

## The University of Oxford upgrades to state of the art IoT Solution for new Data Centre...



UNIVERSITY OF  
**OXFORD**

... proving that smart people choose SMARTset to monitor, control and analyse their critical estates.

The University of Oxford is the best in the world according to the Times Higher Education rankings for 2018, and also the oldest University in the English speaking world. With over 23,000 students supporting over 17,000 jobs it is the biggest employer in the region.



### *Challenge.*

The structure of the University with over 38 independent colleges has led to a multitude of small data centres and comms rooms. These are often located in historic buildings not designed for 21st century technology and are expensive to maintain and manage.

As part of a 5 year strategic plan a new Shared Data Centre was built to provide a facility for all the colleges to migrate their servers and IT equipment into. Due to its success an expansion was built in 2017. Lessons were learnt from the initial data centre project and for the new expansion a new monitoring solution was required to provide improved monitoring of power and temperature to maintain uptime and provide capacity management and energy efficiency analysis.

SMARTset was identified by the University's contractor J Brand and chosen by the client after an evacuation process.

The solution was chosen because of its powerful and flexible dashboard and the speed at which new and legacy sensors and meters from different manufacturers can be connected using a variety of communication protocols such as Modbus TCP, BACnet and SNMP.

The solution included integration with other monitoring software systems and the remote door locking mechanism as well as the installation of additional sensors and power meters.

Alerts and alarms are federated to ensure only critical messages requiring immediate action are created. Dashboards and trend and analysis reports provide real time information.



### *Solution.*

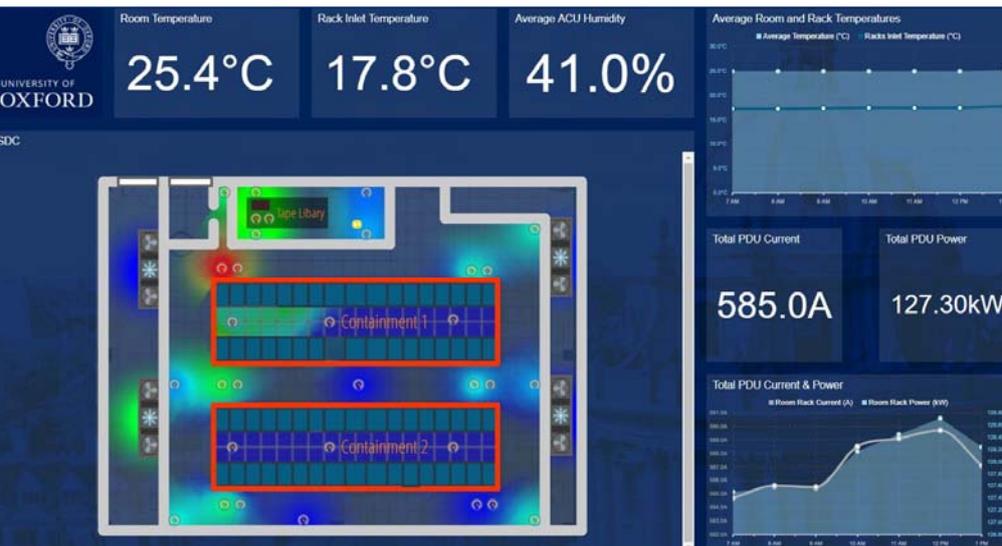


**Result.**

SMARTset provides a key business tool to manage the University's data centre. It saves money by identifying problems such as "hot spots" and predicting failures to reduce downtime.

It generates revenue and allocates cost by allowing accurate energy billing of the owners of servers and IT equipment in the racks and as a UK owned and developed solution it provides an open integration path and road map to make it future proof.

SMARTset is the registered trademark of Industrial IoT software developed by 4NG and distributed in the UK by AIT Partnership Group Ltd.



“SMARTset provides us with visibility and control of power, temperature, humidity and rack access in our data centre. It's so easy to use and a massive improvement on other monitoring software we have seen.”

David Birds,

Data Centre Manager, University of Oxford

## *The Challenge.*

Energy management solutions that provide real time monitoring of power and cooling.

## *What AIT delivered.*

SMARTset, with a clear and simple view of their data and thermal maps.

## *Results.*

An easy to configure dashboard with clear information for managing critical infrastructure.