



Automatic Alarm Dispatching in Data Centres



Linking Intelligent Buildings to Digital Mobile Radios

HSBC's North London Data Centre is a leading example in environmental and sustainable building design. The secure facility houses server rooms that process thousands of banking transactions a day from customers throughout the UK.

The building requires technical maintenance, environmental emissions, security and fire alarm monitoring 24 hours a day, seven days a week.

HSBC selected the combined solution of a TAC Schneider Electric Building Management System (BMS), a MOTOTRBO digital radios system and ZONITH Alarm Control Software (ACS) to ensure all employees can instantly receive technical and business critical alarms.

"We work more efficiently because people immediately receive technical alarms on their radio and don't need to contact the control room"

Adrian Platt, System Engineer

This combination ensures that maintenance engineers and security staff instantly receive and accept responsibility for building management alarms no matter where they are located within the 200,000 sq ft site.

Each alarm generated by the BMS is assessed by the ZONITH ACS and automatically dispatched to the MOTOTRBO radio of the on-site employee responsible for that task. This efficient method of automatic alarm dispatching ensures no time is wasted in notifying the right person at the right time.



Employees receive critical technical alarms on MOTOTRBO radios ensuring systems are fully maintained and operational 24 hours a day seven days a week.

Solution Features

- ▶ Single serial port interface to the central TAC Schneider Electric BMS server.
- ▶ Alarms are assessed against an employee schedule and competency list.
- ▶ Alarms are immediately dispatched to the employee responsible.
- ▶ Employees receive technical alarm information on their MOTOTRBO radio display.
- ▶ Once an alarm is accepted employees can remotely close the alarm using their radio.
- ▶ All alarm details are logged and reported.

The Solution

The ZONITH Alarm Control Software is installed on a computer in the main Data Centre Control Room. It is linked through a serial port connector to the TAC Schneider BMS.

Alarms raised by the BMS are imported by a ZONITH ASCII interface. This interface interprets the ASCII string output from the BMS and compares it to the ZONITH Scheduler and Action Filter.

The ZONITH Scheduler lists the employees on site, whilst the Action Filter decides which competency is required for the specific alarm, i.e. An alarm is dispatched to the engineer with the right skills to resolve it.

Alarms are immediately dispatched over the MOTOTRBO network by text message to the radios. If an employee cannot respond to an alarm, it is automatically escalated to the next person on the list.

Once an alarm has been resolved the person responsible can close it on the ZONITH Alarm Control System by sending a text message.

All alarm activities are recorded for performance analysis and future process improvement.



HSBC Bank plc is one of the major clearing banks in the United Kingdom having more assets than any other bank.

The Need

Receive engineering and security alarm messages on MOTOTRBO radios.

The Solution

ZONITH ACS receives alarms from a TAC Schneider Electric BMS. The alarm details are checked against a scheduler and action filter. ZONITH software dispatches the alarm to MOTOTRBO digital radios.

The Benefits

- ▶ Quicker response times to urgent alarms.
- ▶ Less time spent monitoring control room computers.
- ▶ Audit trail of alarm history.

