

# case study



## Grosvenor lays down 'new rules' for Liverpool ONE and embraces converged solutions

Liverpool ONE is a £950 million retail-led regeneration scheme revolutionising both Liverpool city centre and the way in which intelligent technologies monitor and manage an 'open street' development. Adopting a forward-think

approach, Grosvenor, the developer, wanted all the technical services to be integrated onto a single network to enable information exchange, operating efficiencies, cost savings and new revenue generating opportunities.

It is the largest integration project of its kind in the UK.

## Honeywell



LIVERPOOL  
ONE

Love the City



Liverpool ONE makes its mark as the European City of Culture for 2008 with the retail-led regeneration of 42 acres in the heart of the city.





# Honeywell Converged Building Solutions



## THE CUSTOMER

Liverpool ONE sees the regeneration of 42 acres in the heart of the city. Retail-led, it is a mixed-use development comprising 160 tenants – two anchor department stores and shop units – restaurants, cafes and bars, a 14 screen cinema, two hotels, offices, seven apartment blocks, a new public transport interchange, underground car parking and a five acre park. Liverpool ONE comprises six districts, 40 individually designed buildings and more than 1.6 million square metres of retail space. It will complete in 2008 coinciding with Liverpool's designation as the European Capital of Culture.

Laing O'Rourke is the main contractor, and Crown House, the M&E contractor, on the site west of the main thoroughfare, Paradise Street. Balfour Beatty is the main contractor and Balfour Kirkpatrick, the M&E contractor, on that to the east.

## THE CHALLENGE

'New rules' are the driving force behind Grosvenor's vision for Liverpool ONE – a new and innovative standard in integrated retail solutions delivering a measurable ROI from day one.

Seeking flexibility, inter-operability and performance improvement, Grosvenor wanted to integrate all the technical services for all 40 buildings – security, building and safety management along with data, voice and video communication – on one, common network. Grosvenor believe convergence to be fundamental

to performance improvement enabling a safer, more secure and more comfortable environment on the one hand, and lower operating costs on the other.

In order to deliver this new way of working Grosvenor specified an integrated control solution.





This will be one of the most technically advanced retail complexes anywhere in the world, the level of integration being the key differentiator.





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## THE HONEYWELL SOLUTION

Honeywell is the main IT services and building automation controls contractor on the project.

Honeywell Network Services is designing and installing an IT network that will support the entire Liverpool ONE area from all the landlord facilities within it to all the different building management systems (Honeywell and third party) integral to them. This will necessitate 41 kilometres of cabling – a fibre backbone with copper structured cabling. It is a combination that will provide dual resilient backbones and ensure that IP communication is provided with the right bandwidth in all operational modes.

The network comprises two main computer rooms, 24 satellite communications rooms, 41 communications cabinets and 1,050 I/O data points. Everything will be managed from a Management Suite and control room within the development.

Honeywell's Building Solutions business is focusing on the design, installation, commissioning, project management of, and technical support for, all the building, security and life safety management applications running on the network. It is integrating all the different applications via one common operating platform, Honeywell Enterprise Buildings Integrator™ (EBI). It will mean that all the different functions come together into one screen on a networked PC and a single point of control.

Work is well under way for completion in 2008. Liverpool ONE Facilities staff will be trained to operate and maintain the equipment.



“It’s a capability that helps us to solve that seemingly impossible FM dilemma – how to do more with fewer resources,” says Chris Bliss, Project Manager – Grosvenor.

### THE BUSINESS BENEFITS

This will be one of the most technically advanced retail complexes globally with the level of integration being the key differentiator. The network supports data exchange and information management and, with automated processes happening as intended, marked performance improvement for everyone concerned.

For the public, intelligent solutions mean an enhanced retail experience in a safe, secure and comfortable environment. Information pods, WiFi access and improved GSM coverage provides timely access to relevant information – what’s on, bundled discounts and local information for example – all of which encourage more, higher spend visits.

For the Liverpool ONE community, which includes apartments and retail tenants, a dedicated website and IP telephony supports new standards of service provision and convenience. Residents will, for example, utilise EPOS to order fast food deliveries and book cinema tickets while retail tenants will be able to call on

a wide range of facilities management services provided by Liverpool ONE.

