

IN BRIEF

Industry

- » Professional Services (Architecture)

Challenges

- » Create more secure, reliable remote backup processes to remove the risk of losing vital client data
- » Enable teams within distributed offices to efficiently collaborate over the WAN
- » Eliminate wasted hours searching for lost client data

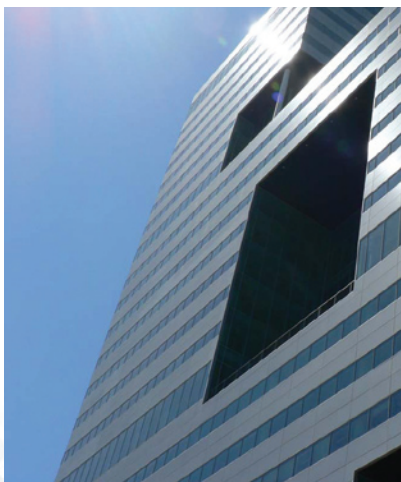
Solution

- » Steelhead appliances deployed in headquarters and 6 remote offices

Benefits

- » Backup windows were reduced from 4 hours to just 5 minutes
- » \$198,000 in annual bandwidth expenses saved with one-time Steelhead appliance purchase
- » Steelhead appliances optimized 82% of the data transferred over the WAN
- » WAN bandwidth capacity was increased by 3.1 times

LITTLE
DIVERSIFIED ARCHITECTURAL CONSULTING



LITTLE Diversified Architectural Consulting

Riverbed Steelhead® Appliances Enable Streamlined Remote Office Backup for Architecture Firm

LITTLE (www.littleonline.com) is one of the nation's largest diversified architectural consulting firms, with 300 employees located throughout the United States. Headquartered in Charlotte, North Carolina, and supported by seven remote offices, LITTLE specializes in the workplace, retail and institutional industries. LITTLE offers a complete range of services including architecture, interior architecture, FM strategies, engineering design, land development, virtual environments, graphic design and building technology services.

Challenge: Streamline Data Backup, and Enable Collaboration for Regionally Distributed Teams

"The applications we use are very desktop intensive; therefore, much of the highly valuable and critical data is typically stored locally on desktop and laptop machines, creating a significant problem for us," says Chris France, CIO at LITTLE. "A single day's worth of lost

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data can cost us \$200,000. So, as you can imagine, data backup is critical for us. Our employees are designing buildings with tight deadlines. If they lose data, they lose time, and this ultimately affects our clients."

"In the past, we never had a good data backup solution for our regional offices. And this had led to some problems for us. Before Riverbed, we used a local tape drive

in each office. This required our architects to be responsible for starting the backup and swapping of tapes, while the remote office managers would send the tapes to headquarters. This system was very limiting for us, and it was fraught with inconsistencies and errors. It also lacked security, and required our IT staff to manually manage tapes distributed throughout our remote offices. Our data backup methods were ineffective and inefficient. And in the end, LITTLE's staff is paid to design buildings, not to swap tapes."

LITTLE then switched to a system using Double-Take Software to provide Continuous Data Protection to their local servers. Tivoli Storage Manager and Double-Take are used to replicate data each night back to headquarters. However, this backup solution had a 4 hour backup window, and brought additional WAN congestion. Also, in the event of a recovery, it required a 4 hour recovery time that could cost 50% of an office's work day.

Solution: Steelhead Appliances Overcome Network Limitations

To provide faster and more efficient centralized data management over the various WAN links, LITTLE deployed Riverbed Steelhead appliances in all but one of its offices. While keeping the Double-Take and Tivoli Storage Manager in place, the Steelhead appliances transparently accelerate the backup systems, as well as the CAD, graphics, FTP, CIFS and email applications.

**Cost Comparison:
Steelhead Solution vs. Bandwidth Upgrade**

	Bandwidth Upgrade	Steelhead Solution
Year 1		
Equipment	-	\$69,000
Annual Expenses	\$324,000	\$18,000
Year 2		
Annual Expenses	\$324,000	\$18,000
Total (Year 1 + Year 2)	\$648,000	\$87,000

“Riverbed was able to optimize our bandwidth capacity by more than 3 times, and the backup and recovery window was reduced by 98%, reducing 4 hour backups to just 5 minutes,” states France. “The icing on the cake was the fact that the Steelhead appliances were extremely easy

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to deploy within our network. Steelhead appliances are transparent; therefore, no network changes were required in order to streamline the backup process.”

