

BEST WAN ACCELERATOR RIVERBED STEELHEAD



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What IT challenges do companies with remote offices face?

Companies usually link remote offices through wide area networks (WANs) and distributed IT infrastructure. Yet in many cases, the effects of low bandwidth and high latency mean applications that run well locally are all but unusable on a WAN, so your remote offices are constantly struggling with poor application performance. Furthermore, the cost of maintaining distributed IT is very high.

Can't these problems be solved by adding more bandwidth or compression?

Contrary to popular belief, adding more bandwidth or data compression to WAN infrastructure will not help application performance very much. Vendors offering network compression and WAN expansion technologies only solve part of the problem. Often their products only add capacity, not addressing the real reasons for poor application performance.

So how can companies solve application performance problems over WANs?

Riverbed Technology provides the only solution that addresses the three key factors that slow application performance over WANs: high latency, limited bandwidth, and "chatty" applications. Riverbed offers a unique combination of application-independent bandwidth optimization and protocol-specific latency optimization that combine to dramatically improve WAN application performance.

How do companies benefit from Riverbed's solution?

With Riverbed Steelhead™ appliances:

- Applications run up to 100 times faster. This dramatic reduction in information-sharing delays can have a huge impact on workflows and productivity.
- All redundant traffic is removed from your WAN. This cuts the utilization of bandwidth dramatically, usually by 60 to 95%, and enables more data to be sent on existing pipes.
- IT architects can consolidate file servers, email servers, NAS, and tape libraries from remote offices to data centers – without degrading performance. Successful site consolidation can save millions in IT operating expenses.

RIVERBED

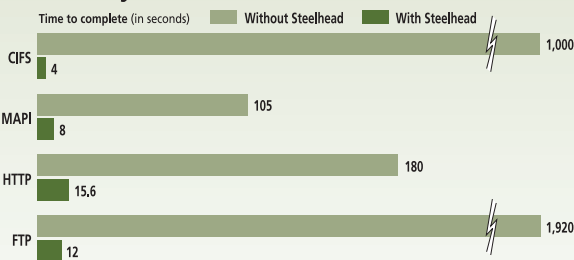
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"To say I was impressed with the [Riverbed] Steelhead would be an understatement."

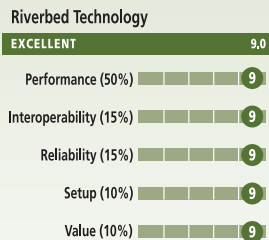
*Keith Schultz,
InfoWorld, April 12, 2004*



Terrifically Fast File Transfers



Steelhead 2000



Source: InfoWorld - April 12, 2004

Our tests showed that when a file had passed through the Steelhead appliance at least twice, the appliance could deliver it 10 or even 100 times faster than another round trip to the server.

Riverbed Steelhead™ Appliances

Steelhead IT infrastructure appliances are a new family of products from Riverbed Technology that improve the performance of distributed client-server systems by optimizing for both high latency and limited bandwidth.

KEY BENEFITS

Riverbed's solutions can help virtually any company with distributed operations by offering a concrete return on investment.

Enable Site Consolidation

- **Cut Costs.** Bring your file servers, Exchange servers, remote office backup, and storage back to the data center.
- **Improve Compliance.** The best way to ensure your company is complying with data retention regulations is to keep it all in the data center.
- **Reduce Risk.** Consolidated infrastructure is less vulnerable to hackers, viruses, and direct attack or theft.

- **Higher Utilization.** Consolidate servers and other infrastructure to high availability, centralized infrastructure that can be more efficiently used.
- **Improve Backup.** More than 50% of employees work in remote offices, and all their data needs to be backed up and recovered. By consolidating your backup of remote sites, the challenge of recovering data is much simpler.

Improve Application Throughput Up to 100 Times

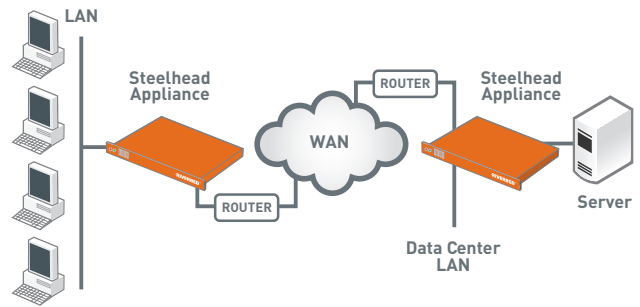
- **Increase Productivity.** Cut the time it takes for distributed users to work with files across your WAN by up to 99%.
- **Reduce WAN Traffic.** By removing all redundant data from your TCP traffic, Steelhead appliances can reduce your WAN traffic significantly. Steelhead appliances include complete GUI and CLI management tools to enable quick and easy deployment, as well as complete reporting tools to measure the benefits.

Powerful, Flexible, and Easy

Steelhead appliances can be deployed in minutes. They are completely transparent and can be installed in the data path or out-of-path, without interfering with your applications.

Whether you have a hub-and-spoke or mesh topology, you can begin by installing just two appliances, and then roll out additional boxes to key sites in your enterprise, as needed. Or, you can deploy Steelhead appliances all at once at every site.

Traffic is automatically optimized when another Steelhead appliance is installed on the other side of the WAN – otherwise it's passed through unchanged.



TYPICAL STEELHEAD APPLIANCE DEPLOYMENT

The Riverbed Advantage

Riverbed offers a unique value proposition: Steelhead appliances deliver order-of-magnitude throughput improvement, for all your WAN traffic, without increasing the complexity of your infrastructure.

Compared to other alternatives for WAN optimization, Riverbed offers these key advantages:

- Unlike compression-based technologies, Steelhead appliances also address the problems caused by chatty application protocols (like CIFS and MAPI) in high latency environments. Compared with compression technology alone, Steelhead appliances have much higher compression ratios, up to several hundred to one.

Depending on your company's workload, Riverbed's Scalable Data Referencing (SDR) algorithms can deliver compression ratios in the range of 50:1, 100:1 or even 400:1, which can save you far more bandwidth than other alternatives.

- Unlike caching technologies, Steelhead appliances improve application performance for all TCP traffic, not just for files or web email alone. Any application you run over TCP benefits from Riverbed's unique architecture. Steelhead appliances are also easier to deploy and manage than caches, with no "proxy configuration" required. Just deploy them and they start working – your users never need to know.