Case Study: BEMS Life Cycle Migration

BEMS upgrade provides enhanced energy performance for prestigious hotel



The Ritz London, 22 Arlington Street, London

The Ritz London is a grade II listed 5-star hotel located in Piccadilly, London. It first opened its doors in 1906 and has since become one of the world's most prestigious and best known luxury hotels.



The Challenge

The customer's Building Energy Management System (BEMS) was outdated and using an obsolete control system, Trend IQ2, which needed to be replaced.

The main challenge was upgrading the BEMS elements of the Heating, Ventilation and Air Conditioning (HVAC) plant to the latest Trend IQ4 system, without causing any disruption to normal business operations within the busy hotel.

The Solution

We produced a clear and concise design brief to develop a phased changeover programme to upgrade to the Trend IQ4 controller system.

The customer's old BEMS computer platform was upgraded to a serverbased variant, complete with newly engineered BEMS schematic pages.

The obsolete IQ2 controllers were then replaced with the latest IQ4 variants. At the same time, our team worked in conjunction with the customer's IT team to migrate the BEMS controllers from the original Trend LAN cabling, to a new dedicated Ethernet BEMS backbone network. All systems were operated in parallel and a phased changeover from the Trend IQ2 LAN network to the Trend IQ4 Ethernet network ensured that there was minimal disruption to the day-to-day operations of the hotel.

Our clearly defined strategy, from the identification of the engineering challenge, through the entire sales process and up until the final delivery phase, led to a successful project handover and a strong BEMS maintenance relationship that continues to this day.

The Results

The Trend BEMS has been updated to the latest controller variants providing The Ritz London with with peace of mind, and assurance that they can rely on us to provide maintenance support for many years to come.

The hotel is also now able to use remote and secure web-browsing to monitor and adjust the BEMS settings to quickly and easily respond to any HVAC issues, in order to keep its valued guests as comfortable as possible.

E.ON Control Solutions

We take pride in being part of an industry that is making massive steps in helping buildings reduce carbon emissions. Energy accounts for a significant percentage of a building's running costs with 60-80% of the annual energy spend controllable through a BEMS.

Our technical solutions and services can help manage your buildings' energy performance and comfort to reduce consumption and provide optimum conditions for the occupiers.

Projects - design, supply, installation and commissioning of BEMS

Service – maintenance, support, lifecycle upgrades

Integration – seamless connectivity for building control systems

Energy solutions – metering, Variable Speed Drives (VSDs), demand-driven software strategies

Remote service – 24/7 call out, triage, remote planned preventative maintenance (PPM), critical alarm monitoring

Advanced remote solutions – IoT, smart buildings, data acquisition, analytics and control

E.ON Control Solutions Ltd

Balmoral House Unit 5 Little 66 Roach Bank Rd Hollinsbrook Park Bury BL9 8RN

T: 0161 796 3500 www.eon.com/control-solutions

