



SOFTCAT SETS NEW NETWORK STANDARDS FOR FIRTH RIXSON

Global leader in engineered products
to hi-tech industries

Latency issues across a global WAN
affecting end-user experience and
productivity

Peak data reduction
by as much as 87%

Firth Rixson is a global leader in engineering and manufacturing to high technology industries, primarily Aerospace. As a leader in world manufacturing, the company continues to set the standard in engineering and operations excellence. Not only are they world leaders in Aerospace manufacturing but Firth Rixson's highly engineered forged and metal products are also integral in other markets, from Power Generation to Mining. With a staff of 800, they supply their products to a customer base in more than 40 countries worldwide.

The Challenge

With offices located across the globe, Firth Rixson's WAN is the foundation of their enterprise, enabling collaboration, communication and business productivity. However, performance of the WAN had begun to frustrate them. Application lag, replication issues and saturation of links were all making for unreliable services and poor end-user IT experience all of which were beginning to impact day-to-day business operations.

Firth Rixson's small IT team was in no position to effectively evaluate the wide variety of technologies available and potential solutions to this challenge so they called on the expertise of long-term partner, Softcat, to help them make an informed choice on what to do.

Paul Jenkins, Group Network IT & Security Manager at Firth Rixson elaborates on the challenges, "The latency issues were really concerning bandwidth between the UK datacentre in Sheffield and the US datacentre in California as the main VPN connection to local hubs in the continents. With only a T1 (1.5 Mbps) connection we found the end-user experience was getting worse and worse, especially if new users came on board. We'd come to the conclusion that we would either need to upgrade the links or come up with a more innovative solution to the problem. That's when we called in Softcat."

Chris Baker, Networking and Security Consultant at Softcat picks up the story, "Once they explained their issues of latency between the offices across the globe we felt pretty sure that a WAN optimisation solution would be the best answer to the challenges. Because of the applications and services they were looking to run over the WAN, we needed to make sure the technology deployed would be well suited to their needs, primarily catering for Citrix, Email and IP Telephony which had suffered from poor response times and sound quality issues."

The Solution

Firth Rixson had already considered technology from Cisco, Blue Coat and others but were not familiar with the relative merits of each or indeed what else they should be considering. Above all they wanted something that would be easy to set up and then straightforward to manage.

With all the considerations in mind, Softcat recommended that Firth Rixson seriously consider Riverbed technology as a leading vendor in WAN optimisation. Chris Baker continues, "Riverbed is good at accelerating a diverse range of traffic types. They were reliant on Citrix and VoIP, which both require dedicated WAN bandwidth per user therefore contributing to the problems. By using Riverbed, we were certain they would be able to dramatically reduce the amount of bandwidth consumed by their enterprise traffic, making room for other bandwidth-intensive applications without the need to upgrade bandwidth."

To prove the recommendations, Softcat proposed a Proof of Concept (PoC) be run on the Riverbed technology. Together Softcat and Riverbed installed two appliances in Firth Rixson's live UK environment. The PoC ran for over a month, testing a wide range of traffic types to then generate a report. The results were compelling, revealing that network speed was increasing dramatically whilst data passed over the network was decreasing in equal measure.

Chris Baker explains how such impressive results were achieved, "Caching, compression and application acceleration features actually speed up the rate at which data can be sent over the network by reducing the amount of data sent and received – something that simply upgrading the bandwidth across a network will not achieve. If data is accessed regularly it can be cached on the local Riverbed box rather than being sent backwards and forwards between the local and central sites."

With the technology proven, Firth Rixson needed to ensure that the implementation would meet their budget too as a significant amount of technology would be purchased and deployed to improve their global network. Looking after their commercial interests, Softcat worked tirelessly with Riverbed to make sure that the project would come in on budget.

With dozens of offices around the globe, Firth Rixson decided to phase the new technology in over two years, starting with the main sites first in the UK and US and then implementing further devices to one or two offices per month thereafter.

The beauty of the Riverbed appliance's is that they are very simple to deploy and once installed need very little management or support. Importantly, this meant installation services for such a big project would be kept to a minimum as well. Chris Baker explains, "They wanted something easy to install and manage and Riverbed is very, very good at that. For example, it has self-auto discovery which means once you plug it in to the network and assign it an IP address it will quickly discover the other appliances, establish a connection and start shaping the traffic."

The Benefits

They have now installed 75 devices across a host of locations around the globe and results have been breath taking. Data passing across the network has been reduced by 68% with peak data reduction as much as 87%. On top of this, optimised bandwidth capacity has increased by a factor of 3.22!

Commenting on the results Paul Jenkins says, "The Riverbed solution has, on the whole tripled the available bandwidth across the WAN. This has helped improve nearly all our services, in particular email and IP Telephony which suffered previously."

Likewise, IT services are now considerably more reliable and stable, resulting in the end user experience being much better too. "Users don't praise us for the improvements in the network but we know the solution has had a positive effect because when we need to turn it off for maintenance or bug fixes, boy do we know about it!"

Why Softcat?

"Thanks to Softcat and their recommendations, complex projects like this just aren't a daunting experience. I've personally dealt with Softcat for 15 years now and they've always been brilliant - they're damned good at sales, presales and technical support. If you've got issues they'll always help and nothing is ever too much to ask. They are, without doubt, one of the best companies I've ever worked with."

Summary

There is no questioning the success of the project. By accurately matching a solution to the specifics of their challenge, Softcat has helped Firth Rixson avoid expensive fork lift upgrades to its global network bandwidth which had they proceeded with, would not have delivered the result they were looking for. The performance benefits and data reduction witnessed, could only have been achieved through the advice to use the technology ultimately deployed.

The Challenge

- Serious latency issues across global WAN
- Affecting end-user experience and productivity
- Needed to know whether to upgrade their links or if a better solution existed
- Required help evaluating best course of action

Key Facts

- Global leader in engineered products to hi-tech industries
- Specialise in manufacturing for Aerospace, Power Generation and Mining
- Worldwide customer base
- 800 staff globally

Solution Highlights

- PoC to endorse recommendations
- WAN optimisation technology from Riverbed
- Close collaboration between Softcat and Riverbed