

Case Study

Oxford University



COOPER B-Line



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COMMSCOPE®

Customer — Oxford University Computing Services

Location — Oxford

Requirement — A new data centre

Equipment — Power and environmental monitoring solutions from Unite Technologies, cameras from MOBOTIX, storage products from Overland, cabinets from Cooper B-Line, cable for access control and CCTV from Excel, and CommScope for the main data centre cabling.

Installer's View — ***"This project needed a deep understanding of the University's requirements, careful planning and strong teamwork. We achieved all of that and it was a very successful implementation now giving the University a reliable and efficient data centre that manages the entire network."***

Paul Jordan, Sales Manager, J Brand

Oxford University, a unique and historic institution, is the oldest university in the English-speaking world. Today it teaches students from more than a hundred and forty countries and has a student population of over twenty thousand.

Being such a huge organisation that needs to facilitate so many students, the University has to ensure it has reliable and up to date infrastructure in place. The IT network at the University is controlled by Oxford University Computing Services (OUCS). The OUCS offers facilities, training and advice to members of the University and is responsible for the core networks reaching all departments and colleges across all campuses.

In 2011, OUCS required a new data centre to allow dual site resiliency with its existing data centre at Banbury Road. The data centre was vital to ensure that the University could maintain a high quality network and they needed an experienced installer to help them with the project. Meeting this requirement, J Brand was chosen to complete the implementation.

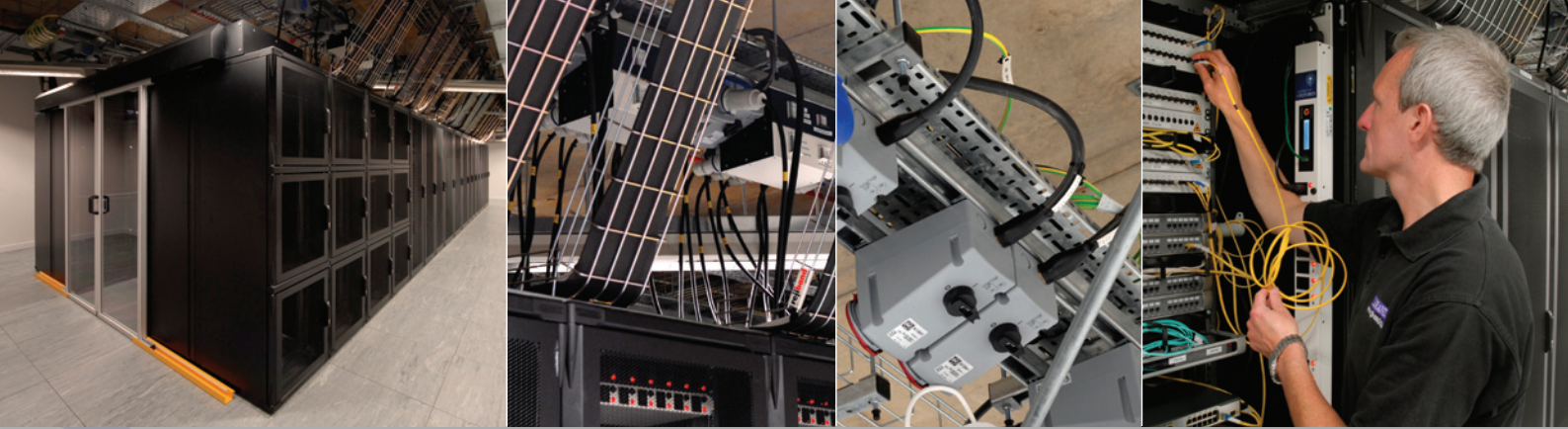


Established in 1933, J Brand is a national installation company offering customers a total network solution. From the beginning, customer service has been at the heart of the business and the success of J Brand is all about listening to clients and tailoring a solution to meet specific business needs. With so much experience, OUCS knew that J Brand was a reliable company that would offer them the high quality solution that they were looking for.

