

CASE STUDY: CONTECH Stormwater Solutions

IN BRIEF

Industry

- Manufacturing

Challenges

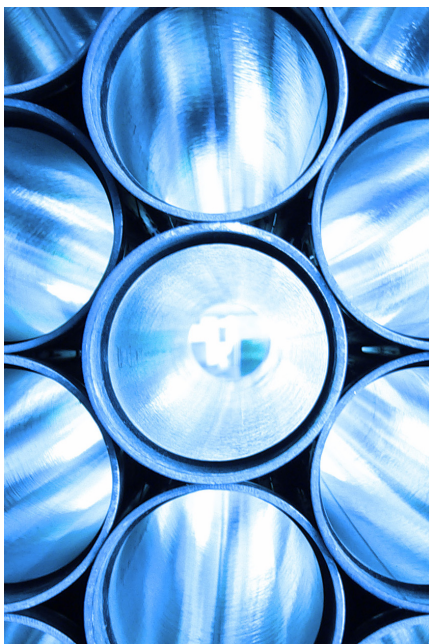
- Merger of two companies on two coasts
- Cross-country replication of real-time CRM database
- Inter-office collaboration designing very large CAD files

Solution

- A Steelhead appliance was deployed in each of 3 offices

Benefits

- Consolidation of development library onto a single file server
- Centralization of Exchange Server implementation
- 50x increase in application performance over the WAN
- 94% reduction in bandwidth utilization on T1 MPLS WAN



Riverbed Steelhead® Appliances Facilitate a Merger and Enable Real-time Collaboration for Teams a Nation Apart

CONTECH Stormwater Solutions (CSS, www.stormwater360.com) is a progressive, innovative company with a mission to preserve and protect water resources worldwide. In addition to a complete line of filtration, screening, and separation products, CSS also helps its customers meet regulatory requirements by offering end-to-end stormwater management solutions. CSS' story begins in 2004 when Vortech, a Maine based manufacturer of stormwater treatment products, merged with Stormwater Management of Portland, Oregon. The resulting company, since acquired by CONTECH Construction Products and known as CSS, is a \$100 million company that operates from the original two sites at opposite ends of North America, with a third site in Maryland, all linked by their MPLS WAN. For Mike Haskell, IT Manager at CSS, the distributed nature of their facilities presented a host of challenges. Enabling simultaneous bi-coastal order entry and smooth ERP conversion came first, but implementing real-time design and high-quality VoIP and video conferencing systems over existing T1 lines were critical to providing their customers with the innovation and quality they had come to expect from CSS.

Challenge: Integrating Distributed Sites Obtained Through Acquisition

When CSS came into being, the typical challenges lay ahead for merging two operating companies into one. Several applications that were critical to their operations and which had worked fine at a single site now faced severe performance issues when being used across the US. The first problem that surfaced involved replication of the SalesLogics CRM sales operations database from Maine to Portland frequently enough to meet their operational needs. Haskell said "When we first tried to do that, it would take over 8 hours to replicate the database, which meant we really couldn't process orders on both coasts. They were doing all kinds of things like burning DVDs and sending the database by overnight express. Now we can replicate the entire database in 10 minutes which means we can take orders in real time on both coasts."

"With Riverbed we essentially have real time LAN-like access from either coast."

Haskell added "We had other problems too. Our engineers in Scarborough (Maine) need to share these huge CAD files with their colleagues in Portland (Oregon), 3,000 miles away. We use Autodesk® Inventor®, which creates enormous files that take forever to share. But with Riverbed we essentially have real time LAN-like access from either coast. We also use Microsoft DFS to enable each site to use files from the other, and that worked pretty poorly also."

Like other IT managers, Haskell was under some pressure by users and management to increase T1 bandwidth between his two primary sites, and to the third site in Maryland, but he knew that adding bandwidth would not help with the speed of the applications because latency was such an issue. "I love my router vendor, I buy their routers and switches, but in this area we tried their product and it just fell down. I also tried their main competitor's products, but that didn't go anywhere."

