Realizing the Internet of Things

Oxford school has online control of heating, ventilation, water, lighting etc. At the EF International Language Centre in Oxford, system integrator Global Electrical Solutions Ltd. has installed a building management system to keep track of heating, ventilation, water, lighting etc.

By connecting Netbiter Remote Management gateways to control panels in the building, users can see current temperatures, levels, and consumption online. They can even turn on lights or open windows remotely – truly realizing the Internet of Things. Global Electrical Solutions (GES) is a UK-based system integrator specializing in assembling highly efficient control panels used in buildings, power & energy, manufacturing etc. At one of their recent installations at the EF International Language Centre in Oxford, they have used the Netbiter Remote Management solution to remotely monitor and control the building premises. The Netbiter Argos web interface works as a front end towards the user displaying current values from the building and also allows users to generate reports and get alarms whenever certain thresholds are reached.

It provides customers with an easy-to-grasp overview of their systems and keeps costs for maintenance down.

Mark Jenkyns, Managing Director, Global Electrical Solutions.

Solution:
Remote Management

Customer: Global Electrical Solutions
Country: UK

www.netbiter.com
Real values, real pictures. GES have used pictures from the actual premises in the school when creating Netbiter dashboards. In these dashboards, users can see exact values in real-time and control heating and ventilation remotely.

How it works
A Netbiter EC310 gateway is connected to the Rockwell Micro800-series PLCs which control the different systems in the building. The Netbiter gateway sends data to the cloud-based Netbiter Argos service where it is stored and accessed. GES and the building owners can log in to www.netbiter.net to see current values and even start or stop equipment, open windows and turn lights on or off from their Netbiter Argos dashboard. Furthermore, they can get alarms via email if certain values are reached (for example if CO2 levels are too high). It is also possible to generate reports on consumption and performance over time.

"Netbiter works really, really well," says Mark Jenkyns, Managing Director at Global Electrical Solutions. "It is easy for us to create graphical dashboards in Netbiter Argos, so we basically use it as the front end for our Building Management System."

Fewer service visits means quick ROI
The remote management solution has been very well received by Global Electrical Solution’s customers as it gives both better control and lowers costs for maintenance as costly service trips can be reduced to an absolute minimum. Since the price of a Netbiter gateway usually equals the cost of a service visit, the return on investment is usually just a couple of months. Mark Jenkyns explains: "When the customer reports a heating problem, there is a good chance it’s a sensor failure which would normally require an engineer visiting site with test equipment. With the Netbiter onsite we can now log in to any one of the buildings controllers and inspect the real time values to determine if the sensor is faulty or not without leaving the office. A new part can be ordered and installed within a fraction of the time."

Mark Jenkyns experienced one of the benefits himself when installing the remote monitoring solution in one of the rooms of the school: “When I got back to the office, I realized that I had forgotten to turn the hot water back on. But since the room now had Netbiter installed, I could easily go in and turn it on with a click of the mouse. Many service trips and maintenance issues are usually simple fixes like this, so with Netbiter we can save a lot of time and money for both us and our customers.”

GES has now installed Netbiter at two schools and a hotel in the Oxford area and can see many other applications for Netbiter connected to their control panels. "It really gives our offering an edge as it provides customers with an easy-to-grasp overview of their systems and keeps costs for maintenance down” finishes Mark Jenkyns.