

Application stories



CCTV UPGRADE ▾

Amplicon were approached by a major London Railway operator to update their existing analog CCTV system with an IP solution. The system had to take advantage of existing as well as new networking infrastructure being installed. The key factor for the upgrade was to enable central monitoring of the railway stations along the lines operated by this rail operator.

SYSTEMS REQUIREMENTS ▾

The London Rail operator was looking for a system to update their existing camera recording equipment (VHS recorder) on each of the stations with a more reliable, high quality software as the existing system was prone to recording poor image quality as well as human error changing tapes and was also a technology that was no longer supported.

It was decided not to replace the existing analogue cameras with an IP version to save money and time on the project, but in areas where improved vision was required new IP cameras would be installed.

Following an incident that had occurred at a station where the Police confiscated the recorded media for evidence leaving no record for the train operator to keep, it was decided that each station would continue to have their own recording systems but would also send the captured video back to a central server as a back-up.

Because of the outdoor environment, networking switches would be exposed to severe conditions at track-side, a rugged and reliable industrial switch would be required that also carried the necessary rail approvals.

SYSTEM DESCRIPTION ▾

Using the existing analogue cameras and converting them to IP was made possible using a range of video servers (Codecs) which are devices that can either be located locally or in a central distribution panel that converts PAL/NTSC to MPEG or JPEG compression making it possible to connect to a network.

It was important that the Milestone NVR (Network Video Recorder) software running on a reliable storage server would be capable of operating 24/7 whilst requiring minimal maintenance over the duration of the contract. The Impact-S range of storage servers were selected because of the industrial grade components used, offering 100,000 hours MTBF as well as the flexibility to build and configure systems to suit each of the station and the central control room. The Amplicon servers had also undergone extensive testing at Milestone to prove their ability to run the software

Because of the expertise Amplicon has to offer within it's Data Communications team, we were also able to design and supply a redundant ring network topology system to complete the package, networking the individual station with the central control room using a railway approved switch.

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SYSTEM DESCRIPTION ▾

Video Server (Codec)



- 1 – 8 Channel Video Server
- MPEG Compression
- Bi-directional Audio

Rail Approved Switches



- Industrial Grade
- Redundant Ring Topology
- Customised Configuration
Copper/Fibre

Impact-S Servers



- 19" Rackmount Servers
- Up to 32 TB – RAID options
available

WHY AMPLICON ▾

Amplicon was the supplier of choice as we were able to offer 30 years experience with industrial electronic systems, encompassing data acquisition, industrial networking and computing solutions. By talking to one of our Security Automation team, the right equipment was selected and delivered on time and within budget. Further work from Amplicon's engineering team meant that the solution was customised to meet the exact requirements of the application at 'off the shelf' prices.