

STEELHEAD EX + GRANITE

INCREASE AGILITY AND CONTROL, WHILE ALSO REDUCING OPERATING COSTS, BY CENTRALIZING AND STREAMLINING MANAGEMENT OF BRANCH SERVERS AND STORAGE

BUSINESS CHALLENGE

Despite the success of massive consolidation initiatives enabled by virtualization and WAN optimization, server and storage infrastructure is still present in remote and branch locations. Why? The demands of custom and write-intensive business applications, the need to work with large business-critical data sets, and the concern of loss of user productivity have required compute and storage resources to be maintained at the edge.

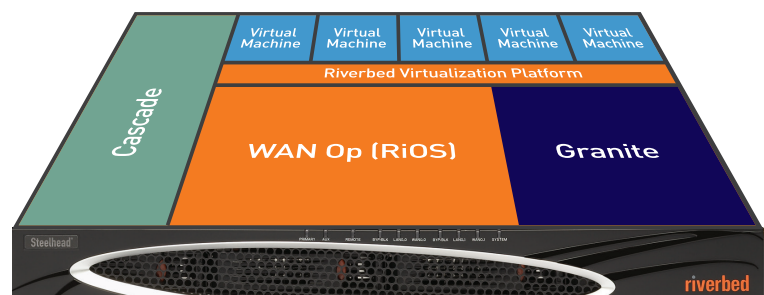
Although the deployment of storage and servers closer to users solves the performance problem, managing infrastructure outside the data center comes at significant cost and complexity, increasing the IT support burden and introducing security risk to valuable corporate data assets.

THE RIVERBED SOLUTION

Riverbed Steelhead® EX + Granite™ products set a new architectural standard, extending the virtual edge of software-defined data centers for complete consolidation and centralized management. They provide a powerful combination of wide area network (WAN) optimization, a virtual services platform, and innovative storage delivery technology.

Through this unique and innovative technology only available from Riverbed, you will reduce operating costs by streamlining management of virtual infrastructure and data, as well as by delivering services wherever and whenever needed — without compromising quality and performance.

In addition, you will drive greater consolidation of branch infrastructure than ever before. By implementing a simple add-on module to your Steelhead EX appliances, you can consolidate and secure all your data in one central location, thus making complete edge server and storage consolidation to the data center possible for the first time.



STEELHEAD EX: WAN OPTIMIZATION & VIRTUALIZATION WITH THE RIVERBED VIRTUAL SERVICES PLATFORM

KEY BENEFITS

» ELIMINATE STORAGE IN BRANCH OFFICES

- Centrally manage servers and data
- Leverage data center tools and cost efficiencies
- Centralize data protection operations

» RAPIDLY PROVISION NEW LOCATIONS

- Boot servers over the WAN in minutes
- Establish service wherever and whenever needed
- Quickly re-provision services in the event of a disaster

» ENSURE USER PRODUCTIVITY

- Enable branch access to centralized data — even during WAN outages

» CENTRALIZE AND SAFEGUARD DATA

- Protect and secure servers and data in the data center
- Enable state-of-the-art authentication and encryption to secure data

» SIMPLIFY MANAGEMENT AND REDUCE OVERHEAD

- Stop maintaining and managing standalone servers, storage, and backup in branch offices
- Easily support a single appliance in the branch, while also centralizing storage
- Reduce the need for branch-based IT personnel and “fly-and-fix” missions

KEY FEATURES

» Storage delivery

Consolidates branch servers and data to centralized data center storage, while still delivering local-speed access to remote locations

» Industry-leading WAN optimization

Overcomes bandwidth and latency problems to speed application performance and data transfers over the WAN

» Virtual Services Platform

Consolidates branch services and business applications directly on your Steelhead appliance, leveraging VMware vSphere Hypervisor to run multiple virtual machines

» Wizard configuration

Simplifies setup and management with the easy-to-use wizard configuration and intuitive user interface

» Built-in visibility and packet capture

Simplifies remote office troubleshooting by turning on the embedded Cascade Shark to gather packet data and gain application-aware visibility via flow data from the branch — with no additional instrumentation required

» High availability

Ensures storage availability for remote users by leveraging the Granite products’ high availability (HA) deployment options and multi-path I/O (MPIO) support

» Snapshot integration

Supports data snapshots and seamless integration with backup applications

» Security

Supports both industry-standard, challenge-handshake authentication protocol (CHAP) to authenticate users and hosts, as well as a secure vault to protect sensitive information using AES 256-bit encryption

» Reporting

Provides visibility into key utilization, performance, and diagnostic data through customizable reports

Riverbed Steelhead

The Steelhead EX appliance is an enterprise-class WAN optimization and virtualization platform that meets the needs of both large and small branch offices. Steelhead appliances deliver the highest performing and most scalable WAN optimization solution available, overcoming both bandwidth and latency problems to deliver LAN-like performance to branch offices or mobile workers across the globe.

Steelhead EX features the award-winning Riverbed Optimization System (RiOS®) and the flexibility of the Riverbed Virtual Services Platform (VSP) that leverages VMware vSphere Hypervisor. With VSP, branch services, such as print, DNS, and DHCP, as well as more resource-intensive applications, can all run directly on the Steelhead EX appliance — without compromising performance.

Steelhead EX is built with robust memory, compute, and storage resources to enable the consolidation of servers and applications to run as virtual machines in the branch.

Riverbed Granite

Granite products extend the virtual edge of the data center to the branch office, enabling complete consolidation of edge servers and data. Granite product innovation enables an architectural disruption that delivers the best of all worlds: 100 percent consolidated data and applications that provide local-quality performance in the branch over the WAN.

Granite products radically reduce operational burden on IT managers, while also massively increasing their control over the infrastructure — all at a lower total cost of ownership. Now, your users and applications in branch locations can access and write to centrally managed storage with significantly improved performance. By accelerating branch access to centralized storage deployed in the data centers, you no longer need to maintain dedicated storage resources in branch offices.

Granite products include:

Granite Core – Physical or virtual appliance that resides in the data center

- Mounts storage provisioned in the data center and extends it to branch offices running the Granite Edge module

Granite Edge – Industry-first, file-system aware, block-acceleration module that runs on a Steelhead EX appliance in the branch office

- Virtually presents storage targets in the branch so they can be utilized by services and systems running within the VSP
- Virtually presents one or more storage targets externally to the Steelhead EX appliance
- Allows data from centralized storage to be available wherever and whenever it is needed
- Boots over-the-WAN in minutes to deliver services quickly for instant provisioning and recovery
- Ensures that data created in branch office locations is securely stored in the data center

LEARN MORE

The winning combination of Riverbed Steelhead EX and Granite technology lets you consolidate remote servers and storage into the data center with no degradation in performance for end users, even during WAN outages. To learn more, please visit <http://www.riverbed.com/steelhead+granite>.