

## IN BRIEF

### Industry

- » Architecture

### Challenges

- » Poor application performance affecting file collaboration between users
- » Reduce time taken to synchronize data to DR site

### Solution

- » Riverbed Steelhead appliances

### Benefits

- » Reduced file and application latency enabling full collaboration between users
- » Improved backup and disaster recovery solution

Rogers Stirk Harbour + Partners



# Rogers Stirk Harbour + Partners

## Rogers Stirk Harbour + Partners avoids 100Mbps Bandwidth Increase and Enhances its Disaster Recovery Solution with Riverbed®

Rogers Stirk Harbour + Partners (RSHP) is an award-winning international architectural practice with 140 employees worldwide and offices in London, Barcelona, Madrid and Tokyo. Central to the philosophy of the practice is a commitment to the creation of public spaces that enliven and rejuvenate inner-city areas, as well as a strong focus on delivering sustainable designs which are environmentally responsible and which are also adaptable over time to changing requirements.

RSHP has wide experience of working on a range of major international architectural projects which are co-ordinated out of its principal office in London, UK. Among these projects are the European Court of Human Rights in Strasbourg; the Antwerp Law Courts; and Terminal 4, Barajas Airport, Madrid. Current projects on site include a mixed-use development and tram station close to Florence; two new metro stations in Naples; a 50-storey office HQ building for a major bank in Mexico City; and one of the new towers on the World Trade Center site in New York. As well as managing the design process from London, the practice also operates locally through project offices where required — usually in close co-operation with co-architects and other consultants — an approach which has already worked successfully on a number of sites across North America, Europe and South East Asia.

### Business Continuity Challenge: Enhance disaster recovery solution for mission critical files

Design drawings are required for every new RSHP project. Each design consists of buildings that range from one to 20 or more stories high with an immense amount of structural detail involved. Because of the nature of the work, files will typically contain links to data in other files creating storage issues for the organization and, in some cases, can result in files of 50GB in size or larger. Drawings are mission-critical and, as a legal requirement, they have to be kept for the lifetime of the structure.

RSHP faced a number of challenges. The company wanted users to collaborate on projects regardless of where they were located in order that projects could be worked on across all time zones. But the time taken to download files and access services made this plan unworkable. RSHP also wanted to enhance its centralized DR plan, improving the time taken to synchronize data to its DR site without increasing bandwidth.

In addition, it took too long for architects to download files when working on project sites. Instead users would download files to a laptop prior to leaving the office and the amended file would be uploaded once the architect returned to the office. This affected the integrity of the file if more than one person needed to work on it at the same time.

### Solution: Cut costs without Compromise: Riverbed Steelhead® appliances reduce file and network latency and improve DR solution

RSHP, working with their storage partner, began to look at solutions which would enable them to improve file collaboration between users, reduce file download times, and improve data backup processes.

However Seamus Conway, network manager for RSHP recognized that the problem of file collaboration and poor download speeds would not be resolved by increasing bandwidth. He needed a solution that would overcome the issue of latency, and choose to look at WAN optimization.

Conway recalls, "We first looked at a sample range of WAN optimization solutions but Riverbed was the only vendor we found to provide a truly network-based and future-proofed solution."

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Conway then agreed to look at Riverbed Steelhead products and ran a number of tests, "The Riverbed solution focused on improving application performance over the WAN using scalable data referencing (SDR)," says Conway. "Because of the optimizations that reduce bandwidth requirements and latency, it was better suited to our needs." He continues, "We needed a solution which would reduce the chattiness of our applications over the WAN. Riverbed enabled this whilst ensuring the integrity of the data."

**"Because of the optimizations that reduce latency Riverbed was better suited to our needs."**

With a solution to reduce CIFS file latency and enable greater collaboration amongst users, RSHP then began to enhance its disaster recovery solution.

With Steelhead appliances in place, the company was able to mirror large amounts of data to a secondary site with NetApp SnapMirror via an optimized connection between the Steelhead appliances without increasing bandwidth. This has significantly improved the DR solution for RSHP.

**Benefits: Disaster recovery solution in place with 2Mbps bandwidth link**

RSHP has installed Steelhead appliances at two of its office locations and at the DR site. This has resulted in an 80% reduction in file download times. Users can now access files in seconds rather than minutes, which in turn enables them to be more productive. Users can now collaborate quickly and easily with each other across locations allowing projects to be worked upon by a number of employees regardless of where they are based. File integrity is also no longer being compromised as files are now accessed directly from a central location.

With Steelhead appliances accelerating back ups and recovery times, RSHP has greatly improved its disaster recovery solution for its mission critical files. Tape backup and data is now synchronized to the DR site and any disk failure can be quickly overcome.

There has been a financial benefit as well as Conway explains: "When we reviewed our DR improvement plan we quickly saw that a 100Mbps link was needed to achieve our target throughput from our HQ to our DR site. Thanks to Riverbed we are able to continue with our current link which is limited to 2Mbps for DR traffic. We managed this using the Riverbed quality of service (QoS) feature."

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RSHP is now looking at the Riverbed Services Platform (RSP), as it is interested in providing Domain Controllers DHCP, DNS, and print and file services to the project offices. The RSP can run up to five additional services and applications virtually on VMware in a protected partition on the Steelhead appliance. This will allow RSHP to increase workstation connectivity and remove print and file servers from the project offices.

**About Riverbed**

Riverbed Technology is the IT infrastructure performance company. The Riverbed family of wide area network (WAN) optimization solutions liberates businesses from common IT constraints by increasing application performance, enabling consolidation, and providing enterprise-wide network and application visibility – all while eliminating the need to increase bandwidth, storage or servers. Thousands of companies with distributed operations use Riverbed to make their IT infrastructure faster, less expensive and more responsive. Additional information about Riverbed (NASDAQ: RVBD) is available at [www.riverbed.com](http://www.riverbed.com)



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**SUMMARY**

**Rogers Stirk Harbour + Partners (RSHP [www.rsh-p.com](http://www.rsh-p.com)) is an international architectural design practice that regularly produces designs for airports, housing schemes, and company headquarters. When a project is won, the design file becomes mission critical and must be kept for the life of the building.**

**RSHP wanted to enhance its current disaster recovery system, and due to file and network latency, collaboration between offices was slow and difficult for employees. RSHP turned to Riverbed to improve download speeds, remove latency issues and enhance its disaster recovery solution. Time to download files and access web-based applications has now improved by 80%, providing LAN-like speeds to users.**