For Grosvenor, convergence mitigates risk and delivers a measurable return on investment from day one. Not only is the city centre safer and more secure, it is easier to validate for regulatory compliance. In practice it means a quick and accurate response to alarm incidents and a reduction in false alarms. Comprehensive monitoring and control also supports effective crowd control and manages people movement in the event of an emergency.

Integration also reduces the development’s carbon footprint. The BMS will, for example, support energy efficiency – it will better align supply to demand – and monitor and control the rainwater harvesting/irrigation systems. Lighting control configuration will automatically adjust to ‘as needed’.

Says Chris Bliss, Grosvenor’s Project Manager: “Integration helps us to see the ‘big picture’ and quickly make sense of a lot of disparate data – and act on it accordingly. It gives us the wherewithal to confidently monitor and control the Liverpool ONE environment in all its operational modes. With our automated building control processes performing on the basis of all available data we can discretely provide a safe, secure and comfortable venue.

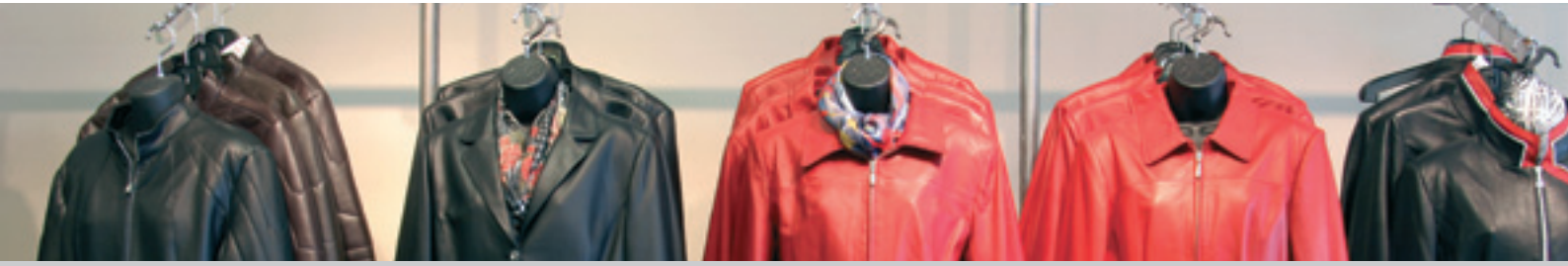
“It’s a capability that helps us to solve that seemingly impossible FM dilemma – how to do more with fewer resources. It gives us the means to up productivity improvement and service provision and, at the same time, cut costs and risk.”

Grosvenor’s investment is also protected over time. The IT network is not only unified, it is scalable over time and distance. It supports current communication protocols and with 24 lots of extension channels already in place, will cope with changing needs over the life cycle of the development.





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“Integration is an investment that will serve Liverpool ONE well for many years after 2008. The smart technology that we are putting in is central to the renaissance of the city as a place to shop, live and work. It sets a whole new approach for retail-led developments.”

Chris Bliss  
Project Manager – Grosvenor

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“The combination of data, process and technology makes things happen as intended,” adds Bliss. “It reduces risk of human error. Measurement and data transparency – clear facts both real time and historical – make for accurate information and speed response times whether in the context of right-first-time or in an emergency. That we can also integrate our building management systems with our business processes – HR, supply chain and financial systems – gives us greater strategic control over our business.”

Finally, IP convergence supports new opportunities for revenue generation – via EPOS, digital signage, retail and residential services. For example, it enables banner advertising via the Web, internet sites and information pods.

## The Honeywell solutions in place at Liverpool ONE include:

### Building Management

- Heating, ventilation and air conditioning (HVAC)
- Energy management
- Lighting controls
- Escalators/interface to third party lift management

### Security

- CCTV and digital video management
- Access controls
- Perimeter protection
- Barrier controls to below-ground service yards

### Safety

- Fire detection/suppression
- Public Address Voice Announcement (PA VA)
- Interface with third party emergency lighting
- Pedestrian counting

### Data, Voice and Video Communications

- Electronic noticeboards/video screens
- Information pods
- Spot announcements & music linked to PA VA
- Wireless networking
- Integration with business systems including EPOS and GSM
- Private Mobile Radio (PMR)



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