

## Kedington Support IAA to Build Leading Edge Network

Early in 2009 the Irish Aviation Authority (IAA) decided to relocate to a new building on D'Olier Street in Dublin. The planned move presented the IT department with a challenge, and indeed opportunity, to build an IT infrastructure that was tailor made for their current needs while capable of supporting their forecasted growth for the coming years.



The IAA contacted Kedington in May 2009 to discuss their plans and arrange a presentation to the entire IT team. As a consequence of this presentation Kedington were requested to develop a design brief for the complete infrastructure including



- Server room layout, floor-plans, and equipment segregation.
- UPS specification, including sizing.
- Cabinet and Frame elevation drawings
- Structure Cabling
- KVM and intelligent PDU specification
- Environmental monitoring
- TV Distribution system
- Electrical Distribution within the Server Room
- Fire Suppression
- Air-conditioning.

Because the network was to support a converged environment, including VoIP, TV and CCTV, Kedington designed the Data Suite to contain a high security Server Room and a separate Switch Room. The Server room contains the high security servers and SAN, all managed over IPKVM and intelligent PDUs. As a result engineers only need to enter this area for server installations, de-installations or hardware upgrades. All other work can be conducted by authorised engineers from any workstation on the network. The KVM and PDU infrastructure, manufactured by Avocent, is managed by DSview3, a comprehensive and secure management platform. The system also includes the DSView Power Management module allowing the direct metering of the power consumed by each server and the generation of energy bills per machine. Using this system the IT Department can issue energy bills to the business departments for whom the servers are maintained within the Server Room, helping drive “green” thinking within the organization. Cabinets within the Server Room are each connected by Qty 24 CAT6a links to Open Frames in the Switch Room containing the Cisco 6500 switch chassis.



The Switch Room contains the Cabinets and Open Frames. The cabinets contain the Voice System, WAN termination equipment, TV system, CCTV and the LAN switches, comprising 2 \* Cisco 6500 chassis installed in Open Frames.

To ensure the cabling system was capable of supporting the business for more than 20 years, the IAA installed a Systimax X10D CAT6a solution capable of speeds up to 10 Gbit/second. This was particularly important in the older part of the building which is a protected structure where upgrades to the cabling infrastructure would be extremely difficult if not impossible.

Following contract award the complete network including, cabling, KVM, PDU, environmental monitoring, TV distribution system the construction of the Server and Switch rooms were completed in 12 weeks.

**To find out more about this case study or server room design services please contact:**

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