University of Derby Improves Online Student Experience with New campusM Authentication

Executive Summary

As part of their ongoing efforts to enhance online services, the University of Derby's IT department upgraded the authentication protocol for the university's campus app and portal, DerbyUni. Powered by Ex Libris' campusM, DerbyUni has over 26,000 active users per month. By aligning their authentication process across different platforms, and leveraging their latest Single-Sign-On (SSO) mechanism, the institution was able to create a simplified experience for all users of the DerbyUni desktop and mobile app.

Key Benefits

- Consistent SSO across all devices improved the end-user experience
- Improved omnichannel integration performance
- Simplified app maintenance through the centralized no-code App Manager
- Enabled the use of out-of-the-box campusM product integrations
- Streamlining of the Connect Layer to reduce on-premise infrastructure dependency

About the University of Derby

Located in the heart of England, the University of Derby builds on the region's heritage of innovation to provide industry-relevant, expert teaching, from **foundation** and **undergraduate** degrees through to **postgraduate** study and **research**. Rated Gold in the **Teaching Excellence and Student Outcomes Framework (TEF)**, the University aims to ensure everyone receives the high-quality education they deserve, regardless of age, background or location. Derby was named University of the Year at the **UK Social Mobility Awards 2020**, Higher Education Institution of the Year at the **2020 NEON (National Education Opportunities Network) Awards**, and won the **Guardian University Award 2020** for Social and Community Impact. For more information visit **www.derby.ac.uk**.

The Challenges

A long-time campusM customer, the University of Derby uses its campusM app, DerbyUni, to communicate with students and provide mobile and portal access to core university services through system integrations with Blackboard Learn, Timetable, Events, Library and more.

Though DerbyUni had 30 authenticated app integrations available through the campusM platform, with many integrations requiring specific username and password sign-ins, making the app experience less than seamless.

In particular, separate sign-in events in desktop and mobile for the same integrations were creating an inconsistent user experience across devices.

" In some cases, we had twice as much coding necessary for the two environments," said Stephen Dashfield, Corporate and Academic Systems Manager at the University of Derby's IT Services. "We had the desktop version, we had the mobile version, it got very complicated to manage."

The Solution

In 2019, campusM introduced an updated authentication process—campusM Authentication (CMAuth), a standardized token-based authentication mechanism and framework that seamlessly supports the handshake, validation, and mapping attributes for authenticated users.

With CMAuth, once the user authenticates, their credentials are confirmed against the institution's Identity Provider, and the user is granted a securely signed token that can be used to access integrated services. This token removes the need to continually pass credentials between the Identity Provider and the Service Providers.

The tangible benefit of CMAuth for end-users is a more seamless user experience across devices, with the authenticated token granting students access to core services without having to sign on separately to different integrations.

By late 2020, the Derby IT department, led by corporate and academic systems manager Stephen Dashfield, had decided to upgrade to the CMAuth authentication mechanism. However, with approximately 30 customized apps that needed to be shifted to token-based authentication, the transition to CMAuth would have taken time and resources away from everyday IT tasks. Rather than delay the CMAuth implementation, the university contracted Agile Professional, an accredited Ex Libris partner, to conduct the implementation.

"We'd been looking at CMAuth for a while, but other developments and improvements took priority," Dashfield noted. *"We were able to use Agile Professional to do the heavy lifting for us, which enabled us to focus on the value add instead of the consolidation work."*

The Agile Professional team, in collaboration with campusM and with IT personnel, reconfigured the 30 integrated apps to accept the new CMAuth token authentication in under a month.

Based on their work with other campusM customers, the Agile Professional team also advised the University of Derby communications team on how to prepare students for the move to CMAuth; How it would impact the User Experience of the app, and how to communicate these changes transparently to their students.

"Upgrading the authentication protocol on any student-facing system can be a daunting task, and when you have over 26,000 active users per month, it requires a lot of planning and crystal clear communication with end users" said Jas Singh, Director of Agile Professional. *"In our experience, transparent and timely communication results in increased levels of student satisfaction and overall confidence in the solution."*

About Agile Professional

Agile Professional Group is a UK-based professional services company specializing in Higher Education solutions, which helps universities achieve their Digital Transformation goals. The Agile Professional team, led by two campusM alumni, align higher education technology ecosystems with institutional objectives including student engagement, retention and success strategies.

The Results

Smooth Student Onboarding

Since its launch in March 2021, the new CMAuth authentication process has improved the app user experience. IT Services' main goal in implementing CMAuth, improving the app user experience, has been met, with very few students turning to the helpdesk for assistance:

"Compared to the amount of users, the number of tickets we had regarding the transition was fairly low ... I think it went as smoothly as we could have hoped to get students onboard," said Claire Hammersley, the system specialist who took the lead on the CMAuth project.

"I think this is one of those pieces of work where not having people say very much about it is a goal," added Dashfield. *"It's not something we expected them to notice, and if they did notice it, it's just how they expected it to work all along."*

Improved Admin Experience

IT Services is also seeing the benefits of the new authentication system. Managing the backend has become significantly easier, as admins no longer have to navigate a web of desktop and mobile roles when implementing a new tile.

"We can now build a tile, show it to the CMAuth role, and that's it. It's going to work on mobile and desktop ... it's one-size-fits-all, in a way," said Hammersley.

Implementing CMAuth will enable IT Services to switch from custom AEKs to the campusM out-of-the-box product integrations, which will reduce the amount of time IT needs to invest in app maintenance. "We've developed quite a bit of features ourselves that we could retire and not have to worry so much about looking after, because campusM has already delivered that functionality," said Dashfield.

Using App Manager as a centralized no-code platform for managing the app across devices will also allow more non-IT personnel to leverage the app, without needing a go-between IT liaison. This will free up time for IT Services to focus on other projects and priorities.

Better Omnichannel App Performance

The disconnect between authentication protocols on desktop and mobile before CMAuth meant that there was often a discrepancy between which features worked on different devices. CMAuth lets DerbyUni admins control all feature changes, for both desktop and mobile, through one role. This limits the amount of time and resources IT Services need to commit to these changes and contributes to a more consistent user experience.

"We were finding that we couldn't get certain things working on mobile," said Hammersley. *"Take the 'My Photos' tile – we could present it on the desktop so that people could upload their photos to our backend system, but not on mobile. So CMAuth has just enabled that feature perfectly, and now everything works – seamlessly."*

About Ex Libris campusM

Ex Libris is a leading global provider of cloud-based solutions for the management, discovery, and delivery of the full spectrum of library materials, as well as mobile campus solutions for driving student engagement and success. Ex Libris solutions are in use by over 5,600 institutions in 90 countries, including 43 of the top 50 universities worldwide and more than 40 national libraries.