



Nimbus enhances fire safety across campuses at a leading British University



# The challenge

The University of Bristol is a leading higher education and research institution in areas as diverse as healthcare, chemistry, mathematics and sports sciences. It comprises several sites scattered across the city and the surrounding region, which vary from student residences to lecture theatres to laboratories and workshops. This complexity presents a challenge to the university's fire safety management processes, which must comply with legislation such as the Fire Safety Order 2005.

Each site has teams who are responsible for coordinating the testing and maintenance of fire alarm systems. In the past, these teams identified faulty devices during daily inspections carried out from Monday to Friday, but there was often no way of detecting faults during weekends if a building was empty or the alarm on the fire alarm control panel was ignored. Furthermore, repeated intermittent faults on a system would often overwhelm the event log memory in the control panel, making it difficult to determine when a fault first occurred or what its cause might be.

To demonstrate compliance with the fire alarm testing regulations, the estate management team previously used a spreadsheet which the contracted service engineers would complete to show which devices had been tested. This approach was prone to delays, errors or omissions, which hampered the team's understanding of the status of the fire alarm systems.

# The solution

Following a successful initial trial in the Wills Memorial Building following its refurbishment, 25 Nimbus Gateway units have been connected to fire alarm systems in the university's City Centre and Langford campuses and the Stoke Bishop student residential area, collectively monitoring more than 100 buildings, some of which are separated by distances of over 15 miles.

A major benefit to the management process has been the emails that Nimbus immediately sends to notify the maintenance teams about events that occur on the system. These events, which are stored in an infinite log in the cloud-hosted Nimbus portal, can be as varied as power failures in laboratory buildings (which can affect other important safety systems in addition to the fire alarms), faults in individual detectors, or isolation switches not reset correctly after an inspection. The database removes ambiguity in tracking the occurrence of faults and allows trends and hotspots to be highlighted and maintenance work prioritised. In the event of a fire, when the fire control panel itself could be damaged, the Nimbus database also assists with the subsequent investigation as the event log data is held elsewhere.

Fire alarm service contractors record the testing they perform during their visits via the Nimbus Engineer App, which sends the data directly to the database. This allows the university's estates team to quickly check that a system is in compliance, and highlights which devices are due for testing. If devices are difficult to access, a service visit can be organised with the appropriate equipment available. Testing schedules can be specified and, using the Nimbus Engineer app, additional information such as barcode scans or images can be appended to the test data.

### The result

Thanks to the compatibility of Nimbus with many different analogue addressable panels, installation of the Nimbus Gateway units was very quick and easy. A single Nimbus Gateway unit, a device similar to an internnet router that converts and transmits the dara, was connected to each set of networked fire control panels. Other product that were considered by the university needed additional panels to be installed and new software to be configured, which would involve coordinating visits from multiple service providers.

Another attractive aspect of Nimbus was the simplicity of adding new devices to a system. The service engineers who install the devices provide an updated system file from the control panel, which can be easily uploaded to the Nimbus Portal by the Estates team, keeping the management of the Nimbus system completely in-house.

#### UNIVERSITY OF BRISTOL CASE STUDY



# The benefits

The benefits for system maintenance have been so positive that he university's estates team is intending to continue integrating Nimbus into its fire alarm systems as they are refurbished and recommissioned. They also plan to extend the use of the system by installing the Nimbus Control Room Monitor (CRM) in the security lodges on each campus. The CRM allows security staff, who act as first responders in the event of a fire alarm, to view any event via a dedicated desktop computer. It can also be tied in with CCTV cameras on the sites to allow responders to investigate alarms and decide on what action is needed. While this could include cancelling false alarms and preventing unnecessary and costly calls to the fire brigade, the CRM can also provide detailed site-specific information for relaying to fire crews attending genuine fire incidents.

Nimbus has provided the University of Bristol with many benefits including – more efficient maintenance, unambiguous evidence of compliance and, in the future, more effective response to fire alarms themselves. It's a state-of-the-art fire alarm management system for an institution at the cutting edge of education and research.



For further information or a demo, call +44 115 924 9537 or check out our website nimbusdigital.com