

**IN BRIEF**

**Industry**

- » Manufacturing

**Challenges**

- » Overcome latency problems impacting the global deployment of applications
- » Provide IT services to distributed offices from centralized data centers
- » Accelerate collaborative imaging and ERP applications over the wide area network
- » Select a solution that integrated quickly and easily into existing infrastructure

**Solution**

- » Steelhead appliances deployed in 25 offices

**Benefits**

- » Application performance significantly improved, making applications LAN-like around the world.
- » Achieved server consolidation for several applications in a globally distributed environment
- » WAN-based backup for remote sites reduced from several hours to 15 minutes
- » Ease of deployment and network integration make installation and management simple and time efficient

# Rohm + Haas

## Riverbed® Steelhead® Appliances Accelerate Applications Around the Globe for Fortune 500 Firm

Rohm and Haas ([www.rohmhaas.com](http://www.rohmhaas.com)) is one of the largest manufacturers of specialty chemicals serving diverse global industries in building and construction, electronics and electronic devices, household goods, pharmaceuticals and transportation. The company continues to innovate in materials design and sustainable technologies with leading scientists and technicians. A global organization, the firm manages over 200 offices, including 100 manufacturing, technical research, and customer service sites in 25 countries. With over \$8 billion in annual revenue, Rohm and Haas employs over 16,500 people and was most recently ranked 285th on the Fortune 500 list in 2006.

### Challenge: Overcoming Latency to Enable Applications across the Globe

As a manufacturing firm producing materials across a broad range of industries, Rohm and Haas clearly understands the importance of responsiveness and the criticality of time-to-market. The company specializes in forming teams of scientists and innovators from around the globe to develop materials for other firms' products. With employees distributed in over 200 offices spread across the world, delivering world-class application performance presented a key challenge for the IT department.

"Network latency was just killing some of our WAN applications," noted John Yeaton, a network engineer with the Network Planning Department. He went on to describe the issues they were encountering.

**"The biggest difference we saw was the CIFS traffic. Riverbed accelerated that significantly."**

"We have two data centers, primary and backup. We have over 200 locations globally, so a large percentage of our users are accessing our applications remotely over the WAN. People trying to use our applications from Shanghai were experiencing

up to 300 milliseconds latency. This was slowing our imaging and other large traffic files to a crawl. Chatty traffic was also significantly impacted. The high latency had slowed some of the applications down to a point where it was difficult for people to use them at all."

### IT Environment: Consolidated Data Centers

Providing access to applications located in a central data center was a key factor in turning to WAN optimization technology. Despite a heavily distributed environment, Rohm and Haas ran most of their IT operations from two data centers, one primary and one backup facility. The network infrastructure consisted largely of Cisco routers and switches and supported a traditional frame relay hub and spoke environment from the main data centers.

**"It's saving us more money than the accelerator costs, so it reduces the payback period to virtually nil."**

"Almost everything runs from a central location in Philadelphia and then we use the WAN to connect the remote users through to our applications here," said Yeaton. "Although Frame Relay is the primary transport, we have VPN over Internet as backup and to carry some less time sensitive traffic. We are actually moving away from Frame Relay to MPLS, so by the end of this year, it will be all MPLS and VPN over Internet."



Yeaton added that deploying Riverbed in the environment was relatively seamless. "In regard to the Riverbed equipment interacting with Cisco equipment, there really was nothing special that had to be done. The Cisco equipment did what it normally does, basically networking Layer 3 type stuff. The Riverbed just talked to other Riverbed devices. More like ships passing in the night, they're both running but they don't have to do anything with each other."

**Solution: Steelhead Appliances Make Applications Usable over the WAN**

Commenting on the evaluation process, Yeaton said, "The biggest difference we saw between Riverbed and the alternatives we evaluated was the CIFS traffic. Riverbed accelerated that significantly better than the other vendors we tested."

The performance results for Rohm and Haas have enabled applications that were previously unusable in remote sites. When discussing these results, Yeaton added, "I would say first thing is the latency on the WAN applications; things like the Optura imaging application goes from almost unusable to usable again. Improving the user experience in all of our other applications was key as well. We have so many applications, and we needed to improve performance across the board."

Ease of deployment and network integration were also significant factors. "The Steelhead appliances are virtually ready to go out of the box. All I need to do is ask the site people who are racking the device to put an IP address on it and connect the Internet cables and we're ready. Auto discovery is also very nice. I just go onto a Steelhead appliance and it will tell me all the other Steelhead appliances that it's accelerating with. The in-path configuration is the reason why the devices are so easy to configure. Out of the box, you can pretty much set it up on the network and it's ready to start accelerating."

**Benefits: Better Performance, Server and Backup Consolidation, and Quick ROI**

Riverbed Steelhead appliances have enabled Rohm and Haas to address the issue of previously unusable applications and poor performance over the WAN. In addition to improving end-user satisfaction, the Steelhead appliances have provided a number of consolidation and backup benefits.

"With WAN optimization for a remote site in North America, the Active Directory replications, the Notes replications, file backups, they all are fast enough that we don't have to put a file server on location, which is saving us more money than the WAN optimization solution costs, so it reduces the payback period to virtually nil."

**"Out of the box, you can pretty much set it up on the network and it's ready to start accelerating"**

Yeaton specifically noted the performance gains for Rohm and Haas' WAN-based backups. "We do backups over the WAN for remote sites

and this acceleration can reduce the backup time from hours to 15 to 20 minutes." The Steelhead appliances have also allowed Rohm and Haas to defer additional bandwidth upgrades.

But the biggest benefit for Rohm and Haas does not necessarily focus on bandwidth. As Yeaton stated at the outset, "bandwidth is not an issue, but latency definitely is, especially for imaging applications and SAP." For Rohm and Haas, Riverbed has helped overcome these latency challenges and bring their remote offices a little bit closer.

**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](http://www.riverbed.com)



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