

# IBM Data Centre Information Sheet

**Author: Firstserv Technical Facilities**  
**Date: 1 December 2010**

Name / Author	Date	Revision Number	Approval
FSTF	1/12/10		

## IBM 6&7 Harbour Exchange Square Information

Harbour Exchange data centre is located in the heart of London's Docklands. The location is within two miles of London's Internet Exchange to give a fast connection speed to the global Internet. The data centre is designed to offer a high level of redundancy to keep systems online.

### Security

Harbour Exchange is manned 24 hours a day by security guards and access to the building is only granted on production of valid company identification. CCTV monitors all entrances and exits and access throughout the facility is gained through a swipe-card access system programmed as per an individual's operational needs.

IBM data centres are also ISO 27001:2005 certified. ISO27001 is the most widely adopted security standard in the world. Our compliance with that standard demonstrates that we take information security seriously and have taken effective steps to put in place an independently certified information security management system to safeguard corporate and client data.



### Fire Prevention

The fire prevention system is constructed of strategically placed detectors - for smoke and heat - creating "zones" within the floor and ceiling voids. The system works on a "double knock" basis comprising of ionization and smoke detection. The system is linked with the building fire alarm system. Fire suppression is provided by a gas based FM-200 fire prevention unit, with a pressure of 25 Bar; release time of 30 seconds; and extraction time of 30 minutes, via designated smoke vents. FM-200 fire suppression system instantly eliminates the threat of fire or smoke damage.



Fire extinguishing equipment



Early warning smoke detection unit



Smoke Detector

## Power

The supply is distributed from the London Electricity Board diversely routed 11Kv ring main. The essential power is supplied via 3 x 500kVA UPS's in an N+1 configuration with a separate 600kVA UPS as back up. All essential backed PDU's have a STS sitting in front of them.

The generator is a dedicated 1500KVA unit, with at least 48 hours worth of fuel held on-site and at off-site reserves. In addition to the on-site stores, in the event of an emergency, tanks are re-fuelled by two independent suppliers.

Each rack within the data centre can be provided with: 16Amp (3.84kW) (single or redundant); 32Amp (single or redundant) or three phase supplies, all connected via commando style sockets.



Electric cable



Power room



Transformer

## Climate Control

Climate controls monitor and adjust temperature and humidity levels. Suites use tightly controlled gas based air conditioners, each of which is of a dual circuit design with three chillers, compressors and condensers, providing three independent circuits for maximum availability.

There is sufficient redundancy within the current configuration of 100Kw Airedale down flow units. Each unit delivers 30t/r of cooling and having three separate cooling circuits delivers triple redundancy. The air conditioning is monitored 24x7 with automatic dial out for repair in the event of a component failure.

IBM operate their data centres to industry recognised environmental guidelines. IBM use the ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) standards, which are widely accepted within the data centre industry, to ensure that the data centre is providing the optimal operating environment for its customers. The ASHRAE standards specifically provide guidelines on the recommended conditions as well as the allowable conditions to the inlet air entering the equipment within the data centre.

More detail can be found in the following ASHRAE documentation (2008 ASHRAE Environmental Guidelines for Datacom Equipment -Expanding the Recommended Environmental Envelope-)

## Floor

The floor is raised above flood level with moisture detectors situated within the floor void. The floor is rated at 1000kgs per sq meter and houses data cable trays and power conduits to ensure data is separated from power.



# IP Connectivity

The internet has become the foremost medium by which business is conducted today, and we know that loss of internet connectivity within a hosted environment would be unacceptable, especially in e-commerce websites.

Firstserv currently has 6.0GHz of network capacity across our Data Centres using best-in-breed Tier-1 carriers for access.

Each of our Data Centres has a fully BGP enabled (multihomed) connection at a minimum of 10.0GHz capacity.

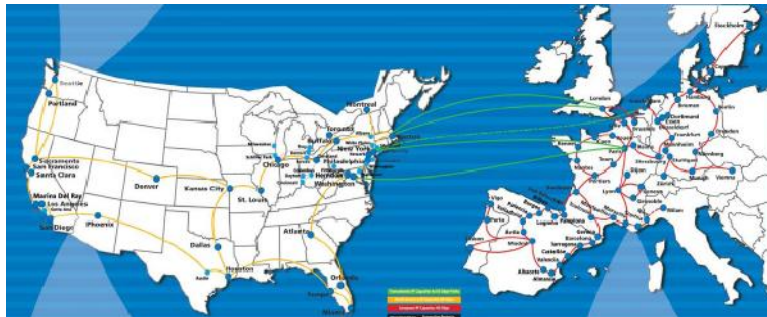
Being carrier-neutral, Firstserv has been in the enviable position of being able to procure bandwidth from leading tier-1 carriers at competitive rates.

Each bandwidth connection is delivered on either a 100/1000Mbps/1Gig Ethernet connection with customer choices of either fixed bandwidth (e.g. Committed Information Rate of 1Mbps) or unlimited connectivity.

Firstserv's provider network utilises best-of-breed Cisco hardware with 24x7 monitoring of critical elements.

Currently Firstserv uses two providers across our Data Centres: AboveNet and Cogent.

The Cogent network map:



The AboveNet network map:

