

### Ty Hywel, Cardiff Bay



#### The challenge

To install a Brand Rex Category 6 UTP/LSOH structured cabling solution across 2 floors. Due to time constraints within the building this had to be installed in a phased programme with extremely limited time and opportunity to complete each area.

#### The solution

The project started with a series of pre-contract meetings to determine the strategy for the whole project, including the co-ordination of all the different contractors. These meetings were attended by one of Whitepack's experienced project managers who had been assigned to this

important project to lead a team of specialist engineers and ensure that the whole contract was completed on time and within budget.

The project had to be completed in five carefully planned separate phases.

To meet health and safety requirements, a total of 9 No 47U Prism cabinets were delivered to the site as flatpack units. The cabinets were moved to the upper floors by WNS using a temporary hoist that had been erected by the builders on the outside of the building.

Phase 1 The task was to carefully disconnect and remove 250 of the existing old Cat5 cabling leaving the remaining 300 cables in tact and operational.

Phase 2 The task was to install a new 47U comms cabinet in an occupied area, disconnect the remaining 300 Cat5 cables and the existing 16-core optical fibre and re-route the cables through the raised floors to cabinet. The cables were then re-terminated and tested. A new 200-pair multicore was installed from the ground floor server room to the cabinet.

The 2<sup>nd</sup> phase was undertaken between Friday night and Sunday night and all the services were back on line to enable normal business to be resumed on Monday.

Phase 3 The task was to install 2 No new 47U cabinets. The existing 2 No 200-pair voice multicore cables (primary & secondary routes) were re-terminated and tested. The existing 2 No 16 core optical fibre cables (primary & secondary routes) that had previously been terminated as "cold cured" were re-terminated as fusion spliced with pre-terminated pigtailed and tested. New 8-core optical fibre cables were installed to link a new cabinet on the 5<sup>th</sup> floor. From the new cabinet 432 UTP/LSOH Cat 6 cables were installed routed through raised floors to floor boxes and through ceilings to WI/FI & AV locations.

Phase 4 The task was to disconnect and remove 750 existing old Cat5 cables from the redundant floor boxes.

The majority of the work was undertaken during night shifts, at the end of each shift the floor tiles were replaced to allow the day shift (builders etc) to work safely.

Phase 5 The task was to install 2 No new 47U cabinets. The existing 16 core optical fibre cables (primary & secondary routes) were pulled back and re-routed via splice boxes to the new cabinet locations the fibres were re-terminated as fusion spliced with pre-terminated pigtailed replacing the previous "cold cure" terminations. New 8-core optical fibre link cables were installed between two floors. The existing 200-pair voice multicore cables were re-routed via box cons to the new cabinet locations.

A total of 906 Cat6 were installed routed through raised floors to floor boxes and through ceilings to WI/FI & AV locations.

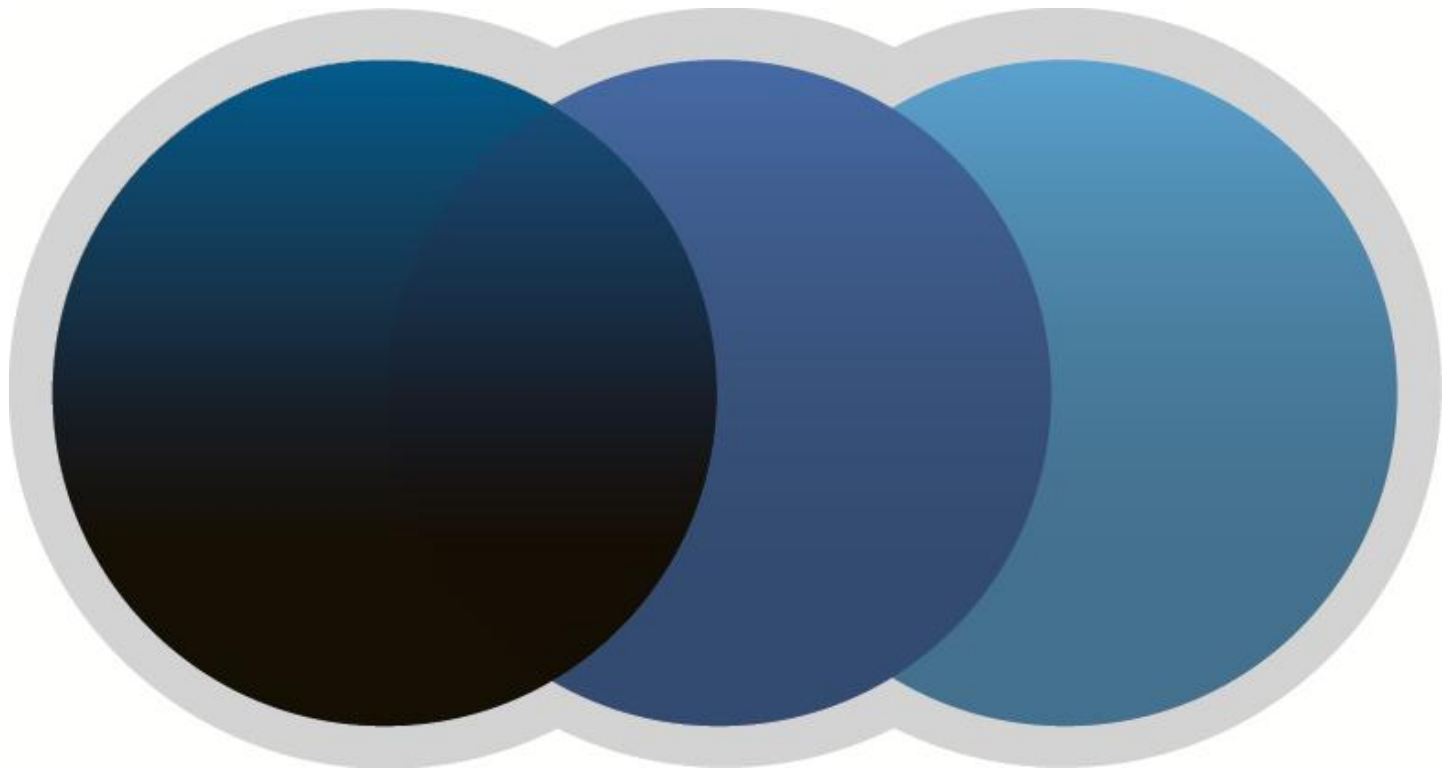
The majority of the work on the two floors was undertaken during night shifts, at the end of each shift the floor tiles were replaced to allow the day shift (builders etc) to work safely.

Throughout the project, Whitepack Network Services attended various progress meetings where progress was carefully monitored to ensure adherence to the main contractor's tightly controlled programme.

Risk assessments and tool box talks were also supplied by Whitepack Network Services to A&N Lewis, the main contractor. As a result, no accidents or near misses were recorded during the duration of the contract. The regular site co-ordination meetings enabled each phase of the contract to be carried out with maximum efficiency and ensured that the ICT programme remained on track a factor that was greatly acknowledged by A&N Lewis.

On completion, the test results, a 25 year Brand-Rex Warranty and a complete set of 'as fitted' drawings were presented to the clients IT department.

The project was a complete success and the Whitepack Network Services project management and installation team was commended by the main contractor (A&N Lewis) for its outstanding contribution to this important project.



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