Department of Immigration and Border Protection – Building for the Future

Canberra Data Centre (CDC) was formed in 2007 with the purpose of being a trusted partner for data centre services. CDC currently operates three data centres, each of which are custom designed and built to provide the utmost functionality of data centres. Due to their application of innovative technology they provide their clients with security, reliability and services whilst adapting an environmental approach.

The Department of Immigration and Border Protection chose to install an AFL MTP solution in the CDC. "There were a range of factors that forced us to move our in-house Data Centre into a Co-Location Data Centre (Co-Lo). The primary reason was the inability of our existing DC to support the new higher density Compute and Storage platforms that the Department intended to migrate to," said Nathan McGlynn, MACS [Snr] CP, Data Centre and Infrastructure Services for the Department. Another reason was the lack of power required to run our systems as we were constantly running at 75-85% of the total power capacity," continued Nathan. The final factor was to align with the AGIMO Data Centre policy to reduce the number of in house 'Data Centres' run by Government agencies and relocate to 'greener' more efficient Co-Lo facilities.

CDC prides themselves on their ability to provide custom built and designed data centres to meet the highest standards for their clients. By working closely with AFL staff and MultiSystem Communications (certified system designers and installers), a solution to best meet the Department of Immigration's needs was achieved.

A combination of AFL's Optical Fibre Distribution Frames (OFDF), MTP cabling, Category 6 Copper and Enclosures were used in the network to ensure an effective outcome.

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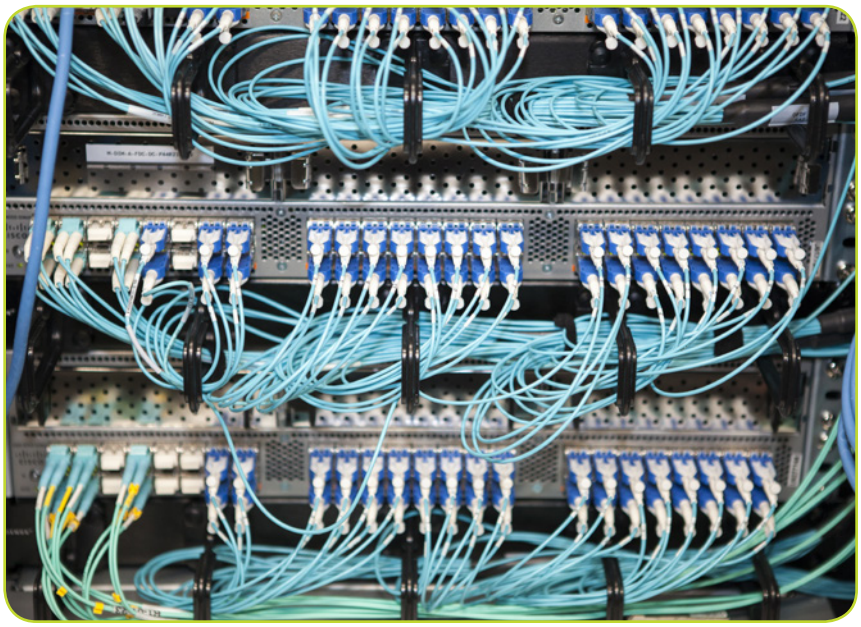

Above from left to right: Paul Hampton (Department of Immigration and Border Protection), John Coetzer (AFL), Tom Reinhart (MultiSystem Communications), Nathan McGlynn (Department of Immigration and Border Protection), and Evan Savescu (AFL).

AFL's Sales Manager, Evan Savescu, commented, "Our high density MTP solution, coupled with our Optical Fibre Distribution Frame (OFDF) provides high speed communications in limited space. This allows more efficient cooling in the data centre, reducing cooling costs and the amount of power needed. This is a win-win for both the CDC and the environment."

On the challenges associated with the project, Tom Reinhart from MultiSystem Communications commented, "The sheer volume of the fibre core count (5000+ cores) that were installed and tested within a four week window was a real challenge." Tom continued to explain, "Some of the backbone trunk connections were required to patch directly from a fibre enclosure into active equipment, meaning we had to design a custom trunk which had a 24 fibre MTP connector on one end, but somehow fan out to 3 x 8 fibre MTP connectors on the other. The active equipment was a BROCADE BLADE CHASSIS which had a specific pin-out configuration." It was fundamental that the configuration was considered when the trunks were being manufactured to ensure the correct input/output fibre cores aligned with each other. Tom mentioned that this was of particular importance "since there was also further patching from the fibre enclosure through other backbone cabling into different cabinets in the POD. This process proved to be quite involved but with help from the AFL team a custom trunk was able to be designed and manufactured to suit the specific needs of the end user."

Overall the project was completed on time and budget and to the satisfaction of all involved.