



Case Study

De Montfort University

De Montfort University (DMU) is one of the largest universities in the UK with more than 20,000 students based over two campuses – Leicester City Campus and the Charles Frear Campus. DMU offers a comprehensive range of courses across five faculties, supported by 3,240 staff.

De Montfort University is a leading institution for professional, creative and vocational education and was formed from a diverse range of specialist institutions. Its long history of excellent teaching, learning and research is founded in the technical and trade education of the late 19th Century. The name itself is associated with Simon De Montfort, Earl of Leicester, a distinguished figure in English history and widely credited with establishing the first parliament in 1265.

The Challenge

With two campuses and five faculties offering around 400 courses it is essential that DMU's network is reliable, consistent and secure. Both staff and students access it on a daily basis so the network is fundamental to the day to day operation of University life. DMU prides itself on the support it delivers to students, not just in terms of mentoring and learning support but also first class IT access.

A student population of 20,000 spread across a diverse geographical area can cause headaches with maintaining sufficient network capacity, upholding security and ensuring continual access.

Paul Toyne, Senior IT System Engineer in the Security and Network Management Team, comments "We have 9000 network devices and 17,000 network ports on the network so finding either rogue devices or free ports has been a time consuming, manual process. When something's not quite right we need to find it quickly, but this is easier said than done when we have to investigate 12 to 13 buildings to find the source. It's often the case that by the time we have found the device creating the issue, and this can be upwards of half an hour, the device has disappeared from the network."

"We needed to quickly identify any device connected to our network that could cause problems. This could be peer to peer file sharing, viruses, or equipment such as unauthorised wireless access points."

"We needed to quickly identify any device connected to our network that could cause problems. This could be peer to peer file sharing, viruses, or equipment such as unauthorised wireless access points."

The Solution

DMU use MAC Auditor to identify and track users and devices on the network. MAC Auditor is a software application designed to locate and report on devices accessing a network. Its data collection and reporting capabilities provides in-depth forensic information and alerts.

Toyne continues, “Our network supports thousands of students on a daily basis, and is at risk of unauthorised devices connecting to it and doing things they shouldn’t. MAC Auditor allows us to trace anything. We just type in the MAC address we are looking for and it reports on exactly where that user is. We can then take immediate steps to nip any potential problem in the bud before it causes problems for other users.”

With so many people working for the university, across multiple locations, it is difficult to keep an accurate track of how many free ports there are in any particular building.

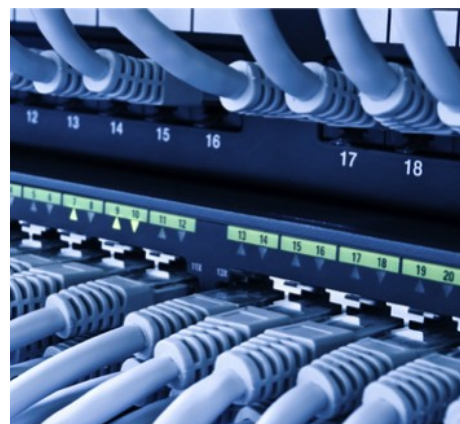
“People within the university move around a lot, changing offices, buildings or campuses. Each work station has a telephone and data port but sometimes people forget to tell us they have moved which can potentially result in unused ports. Our budget is a finite resource and we have to manage that, we don’t and can’t spend money on kit we don’t need. Locating unused ports can be like looking for a needle in a haystack, a manual process that takes a lot of time. MAC Auditor tells us quickly what ports are unused so we can decide to either disable or re-use.”

“The MAC Auditor report gives us a very clear picture of our network capacity, enabling us to manage and plan our network much better. Given that a 48 port gigabit switch can cost anything in the region of £2,500 a report like this can save us a lot of money.”

The Watch list is also a feature that DMU find invaluable in keeping a close track of user activity. The Watch list alerts networking professionals to the MAC addresses that are accessing the network.

“For example, we had a specific issue with a user and a wireless access point. It appeared and disappeared off the network before we had time to locate them and disable the port. We put the address on the Watch list and it alerted us immediately this appeared on another port. As a result we found the user within five minutes and took the appropriate action. Previously this would have had to be completed manually, taking up a lot of our department’s time. In another case we had one laptop (a student’s) that kept appearing and doing things it shouldn’t be. By putting the address on the Watch list we traced the user immediately and prevented what could have been a security risk to the network.”

Toyne concludes “The benefits to DMU are clear. MAC Auditor is cost effective to buy, as it’s a software solution that sits on the server, and easy to install. It gives us instant visibility over our network and the reports allow us to identify who and what is accessing the network. Time savings are also considerable, given then that DMU is spread across so many buildings and sites. Manually tracking ports and MAC addresses is labour intensive and not the most cost effective way to use our IT resource. In this way we are able to maintain a consistent and reliable service to all our users.”



“The MAC Auditor report gives us a very clear picture of our network capacity, enabling us to manage and plan our network much better.”

About Rebasoft

Rebasoft is a privately held business founded by network professionals to help other network professionals. Rebasoft provides state-of-the-art applications that exploit existing infrastructure investments. MAC Auditor was the launch technology building on many years experience in managing networks of all sizes.

Contact us

Albany House, 14 Shute End,
Wokingham Berkshire, RG40 1BJ. United
Kingdom

☎ +44 (0) 118 919 2313

✉ sales@rebasoft.net

🌐 www.rebasoft.net