

Prestigious University College  
Reaping the Rewards  
Of Intelligent Lighting Control



## Energy Saving

In 2010 one of the most prominent university colleges in the United Kingdom commenced a refurbishment of a 50 bed hostel.

Having previously deployed the Netgenium Access Control solution across the campus, the college expressed a desire to extend the system into the refurbished building. One of the design briefs of the project was to save energy where ever possible and intelligent lighting control was high on the agenda.

The design consultants, already aware of their Lighting Controllers set Netgenium the challenge of not only controlling access to the student room but also of providing light and heating control when the room is occupied.

## The Challenge

Netgenium's brief was to control access to the Hostel entrances and student rooms, intelligently sense when the room was occupied by the student and enable lighting and heating to the room.

The traditional method of sensing room occupancy in the hospitality industry is to deploy a cardholder in the room with a micro switch in the base. When a card is placed in the card holder the room is deemed to be occupied.

The challenge for Netgenium was to identify the card holder, authenticate their presence in the room and detect when they leave.

## Summary

To control access to hostel entrances and student rooms

To reduce energy costs by controlling lighting and heating according to presence

## The Solution

Netgenium's proposal was to deploy standard access control to hostel entrances and rooms and use the Netgenium Lighting Controllers to enable intelligent lighting. Sensing room occupancy required a new product.

Netgenium designed a new model of Wiegand card reader, the WGR3604-WR.

This reader provides a slot into which the smart card is placed, authenticated against Netgenium's PolicyServer, then the room is deemed to be occupied.

The WGR3604-WR continues to poll the card and maintains the occupied state of the room for as long as the individual's card is present in the reader's slot.

Both the lighting and heating are controlled by the Netgenium Lighting Controllers and Digital Outputs of the Lock Controllers under control of PolicyServer.

When the card is removed from the slot reader, PolicyServer deems the room is un-occupied and configured to turn off lights and reduce the room temperature

Implementing this sophisticated Netgenium system has significantly reduced the college's expenditure per month in utilities

Greater control over common areas per floor, reducing petty theft and general misuse of fixed assets..

## About

Netgenium are a manufacturer of Power Over Ethernet (PoE) products and solutions. We continue to develop a range of IP products using IP and the LAN to control many elements of your building including: security, access, door intercom and lighting.