Northwest Pipe

Northwest Pipe Company

Riverbed Application Performance Platform Cuts IT Upgrade Costs by $1 million

Since 1966 Northwest Pipe Company has been a leading manufacturer of welded steel pipe. Headquartered in Vancouver, Washington, the company operates nine manufacturing facilities in the US and one in Mexico.

Challenge: Aging infrastructure, insecure, expanding data, and degraded application performance threaten business performance

Northwest Pipe's network engineer, Jonathan Harris, had a lot on this plate when the economy finally turned around after the last recession. Key components of the IT environment had begun reach end-of-life, including server hardware and software at the remote sites. "Those file servers were put in service more than six years ago," explains Harris. "Two servers from that timeframe suffered catastrophic hardware failure." He calculated that updating the hardware and software (using the same solution architecture) would cost $160,000.

In addition to the necessary infrastructure upgrades, growing traffic was starting to overload the company's MPLS network to the point that it was affecting business. The majority of Northwest Pipe's business-critical applications, including IP telephony, are centralized and delivered over the network to the manufacturing plants. Network saturation led to application performance problems, and "people complaining about applications not running the way they should," says Harris.

Application performance costs were mounting as well; the company was using Cisco WAAS for application performance, but the WAAS appliances were end-of-life and upgrades would cost between $200,000 and $250,000. It was time to increase the bandwidth at some of the manufacturing sites with smaller circuits. "Just adding bandwidth to the sites that needed it most would have cost $3,000 to $5,000 per month," says Harris, a recurring cost he wanted to avoid.

Rapidly expanding data generated by the manufacturing plant — and protection of that data — was also a major challenge. "With the automation and integration of more systems at the plants, as well as demands from the executive group for more of that data, we needed to do a better job of protecting it," Harris explains. He determined that the initial cost for a data replication solution for this data would be about $150,000, and bandwidth upgrades would be needed to accommodate the new data replications, at $8,000 to $12,000 per month.

Finally, the IT staff needed better visibility into the MPLS network traffic for capacity planning and troubleshooting.

> "There isn't anybody else out there that offers a solution that could do all this."

In Brief

Challenges

- Budgetary constraints postponed infrastructure upgrades — major upgrades needed
- Rapidly expanding manufacturing data required secure backup
- Degraded application performance due to MPLS network overload

Solution

- SteelHead CX and EX appliances
- SteelFusion solution for zero branch IT

Benefits

- $1 million+ saved on IT infrastructure upgrade through SteelHead/SteelFusion solution
- Accelerated application performance via SteelHead WAN optimization, even over networks with increased traffic
- Accelerated time to resolve performance issues with SteelHead-enabled visibility into application and network performance
- Eliminated $750,000 planned expense through SteelFusion, a zero branch IT solution that centralizes data and enables instant disaster recovery at the branch

Solution: One Riverbed platform eliminates expense and complexity of four separate solutions

One option would have been to address all of those needs separately — replace the WAN optimization solution, add bandwidth to selected sites, replace file servers, add a disaster recovery (DR) solution for the manufacturing data, and additional bandwidth for that data replication. The total cost of this approach would have been $1,425,000, with nearly half ($750,000) attributable to the DR solution ($600,000 for additional bandwidth over five years + $150,000 for the hardware).

Instead Harris opted for the Riverbed Application Performance Platform for superior application performance and zero branch IT for more effective management, faster disaster recovery, data protection, and lower cost. Specific solutions that are part of the platform include Riverbed® SteelFusion™ at the manufacturing sites, along with a SteelHead CX appliance and SteelFusion Core in the data center.

Harris went with Riverbed in part because of the company's reputation. "I had already known that Riverbed was a very strong solution provider in WAN optimization," Harris recalls.

"They had a lion's share in that market and for good reason. Their technology was very solid and well made."

More importantly, with the combination of SteelHead and SteelFusion, Harris could have a single solution for the issues he was facing. SteelHead WAN optimization addressed the bandwidth saturation and application performance issues. SteelHead also provided a higher level of visibility into application and network performance than what Harris had previously. SteelFusion, which integrates server, storage, network, and virtualization, would eliminate the need for IT at all the separate manufacturing sites, including the need for new servers. It would also secure the manufacturing data by storing and managing it centrally — back in the data center.

"There isn't anybody else out there that offers a solution that could do all this," Harris says.

Results: $1 million-plus saved, data secured, superior app performance ensured

Riverbed enabled Northwest Pipe to upgrade its IT infrastructure and better protect its data for $400,000, which is 28% of what it would have cost to address the IT issues separately. Harris saved his company more than $1 million.

Harris now has a solution in place that ensures superior application performance over the network, even as network traffic continues to increase by 25% to 35%. "The end users are still not affected. The applications are running the same or better than they did in the past," Harris notes. "And we have all the protection people need for their data."

Harris appreciates the visibility he now has into application and network performance. "We went from not being able to see anything to having full visibility through Riverbed," he explains.

"The Cisco solution has a dashboard that gives you graphs and reports, but it just didn't compare to what Riverbed offers."

"Having better visibility puts me so much further ahead of where I was," he continues. "I'm able to troubleshoot so much more clearly and see what's going on. It's wonderful."

> "The applications are running the same or better than they did in the past (in spite of increased traffic on the network). And the users have all the protection they need for their data."

Summary

When the economy finally turned around and Northwest Pipe had more money to spend on IT, the list of things to spend it on was long. If the company upgraded all of the end-of-life components separately, and added a stand-alone DR system and necessary bandwidth, the total cost would have been $1,425,000.

Riverbed enabled Northwest Pipe to upgrade its IT infrastructure and better protect its data for $400,000, which is 28% of what it would have cost to address the IT issues separately, saving the company more than $1 million.

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.