

# Migrating and modernising the on-premises virtual learning environment to AWS for an enhanced experience



## Outcome

The migrated and modernised Moodle infrastructure means that The Open University can now take advantage of cloud benefits including:

- Cost effectiveness and long-term cost reduction
- Modern and future ready architecture
- Flexibility and customisation
- IaC de-risks and automates infrastructure management and configuration
- Automation enables faster and safer deployments
- Ability to scale up and down the service based on demand, and doing so quickly
- Strong partnership with AWS and shared responsibility in managing the service frees up internal teams to focus on value-add tasks

## Company overview

The Open University is a global leader in higher education able to reach every adult in the United Kingdom - and many others across the world. Their commitment to distance learning and access to education enables them to cater for the widest range of students.

They are the largest academic institution in the UK by number of students.

 **Client name:** The Open University

 **Service:** SD

 **Technology:** AWS, Moodle, LAPP

 **Industry:** Education

 **Location:** UK



## The challenge

- The Open University needed to maintain and transform their virtual learning environment (VLE) to bring an enhanced experience to their users.
- The legacy on-premise infrastructure was difficult to keep up-to-date and not cost effective to scale in line with new business requirements.
- In scope for the migration to AWS was their award-winning core VLE, used by over 220,000 students every year. Also included was the OpenSTEM Labs platform, which provides remote and virtual access to scientific experiments for many users around the world. And the final platform to migrate was the OpenLearn OER platform, containing thousands of free courses used annually by millions of learners.
- They wanted to implement Moodle on AWS for all learning platforms to take advantage of modern cloud services while optimising the workload for cost, performance and operational efficiency.
- The Open University needed to automate some repetitive tasks to enhance efficiency, but had limited internal knowledge of AWS development.

## The approach and solutions

- NashTech worked closely with The Open University as one-team to deliver success, putting a huge amount of effort into building domain knowledge as well as focusing on training employees to upskill and develop their technical knowledge in Moodle and AWS. This training focused on processes, services and operations of the AWS infrastructure used by the LXT and OpenLearn teams.
- Working closely together, the technical teams at NashTech and The Open University reconfigured their Moodle build and established a modernised infrastructure. Moodle is a highly customisable open-source learning management system (LMS), which is used by The Open University as the technical foundation for their core VLE and for several highly innovative education platforms.
- Working collaboratively, we migrated the Moodle VLE that was on-premise to a new AWS cloud platform.
- We configured the AWS infrastructure to take advantage of modern cloud services and processes like Infrastructure as Code (IaC) and Containers.