The project was so large it needed to be completed in stages for it to be managed correctly. The first stage was designed early in 2011 and J Brand chose to work with Mayflex, the distributors of IP converged solutions, to source all the products for the project. J Brand chose Mayflex because of their longstanding relationship and the fact that they knew Mayflex would work with them as a partner and not just a supplier.

Paul Jordan, Sales Manager of J Brand, commented, *"With a project as large as this, we needed to work with someone side by side, who could support us throughout the life of the project, even after completion. In addition to this, Mayflex always stocks an impressive selection of network hardware, all of which we knew would meet the customer's requirements. Knowing we could get such great service, we wouldn't look anywhere else."*

After listening to OUCS and understanding their requirements, J Brand chose to use Unite Technologies' power and environmental monitoring solutions, cameras from MOBOTIX, storage products from Overland, cabinets from Cooper B-Line and cable from Excel and CommScope.



The first stage of the data centre was designed as a cold aisle contained pod of communications cabinets. Cabling was run in overhead containment and “waterfalled” into the communications cabinet. Each cabinet was fitted with two 32 Amp intelligent PDU’s supplied via a ceiling mounted commando socket and fed from separate UPS’s.

The use of the aisle containment from Cooper B-Line was particularly important as it makes the system far more energy efficient as a much smaller area needs cooling. This efficiency goes even further with the use of intelligent PDU’s from Unite Technologies, which will allow Oxford University to monitor the power consumption of each department and charge them accordingly. Using intelligent PDU’s, OUCS has the capability to remotely monitor and manage what is happening across the University, cutting down man hours and increasing effectiveness.

Another major benefit to this functioning data centre is that it will allow OUCS to rent out cabinet space to University departments and colleges, and also preferably to rent space on virtualised infrastructure provided by OUCS.

J Brand also installed security cameras at the OUCS. M12, D24 and Q24 cameras from MOBOTIX were used to ensure the data centre was secure. MOBOTIX is one of the world’s leading network camera manufacturers providing high-resolution systems that are used globally. The Q24 is MOBOTIX’s innovative camera using Hemispheric Technology allowing a 360 degree all round view to capture an entire room.

To work with the cameras, Overland SnapServers were used to store the recorded images. SnapServer network attached storage (NAS) solutions offer exceptional price/performance ratios, and include legendary ease of use and “set it and forget it” reliability that minimise the demand for IT resources and lower the total cost of ownership of any storage solution.

In total, 16 MOBOTIX cameras were installed and 50 pairs of Excel Cat5e cables to complete phase 1 of the installation. The benefit of using Excel cable is that when it is installed by an Excel Cabling Partner, like J Brand, the products come with a 25 year warranty, offering long term peace of mind for Oxford University. In addition to this, CommScope Cat 6_a copper and OM4 multi-mode fibre formed the backbone of the main data centre cabling infrastructure, giving 10Gb/s capability over copper and up to 100Gb/s over fibre as all fibre terminations were carried out using the MPO connector.

All projects come with challenges and this project was no different. Firstly, J Brand had to design containment above the cabinets that looked neat and tidy. They also needed to provide sufficient space for the cabinets to be installed while keeping away from other installed items on the ceiling. In addition to this they had to make sure the data and power were kept apart as per the regulations. With careful planning and using their vast experience, J Brand was able to overcome these challenges, though, and phase 1 was completed in August 2011. In phase 2, which is due in late 2011, there will be a mirror installation completed.

Paul Jordan says, *“This project needed a deep understanding of the University’s requirements, careful planning and strong teamwork. We achieved all of that and it was a very successful implementation now giving the University a reliable and efficient data centre that manages the entire network.”*

He continues, *“Mayflex was able to offer us complete IP converged solutions so we only ever had to deal with one supplier to get all the products needed and Mayflex provided full support throughout. I’d like to especially thank Paul Collins and Tom Filce from the Mayflex sales team who were a real asset in terms of designing the solution during the pre-sales process.”*

