

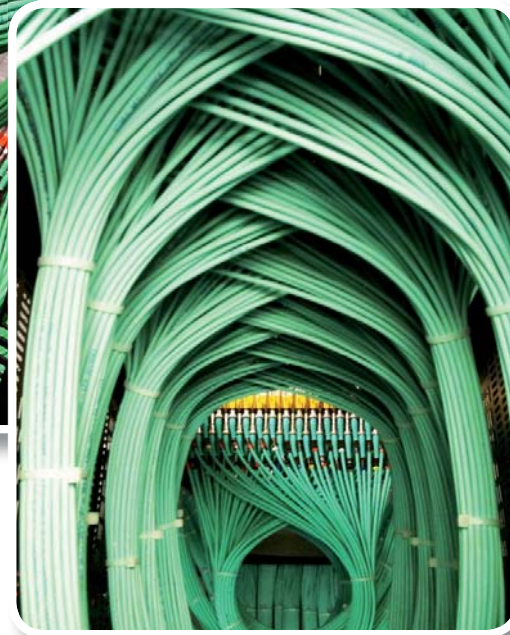
Pacific Television Centre London

Probel Sirius Router

June 2010

Pacific Television Center (PacTV), a Los Angeles-based independent global transmission and production company, recently upgraded the Main TX router within their London facility. The upgrade coincided with the upgrade of fibre connectivity between London and L.A., from OC3(155Mb) to OC48 (2480Mb). PacTV commissioned **absolute CAD** to implement the design and integration of the new system.

The upgraded in fibre connectivity and router capability enabled PacTV to offer clients up to seven simultaneous HD feeds, an increase from the three that it supported previously. It can now provide HD transmission around the globe including New York, Washington DC, Los Angeles, Toronto, Sydney, Auckland and Paris.



Design

The design for the HD router upgrade, involved a full understanding of the technical and operational needs of PacTV. As the company provides around-the-clock TX services, the design had to ensure that there was ZERO downtime. This would prove vital to ensure that their clients feeds would not be compromised.

The new Snell Sirius 128 x 128 HD router upgrade would supercede the existing SD/ASI, by doubling the capacity and increasing the bandwidth to provide HD routing. Absolute CAD designed the system to be predominantly pre-wired off site and installed in a co-location room adjacent to the main Technical Area. This minimised disruption within the company, and enabled the router to be wired without affecting any of the live circuits, until it was time for the changeover. The integration of the new Router was aided by the fact that **absolute CAD** have been responsible for designing every aspect of the technical infrastructure since its conception in June 2004.

Project implementation

In addition to designing a new routing system that would consume over 14Km of HS/SDI digital video cable, there were technical and operational issues which had to be overcome in order for the project to succeed.

1. Minimising disruption:

In order to minimise operational disruption on site during the project, **absolute CAD** took the decision to pre-wire over 1000 cables off site. The cables once cut and identified were terminated at one end and delivered to site in preparation for installation. This prevented the operational areas being exposed to disruption, and to any potential trip hazards.

While the cables were being prepared, a new remote Technical Area was being built. This was to house not only the new Snell 256 x 256 HD router, but all of the essential HD video patch panels associated with all connections to and from the router. **absolute CAD** ensured that the new Technical Area was designed to cater for all of the current and future technical requirements of Pacific Television.

2. Zero downtime

Once the infrastructure for the new router, and all of the associated devices, had been installed it was imperative that the system be run in parallel with the “on air” router in order to check every connection was within specification.

With all connections rigorously checked, **absolute CAD** worked closely with Pacific Television to formulate a changeover schedule which was to take up to 3 days to complete. Transmission services were subdivided into groups, that once became “off-air” could be migrated to the new router. Once the process had started, both routers had to be run simultaneously, with control and monitoring.

Both routers continued to be in service throughout the changeover period, and for some time afterwards as a precaution. No services were lost, and Pacific Television were able to continue their 24 hour operation throughout the entire period.

Summary

With a difficult 24hr Transmission output to consider, **absolute CAD** provided the experience to implement the new router installation with a minimum disruption and loss of service to the client. By pre-wiring off-site the majority of the cabling, time was drastically reduced on-site. The services that Pacific Television provide are essential for their business, and the smooth application of this project meant that this business was not affected.

The installation was completed in under three weeks and was completed within budget. The cabling was designed and installed using broadcast standards, and the client was left with an immaculately wired installation

“ absolute CAD proved to be the perfect choice as systems integrator, as they managed the project from start to finish, and ensured that it was completed on time and within budget. They also made us feel as though we were in safe hands throughout, ensuring our critical feeds stayed online throughout the changeover ”

Dave Miller - Engineer
Pacific Television

For further information

email **absolute CAD** at info@absolutecad.tv