



Keysource maximises IT capacity in a restricted space

“Keysource has delivered on its promises and the dedication of its staff has contributed to the success of the project.”

Mark Chisholm of Royal Holloway, University of London

overview

- ➔ One of the four largest multi-faculty colleges in the University of London, Royal Holloway has a distinguished history and reputation for academic innovation. Having outgrown their existing IT space, the university had a requirement for a new data centre and, following a competitive tender, Keysource was appointed to design and build the facility.

the challenge

- ➔ Royal Holloway, University of London, had an ageing computer room at its main campus in Egham, Surrey, which no longer met current IT needs and did not possess the capacity for any future growth plans. These plans included a new project that had been undertaken to deploy additional IT equipment that has been hosted temporarily at Imperial College London.

As a result, a bespoke data centre solution was required, to be located in a building previously used as a lecture theatre at the university's Huntersdale campus, which could be installed rapidly and cost effectively.

the solution



The appointment of Keysource was crucial as it was able to deliver the project from start to finish. Keysource initially provided consultancy to the university and worked through all the options available to Royal Holloway to help gain a better understanding of the commercial and operational needs of the new facility. This meant that the university could make a fully informed decision. Next Keysource provided a 'turnkey' solution that included a detailed design process. As a result, Keysource developed a scalable data centre that is suitable for the university's current and future IT requirements; maximises uptime in the event of power failure; and utilises the most appropriate technology. The solution involved a full development and installation package covering design, construction, project management and monitoring services. As the principal contractor, Keysource were responsible for the complete strip-out of the building that houses the new data centre and all structural work including the installation of a new roof, computer room grade raised floor, and bio guard suspended ceiling.

Technical information

- The data centre is designed to take an initial deployment of 20 server racks at 6kW per rack and 4 communications racks at 2kW per rack. The scalable nature of the facility means that its infrastructure also has the capacity to house a further 20 racks at 6kW per rack, which can be installed as a second phase without any operational downtime.
- The design has delivered a secure facility with IT systems supported by redundant UPS. Emergency power is provided by an automatic standby diesel power system to maximise uptime.
- The cooling systems utilise the hot aisle containment approach with in-row cooling. The cooling system has been developed at an IT cabinet level in order to closely control inlet temperatures to critical IT equipment.
- An early warning VESDA smoke detection system and fire suppression system have been incorporated to provide high levels of protection. The facility also contains plant, environmental and security monitoring tools to ensure equipment availability and minimise downtime.

the benefits



- **Forward Thinking** – a cost-effective design that enables Royal Holloway's IT equipment to be supported in a redundant and scalable environment to meet current and future predicted needs.
- **Project Management** – a complete solution that was managed end-to-end to deliver a turnkey data centre on-time and on-budget in less than five months.
- **Partnership Approach** – a close working relationship demonstrating high levels of commitment, communication and professional expertise to ensure a smooth installation process and total peace of mind.

Mark Chisholm, Project Surveyor, Estate Services at Royal Holloway, University of London, says:

“Keysource has developed a high-quality data centre solution that significantly increases our computing capability and offers expansion potential to handle future growth. Royal Holloway is an expanding university, so it is essential that it possess the infrastructure to support plans moving forward. Keysource has delivered on its promises and the dedication of its staff has contributed to the overall success of the project”

can we help you and your company?



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