

KBC Mesh Provides Wireless Redundancy

Logistics Site Surveillance System



Background

A site surveillance system at a logistics centre close to London Heathrow airport required network redundancy. With no possibility of cabling, KBC wireless mesh units provided a secure, resilient solution.

The Challenge

Located to the West of London and close to London Heathrow airport, the customer's warehouse and distribution centre is situated within just a few kilometres of the UK's busiest stretch of motorway. The site is in use 24-hours a day so a CCTV system was required to monitor the movements in and out of the loading bays at all times.

The CCTV system was required to record video locally and to stream live video back to a remote monitoring centre. There was no installed fibre available and, because of the inconvenience of civil works, there was no prospect of installing new cable. The system also needed to be resilient.

The Solution

To fulfil the requirement, a redundant, wireless CCTV system was designed with a local DVR plus a link to transmit the video back to a monitoring centre. For full coverage of the loading bays and doors, cameras were located on existing poles around the site. To ensure operational resilience, KBC MeshII units were used to create a redundant ring, so that even if one signal path is blocked, a backup connection becomes active, and the secure video links from each of the cameras is maintained.

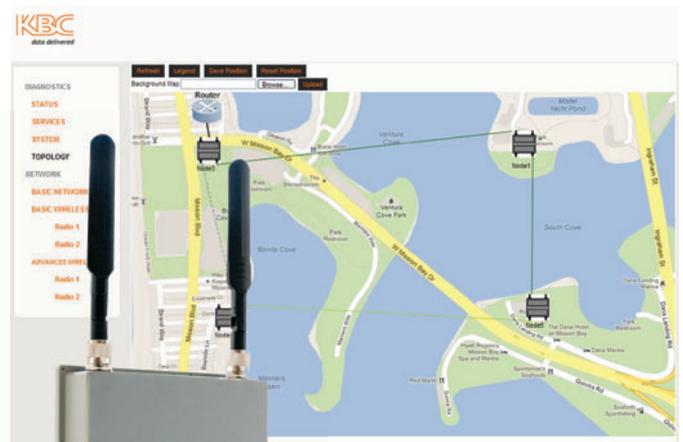
Installing the System

Channel selection for each of the units was set automatically enabling the best frequencies for the wireless environment to be used. With each pair of host and clients 'locked' together, ensuring that the correct transmit and receive units could only ever communicate with each other, the units were installed at each camera node. Once mounted, alignment was carried out using the LEDs on the rear of the unit and the alignment tool within the graphical user interface

to ensure that the signal levels were at the correct levels. Throughout the short process, the mapping tool, which comes as standard on KBC Mesh units and depicts a graphical overview of the entire system, was used to show the status of all the link connections in case of any weak RF links.

Outcome

The CCTV system was successfully installed and is fully operational. The wireless units provide the resilient transmission required for surveillance of the site and now deliveries and collections are monitored and recorded 24 hours a day. Following the success of this installation, further similar CCTV systems are planned throughout site.



Redundant Ring Mesh System for Logistics Site

