

Automatic Alarm Dispatching in Data Centers



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 straight to their radio and don't need to contact the control room"

Paul Ward, 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



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.

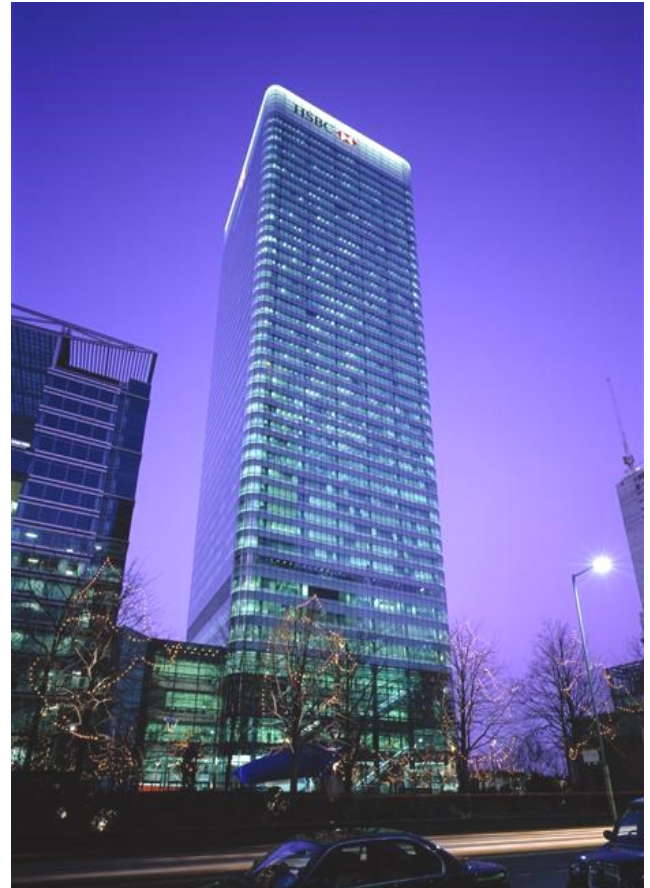
Alarms raised by the BMS are imported by a ZONITH ASCII interface. This interface interprets the ASCII string output from the BMS and registers it in the ZONITH Scheduler and Action Filter.

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

Alarms are immediately dispatched over the MOTO-TRBO network by text message to the radio of the employee responsible for that task. If an employee cannot respond to an alarm, it is automatically escalated to the next employee on the list.

Once an alarm has been resolved an employee can return a predefined SDS message to close the alarm within the ZONITH ACS.

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.

In Short

Needs

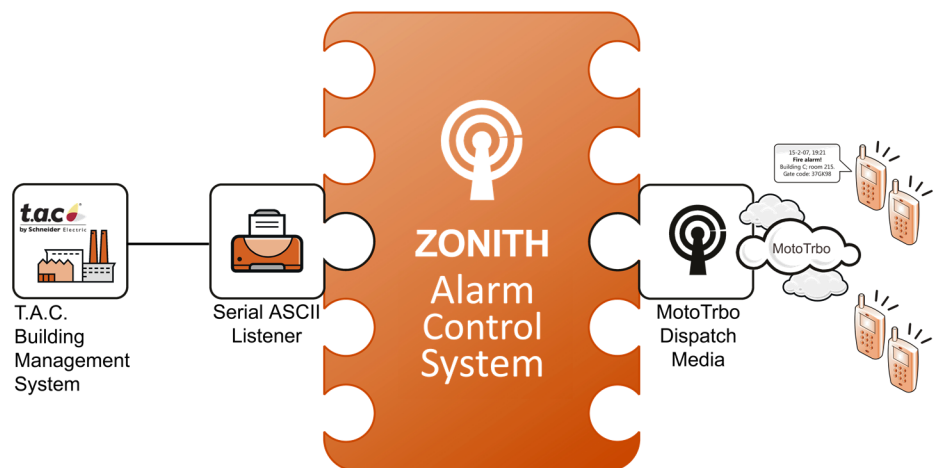
To instantly dispatch engineering and security alarms to employee Moto-Trbo radios whilst working outside the control room.

Solution

ZONITH ACS receives alarms from a TAC Schneider Electric BMS. The alarm is compared to a work schedule and action filter. ZONITH software dispatches the alarm details to Moto-Trbo radios.

Benefits

- ▶ Quicker response times to alarm notifications.
- ▶ Reduces the need to staff the control room.



"The customer has requested this system to be installed in a further three data centres within the UK, 3 less hour"

Jason Okoh, Sales Director, at London Communications