

# Case Study

## London Data Centre

<b>Customer</b>	London Data Centre
<b>Location</b>	London, UK
<b>Requirements</b>	Create a new state of the art data centre
<b>Equipment</b>	Excel Category 6 <sub>A</sub> cable, patch panels and Excel OM4 fibre cable

### Customer's View

This is the second project Patchsave solutions undertook for us. As they were familiar with our requirements this was a significant factor in the awarding of the contract. The commitment and receptiveness of the onsite team was key to meeting our needs.

*London data centre representative*

**excel**  
without compromise.

### The Requirement

The client required a cabling solution that could run various applications within a data centre environment. The Excel solution was put forward by Patchsave and was chosen as the best solution for the data centre due to its proven technical capability and the added reassurance that if required the installation would be supported by a 25 year warranty.

### Sourcing a Partner

Progressive Network Solutions was chosen by Patchsave the main contractor to carry out the installation. This was due to their experience of carrying out such large projects. Progressive Network Solutions was established in 2002 to provide data cabling installation and structured cabling installation within London, the City, The Home Counties, Thames Valley and the Midlands areas.

As an accredited Excel Cabling Partner, if required Progressive Network Solutions are able to offer a 25 year warranty on the Excel system which covers the copper, fibre, voice and even the Environ Racks when installed as part of a total solution.

### The Right Product

Excel Angled Category 6<sub>A</sub> Patch Panels ensured easy cable management and provided neat and tidy installations. The overhead basket tray was designed especially to sit above the cold aisle containment on Unibar struts with sufficient space for the large quantity/size of TOR Category 6<sub>A</sub> cables that were installed overhead. A combination of both front and back mounted patch panels enabled the best possible patching solutions for the clients installed hardware.

The OM4 LC Excel cables were all crossed/flipped throughout the fibre termination process, enabling the client to implement easy patching with standard duplex multimode



patch cords. Excel Category 6<sub>A</sub> Harness links were also built specifically for Cisco Nexus switches, reducing the overall cost of the project so that multiple adjacent racks could share the same backbone switching fabric and DMZ security requirements.

An array of specific, non-standard lengths of fibre and copper patch cords were UK manufactured in line with the client's requirements to help identify equipment type. All patching items were supplied clearly labelled with vertical and horizontal cable management providing each cabinet with a clean and easy to use future proof solution. Excel OM4 and Category 6<sub>A</sub> patch cords were delivered and left ready and in place for the client in readiness for the hardware installation phase.



## Design and Installation

Working to the client's precise Statement of Work, a design was produced to utilise Top of Rack (TOR) cabling to interconnect all client racks with two designated resilient routes. These were then dressed neatly back in to main CPI patching frames which were installed at opposite ends and in different data centre aisles, ensuring a separate cabling route for every cable panel from each individual rack. This was required as part of the original design brief as the completed installation is to be used for multiple core network switches, servers and storage solutions providing essential 'real-time' high performance services across the globe.

Network connectivity for the client was to be supplied via a Primary and Secondary PoP room, so once again providing a separate route in to their caged data centre space. Tight timeframes for installation and the need to fit in with a main building construction schedule provided challenges, so by pre terminating each end of every Excel cable length off site ensured a quick and clean installation, minimising any on site disruption and completing on time and within budget. Patch Solutions were working within a secure data centre environment so Method Statements were constantly submitted and revised, Health & Safety monitored at all times and also ensuring that they engaged fully with other contractors within the overall project plan.

## The Result

The new London based critical data centre design is a similar project to what was successfully undertaken by Patch Solutions in 2014, utilising Excel Networking throughout 30 IT racks. This duplication of the previously installed environment demanded 10 Gigabit networking speeds throughout for both legacy and state-of-the-art equipment. Excel networking provided the obvious choice with high quality RJ45 Category 6A and OM4 LC fibre all readily available, complete with an industry recognised system warranty.

The overall project management was completed by Patch Solutions, with instruction from the clients US office around their strict global design, installation, testing and commissioning standards. Each and every cabling termination was Fluke DX tested to the latest standards and product data sheets, final cabinet elevations and images were presented within a clearly labelled O&M manual on completion - all rubber stamped with the Excel 25 year system warranty certification.



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THE DATA CENTRE DIFFERENCE

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