riverbed



NOTICE: New Product Names

The contents of this asset do not reflect our recent product name changes. Here are the new Riverbed® names:

Old Names	New Names
Steelhead	SteelHead™
RPM, OPNET, Cascade	SteelCentral™
Stingray	SteelApp™
Granite	SteelFusion™
Flyscript	SteelScript™
Whitewater	SteelStore™



IN BRIEF

Industry

Manufacturing (Airport Baggage Handling)

Challenges

- Prepare for disaster by moving hundreds of gigabytes of data from their primary to secondary datacenter
- Improve the performance of file sharing and email across the WAN to help distributed design teams collaborate
- Reduce the overhead of managing, protecting, and distributing important design data

Solution

Deploy Steelhead appliances at data centers, the disaster recovery site and at multiple locations over its private WAN

Benefits

- Faster file sharing enables faster project delivery and fewer version control problems
- Data center consolidation, and centralization of primary business applications
- » Robust disaster recovery plan
- >>> LAN-like performance for users in small sites
- >> Bandwidth savings





G&T Conveyor

Riverbed Helps National Manufacturing Company Slash Costs

G&T Conveyor is the largest privately held turnkey Baggage Handling Systems manufacturer in the United States. G&T has designed, engineered, manufactured, and installed hundreds of claim and make-up devices and miles of transport conveyors, and its product are integrated with Explosive Detection equipment.

A "Named Equipment Provider" by port authorities, consultants, and airport architects, they have installed and integrated their equipment at over 500 airports, comprising over two million linear feet of transport conveyors. Although their headquarters are near Orlando, Florida, G&T also maintains operations at projects on-site at airports, typically for 12 to 18 months, sometimes for several years at a time. Their 800 employees perform design and manufacturing in Orlando, but work collaboratively with the project teams at airports in Seattle, Dallas, Minneapolis, and other major cities.

Challenge: Protecting Company Assets and Leveraging Inter-Office Productivity

G&T had several interrelated challenges. For the IT group, led by George Tilmon, his top concern was business continuity. "We're based in Orlando, Florida, and with frequent

"Our massive half-terabyte DR jobs that basically didn't work, even over four days, can now be done successfully in a day." hurricanes coming through here, we need to be prepared for anything. In the past, it was a real problem because moving hundreds of gigabytes of data across our WAN over T1 lines was a non-starter."

For his users however, the concerns were very different. "Distributed design and

collaboration leads to big problems for manufacturing companies. We rely on several CAD applications, including AutoCAD® Mechanical, AutoCAD Electrical, as well as Bentley MicroStation®, and on Microsoft Project® for project management. Applications like that generate enormous files that have to be shared constantly across the WAN between distributed teams. Because it can take 20 or 30 minutes to download a large assembly over the WAN, users start looking for alternatives like emailing drawings to each other. But that leads to immediate version control problems."

The other problem Tilmon faced was the cost and complexity of pushing IT resources out to the edge of his network. "We had to deploy Exchange[®] servers out in our edge locations just to deliver acceptable email performance for our users; same for file servers to store our drawings. Then those files need to be backed up and replicated, all without messing up our version controls."

"Now, not only do we have centralized file shares that are accessible at essentially LAN speed anytime, we also have better control over our data; and to top if off our version control problems have disappeared."

Solution: Steelhead Appliances Overcome Network Limitations

"We were looking for ways to improve the performance of applications used in our firm. In 2006, our reseller told us about a product from Riverbed[®], the Steelhead[®] appliance," said Tilmon. "He said they might be able to help us out in solving some of these problems." Tilmon arranged for a demonstration and was suitably impressed. "After the demo at our offices, we installed three units in Orlando, Dallas, and Minneapolis. "

"As soon as we deployed the Steelhead appliances, user reviews began to pour in," said Tilmon. "Instead of the usual complaints about time lag and the network being slow, users were like 'Wow!' When you stop hearing complaints from users, that's when you know you're doing your job." Some of the results Tilmon saw were stunning. "Downloading 20 to 30 MB project files that used to take 3-4 minutes now take ten seconds! Our massive half-terabyte disaster recovery jobs that basically didn't work, even over four days, can now be done successfully in a day."

