

Mott MacDonald



Riverbed helps global consultancy consolidate resources, improve business productivity and become a hybrid enterprise

A global consultancy

Mott MacDonald is a £1.3BN global management, engineering and development consultancy. It is one of the world's largest employee-owned companies, with 17,000 employees and over 180 offices delivering sustainable outcomes for clients in 150 countries worldwide. It works on projects in the transportation, buildings, power, oil and gas, water and wastewater, environment, education, health, international development and digital infrastructure sectors.

Consolidate Resources And Improve Collaboration

It is critical that Mott MacDonald's IT infrastructure can support global collaboration, says Bradley Tullett, head of infrastructure at Mott MacDonald, "We have project teams around the world, who need to share documents, files and data." However, supporting a geographically distributed workforce was challenging, he adds, "We had a data center in London and hub sites at strategic points on our

network. Every office had a file server and project data was stored locally. Whenever offices collaborated, data had to be replicated, which had an impact on version control and performance."

The additional data traffic added to the pressure on Mott MacDonald's Wide Area Network (WAN), notes Tullett, "Our IT architecture is a mix of MPLS and IP/VPN, and our key applications include a document management system, intranet, ERP, AutoCAD and Exchange. We've continued to add new applications like BIM [Building Information Modelling]. We used to work with file sizes of 10-20 megabytes; now our models are typically 1-2GB in size."

As applications grew in size and complexity, the pressure on the network increased, explains Tullett, "We were replicating vast amounts of data to make our services widely available, and to protect data. We wanted to consolidate our resources and improve collaboration."

Riverbed Steelhead for IT consolidation and greater efficiency

Several potential solutions were explored, including increasing WAN bandwidth, but this was not a viable option, says Tullett, "In some regions, bandwidth is very expensive. But even if we increased the bandwidth, the vast distances between offices

In Brief

Challenges

- Data traffic putting pressure on network
- Network bottlenecks resulting in poor application performance
- Improve applications to boost collaboration and productivity
- Widely dispersed IT resources challenging to manage

Solution

- SteelHead™
- SteelCentral™ Controller

Benefits

- File transfer speeds up to 10x faster
- Search speeds 3x faster
- Up to 8x bandwidth reduction
- Optimization enabling 40TB bandwidth reduction per month
- LAN-like speeds at remote office locations
- Consolidation of IT resources
- Global collaboration enhanced
- Successful roll-out of cloud services

would have made latency an issue. We also looked at acceleration devices, but they just cached the data.”

Mott MacDonald decided that WAN optimization offered the best solution. The company tested solutions from several vendors, including Riverbed® SteelHead™ WAN optimization. “We conducted a proof-of-concept (POC) and Riverbed was ahead of everything else we tested,” says Tullett. With SteelHead, search speeds were 3x faster and file transfer speeds on average, 4x faster. “In some locations, performance was even better, for example, between the UK and Hong Kong, transfer speeds were 10x faster. When it came to optimizing and improving AutoCAD performance, none of the competitors came close to matching Riverbed.” SteelHead also delivered 50% bandwidth reduction, “We were getting LAN speeds across remote connections,” notes Tullett.

As a result, Mott MacDonald deployed SteelHead across almost 100 sites, and using Riverbed® SteelCentral Controller™ to manage SteelHead.

A more efficient business delivering even greater value to customers

Deploying Riverbed brings many benefits, says Tullett, “We’re seeing an average 2.7x optimization across the network globally. But in some places, it’s up to 8x. We are taking 40 terabytes a month off the network, in terms of bandwidth, and that makes a huge difference.” Application performance has greatly improved, he adds, “Our staff can focus on innovation, rather than waiting for the systems to deliver. This has increased productivity and helped us deliver an even better service to our clients.”

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Bradley Tullett
Head of infrastructure, Mott MacDonald

WAN optimization has also allowed new services and rich-media content to be delivered to employees, “We’re using SteelHead’s quality of service functionality to implement VoIP, so traffic prioritization on the network is happening. We can now use more media - like video - to engage our staff, both for internal communication and training.”

SteelHead has enabled Mott MacDonald to consolidate many IT resources. The company now has four data centers across Europe, the US and Asia, delivering many services and applications to branch offices. “We’ve been able to consolidate and deliver from data center, and that brings efficiency gains for our project teams, because they can work on the same data models globally. And you don’t have to replicate and manage them,” notes Tullett.

Riverbed has also helped Mott MacDonald better protect its data, “We’ve improved our recovery point objective, because we’re able to replicate more data, more quickly to data centers.”

Remote sites are now better connected, “There are constraints around the technologies or type of network we can use in certain sites. Deploying Riverbed means these sites can now connect to our intranet and feel part of the group,” says Tullett. “And if we need to mobilize a project team at a remote site, it can be up and running very quickly as we don’t have to source extra bandwidth or new infrastructure, nor re-architect our network.”

SteelCentral Controller has brought benefits too. “We want our staff to work consistently, wherever they are. SteelCentral enables us to standardize our service offerings and deploy standard configurations. It also gives us a global view and helps us understand how our platform’s performing,” says Tullett.

Mott MacDonald plans further consolidation. “We’ve consolidated at the data center, now, we’re moving a hybrid model that includes the cloud,” says Tullett, “We have deployed Office365 globally, and we’re now exploring hosting more services and data in the cloud. Deploying Riverbed has helped us become a hybrid enterprise.”

Tullett has no doubts about the impact of Riverbed, “By improving how we connect and collaborate globally, we’re able to deliver even more value to our customers. We’re really pleased with the ROI we have achieved too. Riverbed is now part of our standard service offering, so if we’re opening a new office, Riverbed goes in. Riverbed is a strategic partner for us and that is something we want to continue.”

Mott MacDonald has a geographically dispersed workforce, so efficient and effective collaboration plays a key role in the company’s success. But as larger and more complex applications were introduced, they placed additional pressure on the company’s Wide Area Network, slowing existing applications.

With Riverbed® SteelHead™ and Riverbed® SteelCentral™ Controller, Mott MacDonald has been able to greatly reduce bandwidth requirement; accelerate applications; enhance end user experience; boost productivity and collaboration; deliver even more value to customers; consolidate IT resources and become a hybrid enterprise.

“Riverbed has helped us boost productivity, improve end-user experience and become a hybrid enterprise. And we’re really pleased with the ROI we’ve achieved.”

About Riverbed

Riverbed, at more than \$1 billion in annual revenue, is the leader in application performance infrastructure, delivering the most complete platform for the hybrid enterprise to ensure applications perform as expected, data is always available when needed, and performance issues can be proactively detected and resolved before impacting business performance. Riverbed enables hybrid enterprises to transform application performance into a competitive advantage by maximizing employee productivity and leveraging IT to create new forms of operational agility. Riverbed’s 26,000+ customers include 97% of the *Fortune* 100 and 98% of the *Forbes* Global 100. Learn more at riverbed.com

The Riverbed logo consists of the word "riverbed" in a lowercase, sans-serif font. The letters "river" are in a dark blue color, and the letters "bed" are in a bright orange color.