“With Riverbed, we were hoping to see some great improvements, and we did,” said France. “The Steelhead appliances optimize all of the protocols going over our network. Our FTP traffic alone was optimized by 61%. Since Double-Take was running over its own port, we could segment this out, and track how much it was getting

optimized. The Double-Take traffic was optimized by 82%. In addition to the reduction in Double-Take traffic, we had a 60% reduction in overall traffic. Unquestionably, this is a great return on investment for us.”

Benefits: Reduced Costs from Retrieving Lost Data and Simpler IT Management

France estimated, “Our network-based backup with Riverbed provides us with three times greater bandwidth capacity than we previously had at each of our offices. Without Riverbed, that would cost us \$324,000.00 every year. Using Riverbed to optimize our network-based backup, we now need just one-third of that bandwidth. Today, our bandwidth costs us \$108,000.00, and the Steelhead maintenance is only \$18,000.00 for an annual cost of \$126,000.00. That is a \$198,000 annual difference. Even if we factored in the capital cost of buying the Steelhead appliances, we still saw a ROI in just six months. The Steelhead appliances have paid for themselves already. We now have faster and more accurate data backup, while our IT department is more efficient.”

“Even if we were to put in three times our current bandwidth each office, I doubt we would see our backup times going down this significantly, due to inherent WAN latency. More importantly, we would not gain any benefits from the other applications, such as CAD, Photoshop, and Exchange that are being optimized with Riverbed.”

“Steelhead appliances have also enabled our IT department to consolidate our network operations. Access to information is now accelerated, and critical client data is centrally stored at the corporate data center where all our knowledge workers can access it. Because of Steelhead appliances, we no longer need to maintain remote IT infrastructure.”

“The Steelhead appliances have paid for themselves already. Even if we factored in the capital cost of buying the Steelhead appliances, we still saw a ROI in just six months. We now have faster and more accurate data backup, while our IT department is more efficient.”

Cost Comparison

To meet the needs of its changing business environment, LITTLE needed to improve application performance for their remote offices. They understood that a bandwidth upgrade would not provide the level of performance required as WAN latency would continue to plague their network, and would not optimize applications and protocols over the WAN. Nonetheless, France knew that the savings in bandwidth that Steelhead appliances create would provide a concrete justification for their implementation.

Over a two year period, the costs of implementing a bandwidth upgrade would be 7.5 times more expensive than deploying the Riverbed solution. Annual operating costs for maintaining bandwidth upgrade are 18 times more expensive than deploying Riverbed.

“The icing on the cake was the fact that the Steelhead appliances were extremely easy to deploy within our network. Steelhead appliances are transparent; therefore, no network changes were required in order to streamline the backup process.”

SUMMARY

LITTLE Diversified Architectural Consultants needed to enable more reliable and faster data backup. Their goal was to create a secure and centralized solution for remote backup, to remove the risk of losing vital data associated with client projects. They also needed to enable more efficient distributed office collaboration between regionally distributed teams by optimizing their application performance over the WAN.

By deploying Steelhead appliances, LITTLE’s architects and designers have accelerated access to the freshest data, regardless of their locations. This makes team collaboration easier, and the billable hours due to lost data have been reduced dramatically.



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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



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Riverbed Technology
199 Fremont Street
San Francisco, CA 94105
Tel: +1 415 247 8800
Fax: +1 415 247 8801
www.riverbed.com

Riverbed Technology Ltd.
Farley Hall, London Road
Binfield
Bracknell
Berks RG42 4EU
Tel: +44 (0) 1344 401900

Riverbed Technology Pte. Ltd.
391A Orchard Road #22-06/10
Ngee Ann City Tower A
Singapore 238873
Tel: +65 6508-7400

Riverbed Technology K.K.
Shiba-Koen Plaza Building 9F
3-6-9, Shiba, Minato-ku
Tokyo, Japan 105-0014
Tel: +81 3 5419 1990

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