Benefits: Better Client Service, Reduced Non-Billable Hours, and Simpler IT Management

Deploying Steelhead appliances has had a huge impact on G&T in many ways, according to Tilmon. "First off, we are now able to implement out disaster recovery plan by moving 500 GB of data easily over our WAN. When we tried to do that previously, we had to abandon

"Instead of the usual complaints about time lag and the network being slow, users were like 'Wow!' When you stop hearing complaints from users, that's when you know you're doing your job." the effort after four days of trying. Basically we were getting nowhere; it was like running in mud. Now, we can get that job done in a reasonable period of time.

"Second, we have completely changed the way we manage data and collaboration. We've really gone to a centralized structure with our Exchange

and Windows file shares located here in Orlando. Before when people wanted to browse a remote file share, they literally had to wait until after business hours, and even then it was all but unusable. Now, not only do we have centralized file shares that are accessible at essentially LAN speed anytime, we also have better control over our data; and to top it off, our version control problems have disappeared."

G&T has been able to consolidate four data centers into two, and now has Steelhead appliances deployed in both data centers in Florida and the disaster recovery site in Dallas. G&T also has six Steelhead appliances deployed at other locations on the company's WAN, and runs Steelhead Mobile at about 15 other small sites that support one –to-three employees. With Steelhead Mobile, G&T can give mobile workers LAN-like access to corporate files and applications no matter where they are, anywhere in the world.

G&T has centralized its Kronos time card application, and Glovia ERP infrastructure. For example, G&T was connecting a remote office in Anchorage over a 768 Kbps link and users complained that it was too slow to even run their time cards—but once they installed a Steelhead appliance in Anchorage, users stopped complaining.

Project management and IT overhead have also been impacted. "Pre-Riverbed, our project managers had to build in extra time into every project to account for the overhead associated with setting up the FTP server and the time to download project and drawing files. They had to make sure people had their FTP usernames and passwords, and that they followed certain procedures prior to uploading and downloading files, all to avoid mistakes (which happened anyway). Now people can work the way they normally work, no matter where they are, and our project managers don't have to worry about it."



Orlando Site - Bandwidth Optimization Report from Steelhead Appliance.

G&T also leveraged Steelhead appliances to address trouble replicating its databases and mission-critical information over the WAN. The company was running EMC RecoverPoint on a 6 Megabit WAN link with 100 milliseconds of latency, and needed to avoid upgrading its bandwidth. When they tried to replicate with RecoverPoint, they encountered layer 3 issues and recovery failures. Riverbed's support engineers realized that G&T's Cisco firewall was caching its data, leading to timeouts. G&T upgraded its firewall and today moves 15 jobs over its 6 Megabit link within 30 minutes.

When asked about the overall benefit of Riverbed's Steelhead appliances, Tilmon thought about it and replied, "You know, it's so much more than a WAN accelerator. Riverbed has allowed us to pull resources back from the edge of our WAN; they've improved the way our distributed teams can work together, which impacts the speed and quality of our project delivery. And they have enabled us to deliver improved services with the same WAN bandwidth. The value is different for different people in our company, but I think it's fair to say Steelhead appliances have really enabled us to think differently about a lot of business and technology issues at G&T."

SUMMARY

Headquartered in hurricane territory, G&T Conveyor needed Riverbed to enable replication of hundreds of gigabytes of data over their T1 WAN.

With Steelhead appliances, engineers at G&T were able to collaborate with their peers at remote branches in real-time.

G&T's Riverbed deployment allowed IT to reduce administrative costs and network complexity by removing distributed Exchange and file servers from offices without creating a performance problem for users.

riverbed Think fast:

About Riverbed

Riverbed Technology is the IT 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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