

OraSure Technologies



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Riverbed SteelHead Makes Data Mirroring Work In OraSure Technologies' Virtualized Environment

OraSure Technologies, Inc. is a leader in the development, manufacture and distribution of medical diagnostic and collection technologies designed to detect critical medical conditions. OraSure made history in 2012 with the introduction of the OraQuick In-Home HIV Test, the first FDA-approved over-the-counter HIV test available in the United States. OraSure's 230 employees operate out Bethlehem, Pennsylvania where the IT environment matches the company's leading-edge medical technology, with three data centers serving a 90% virtualized environment. The IT environment handles all aspects of OraSure's operations, from research and development to marketing and sales.

"We're able to get the snapshots taken on the remote site and have them move down here in a reasonable amount of time through the communications infrastructure we have in place. We don't need to oversubscribe or over purchase communication resources that are going to be sitting idle. We're maximizing what we have."

Rick Kula,
Manager of Information Systems

OraSure's 90% virtualized environment pushes bandwidth limits

Over the past decade, OraSure found that the largest stress on its technology resources was the increasing amount of data the company was generating and storing. The cost projections for continued growth were astronomical. OraSure discovered that through virtualization they were able to meet performance needs while managing costs. According to Rick Kula, OraSure's Manager of Information Systems, "Virtualization came along and said, 'Hey, you can do it for a lot less. You can put more workloads on the existing underutilized servers, and with utilizing storage networks and the like, you can take advantage of shared storage and the capabilities within those devices allow you to replicate it, mirror it, what have you.' That makes it a more cost effective mechanism for backup and recovery."

The solution of virtualization, however, also created a problem. While server virtualization can make the most of available compute resources, it can also increase network traffic over non-virtualized systems. OraSure discovered that maintaining growth would require significant and costly upgrades to its network to achieve the tenfold increase in bandwidth the projections showed was needed. At this point WAN optimization and Riverbed SteelHead entered the picture.

In Brief

Challenges

- Data replication and mirroring in fully-virtualized environment overtaxing network resources

Solution

- 2 SteelHead CXs

Benefits

- 97% reduction in WAN traffic
- 23.6x increase in throughput
- Eliminated need to increase bandwidth

Reputation and partner support make Riverbed SteelHead the obvious choice

Kula initially considered options from several vendors. Riverbed's reputation as a leader in Gartner's Magic Quadrant and its support of software critical to OraSure, including VMware's virtualization software and NetApp SnapMirror, quickly made it the clear choice. OraSure deployed Riverbed SteelHead CXs at its Bethlehem headquarters and at its Canadian subsidiary.

SteelHead WAN Optimization and control makes mirroring magic

SteelHead brought immediate, obvious improvement. At the Canadian site, WAN traffic was reduced by 97% while throughput increased 23.6 times. In continued use, OraSure experiences an 80% to 95% reduction in network traffic for both Canadian and American sites. This allows OraSure to accomplish everything it needs to with its current 100Mbps pipeline, eliminating the need for network upgrades.

At the same time, recovery has improved. With bandwidth issues removed, OraSure uses SnapMirror to frequently back up the entire environment and move it to a remote storage location, reducing the company's recovery point objective (RPO). With such frequent mirroring, in the event of a problem, very little, if any, work will ever be lost. OraSure's testing indicates that even in the event of a catastrophe, the entire environment could be restored in an hour, improving the company's recovery time objective (RTO).

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.

The Riverbed logo consists of the word "riverbed" in a lowercase, bold, orange sans-serif font.