In addition to the basic business applications like Great Plains and Inventor, CONTECH also uses video conferencing with VoIP quite heavily. "Our offices are linked by T1 lines, but 768 kbps of that bandwidth is required by the video, and an additional 128 kbps is dedicated to VoIP. We use our MPLS network, and set QoS in our routers. With Riverbed deployed, the remaining 600 kbps is sufficient to run our business operations at both sites. That includes all of our Exchange traffic for all three sites, which comes through our Maine site, as well as document sharing and all the traffic generated by Great Plains and SalesLogics, our CRM system."

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SUMMARY

CONTECH Stormwater Solutions took on a difficult technology problem when it decided to streamline operations between its West and East Coast operations.

After reviewing competitive products and bandwidth upgrades, CSS deployed the Riverbed Steelhead solution in order to overcome latency and bandwidth limitations.

With Steelhead appliances, CSS has been able to consolidate much of its server infrastructure without sacrificing performance for the users of any of its offices. Their order-entry system can now replicate within minutes, enabling real-time order entry on both coasts.

The Steelheads have also enabled real-time design between engineers at different offices with overall bandwidth reduction that has enabled high-quality VoIP and video conferencing systems to function without the need for a bandwidth upgrade.

Solution: Steelhead Appliances Improve Exchange, Citrix, File Sharing, and ERP

Searching for a solution, Mike Haskell first heard of Riverbed through his reseller. Impressed with what Riverbed had to offer, he was eager to test them on his network, "Working with my reseller, we dropped the Steelhead appliances in quickly. Basically, you just plug them in. They also out-performed the alternatives. ...it was a no-brainer." Haskell reported that Riverbed enabled CSS to do several important things. First, Riverbed enabled him to consolidate his development infrastructure into a single intranet server to support the company's distributed design and virtual manufacturing processes. Secondly, he is now able to deliver better performance for applications like Citrix. Haskell commented on the impact: "We tried to roll out some Citrix applications to our Maryland office, but it didn't work because we had too much other traffic. Once we deployed Riverbed, we were able to also roll out Citrix successfully to that site." Third, he was also able to centralize his Exchange implementation, enabling all three sites to connect to one Exchange server. Lastly, his teams truly experience LAN-like performance across the country. In Haskell's file sharing tests, the time to send a 24 MB DWG file dropped from 164 seconds to 4 seconds – a 41x performance improvement. On average, they saw a 17x improvement in time to transfer files across the WAN.

Benefits: Real-Time Inter-Office Collaboration, Fluid Voice and Video, and Simpler IT Management

With the Steelhead appliances installed at each of their offices, CONTECH Stormwater Solutions, once three separate companies in three cities, no longer has a geographical challenge to operating as one company. Users are able to send and receive emails to any colleague

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with LAN-like speeds. Engineers can make frequent updates to large CAD documents on-the-fly, directly on to the file server. Customer service representatives at all offices have access to the same information only moments after it is entered into the data-

base. And IT no longer maintains the headaches of night-long replication, remote Exchange administration, or congested pipes dropping important VoIP calls.

"Once we deployed Riverbed, it was so much faster we realized we couldn't live without it," said Haskell. "It's part of our standard remote office deployment stack now." For CSS, Riverbed has become a key component of their growth strategy and has helped them to accelerate their business itself.

About Riverbed

Riverbed Technology is the pioneer in wide area data services (WDS), a fast-growing product category that solves the problems of high latency and limited bandwidth that plague a wide variety of applications over distributed networks. Riverbed's Steelhead appliances provide the highest level of performance across the broadest range of applications over WANs, accelerating applications by up to 100 times, and reducing WAN traffic by up to 95%. By providing optimizations that are orders of magnitude greater than what users experience today, Riverbed is changing the way people work – and enabling, for the first time, a distributed workforce that connects as if they were local.

The Wall Street Journal named Riverbed the winner of its 2005 Technology Innovation Award in the Network/Broadband/Internet category. In addition, *InfoWorld* has named Steelhead a "Technology of the Year" in both 2005 and 2006, as the "Best WAN Accelerator", and *Network Computing* named Riverbed the winner of its 2006 Well-Connected Award for Remote Office Network Infrastructure. Riverbed's award-winning solutions are available worldwide from resellers who are members of the Riverbed Partner Network, from Riverbed OEM partners, or directly from Riverbed.

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