from the college are able to assist these individuals, providing them with the help they need.

iboss currently safeguards 2,000 devices across more than 5,000 users made up of both staff and students. In addition, the iboss solutions prevent around 65,000 threats every 30 days

The iboss solution allows students and staff to study and work from anywhere, while remaining under the same level of protection as they would be within the campus perimeter.

About iboss

iboss is a cloud security company that enables organizations to reduce cyber risk by delivering a Zero Trust Secure Access Service Edge platform designed to protect resources and users in the modern distributed world. Applications, data, and services have moved to the cloud and are located everywhere, while users needing access to those resources are working from anywhere.

The iboss platform replaces legacy VPN, Proxies, and VDI with a consolidated service that improves security, increases the end-user experience, consolidates technology, and substantially reduces costs. Built on a containerized cloud architecture, iboss delivers security capabilities such as SWG, malware defense, Browser Isolation, CASB, and Data Loss Prevention to protect all resources via the cloud instantaneously and at scale. The iboss platform includes ZTNA to replace legacy VPN, Security Service Edge to replace legacy Proxies, and Browser Isolation to replace legacy VDI. This shifts the focus from protecting buildings to protecting people and resources wherever they are located. Leveraging a purpose-built cloud architecture backed by 230+ issued and pending patents and more than 100 points of presence globally, iboss processes over 150 billion transactions daily, blocking 4 billion threats per day. More than 4,000 global enterprises trust the iboss platform to support their modern workforces, including a large number of Fortune 50 companies. To learn more, visit https://www.iboss.com/