

## Case Study IT029



# Document Management at the Royal Opera House

### The achievement

Schal International Management Ltd enabled electronic distribution of documents, with searching facilities and an audit trail, among members of the design team for the refurbishment of the Royal Opera House. Face to face or telephone communications were focused on key issues not hand-over of documents.

### Key benefits

- ★ Improved communication within the design team, which was able to share correspondence instantaneously.
- ★ Improved document retrieval leading to improved team effectiveness – team members could search and locate any relevant document from their desks.
- ★ Improved quality of the product - the refurbishment of the Royal Opera House – as a result of effective and fast communication within the design team
- ★ Benefits to the client through easier and better communication with all design team members, in an auditable manner.
- ★ PIMS has helped to differentiate Schal from its competitors and has assisted them to win other projects

## The background

Schal's objectives were to reduce the amount of paper used in communications, to establish an on-going archive, and improve communication among members of the design team.

## The approach

Initially they installed a version of the project information management system (PIMS) in their main office so the client could access it via a modem and telephone line. The line was later upgraded to an ISDN line. This was extended by installing servers, linked to the original server, in the offices of the client, architect, engineers and cost consultants. All five servers were connected in a wide area network with fixed lines.

They established a clearly defined protocol about how the system should be used: For documents originating within the team, the sender had the responsibility to put it in electronic format, including scanning where necessary, and distribute it to others as appropriate. For documents originating outside the team, the first receiver was responsible for scanning and distribution. The servers were totally separate, but electronic data could be sent from one to another. Documents went only to those for whom they were intended. The client could write to the architect, but it would not automatically go to the engineer.

The system was totally auditable. It recorded when a document was sent and to whom, when it was read, and when the item or instruction had been completed.

The biggest difficulty for Schal was maintaining control over servers in other firms' offices but this was resolved through regular meetings and the definition of agreed protocols. They were greatly helped by the client who wanted a one-team approach and insisted that the other team members met Schal's requirements.

Schal had to gain supervision rights to parts of other companies' servers to install the system, to link the sites together, to control access rights in each company (who should scan

documents, who should view documents, who should review them, and who should issue them) and to determine groups for the distribution of documents.

The system was able to store approximately 350,000 documents available on-line to authorised users, reducing the amount of paper work in the offices. Information was available to all users as soon as it was received, therefore issues could be dealt with in a quick and timely manner. In the main Schal office the paper copies resided in six cabinets and only one copy was kept, rather than the traditional five copies. This reduced wasted time in filing and searching for documents. Documents could be found on the electronic system in minutes rather than hours or days in the traditional paper based systems.

## Key lessons

- ★ Commitment from the client is vital.
- ★ It is important to establish who is overall responsible for maintaining control over the servers.
- ★ The whole design team has to be willing to work towards one shared goal.
- ★ A culture change is needed among all the participants when moving away from paper-based documents. Prepare a project protocol that determines what is controlled centrally and what locally, and sets out responsibilities for introducing electronic versions of documents into the system.
- ★ To get the full benefit, training on the system is needed at every location.

## Further information

For information on other case study summaries please contact:

IT Construction Best Practice  
Davis Langdon Consultancy  
FREEPOST LON14305, London WC2B 6BR  
Fax: 020 7379 3030  
Email: [itcbp@davislangdon-uk.com](mailto:itcbp@davislangdon-uk.com)  
Web: [www.itcbp.org.uk](http://www.itcbp.org.uk)

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