

SteelHead and SteelHead Virtual

Application acceleration for the digital enterprise

Today's Riverbed[®] acceleration solutions are engineered for fast, seamless network integration into remote sites and branch offices, or data centers with scalable performance designed to support a growing number of users, devices, data and application types.

Our market-leading solution, SteelHead, provides the acceleration simplicity and convenience of an appliance while SteelHead Virtual provides these same acceleration benefits running in your virtual machines.

In the era of artificial intelligence (AI), the ability to move vast quantities of data efficiently and securely is paramount. Riverbed Technology, with its long-standing expertise in network acceleration and resilient networking, is at the forefront of this transformation.

As the market leader in application acceleration, SteelHead and SteelHead Virtual have proven to dramatically speed up the performance of enterprise and AI applications anywhere in the organization and move vast amounts of data from where it resides to where it needs to be quickly and efficiently.

Riverbed makes it easy to assure fast, agile, secure delivery of any application and data to anyone, anywhere.

Business Challenge

The modern enterprise IT infrastructure has evolved into a hybrid one with applications and data in data centers, cloud and at the edge. More and more business-critical applications are moving to public clouds to take advantage of SaaS and IaaS benefits while others remain on-premises in datacenters or at the edge. Enterprises need to move data between data centers, cloud environments, and edge locations to optimize performance, scalability, and costs, ensure compliance, enhance disaster recovery, and support global collaboration. This dynamic data movement is essential for maintaining efficient, resilient, and flexible IT operations.

As AI reshapes the enterprise, organizations are looking to unlock new value through smarter innovation—and data is the fuel that powers it. The challenge is data is spread across data centers, public clouds, and increasingly at the edge—in factories, stores, and remote sites. And that data all needs to move to where AI applications reside.

Riverbed's SteelHead and SteelHead Virtual solutions are designed to optimize the movement of massive data sets across enterprise IT landscapes through streamlining and resilient optimizations techniques.

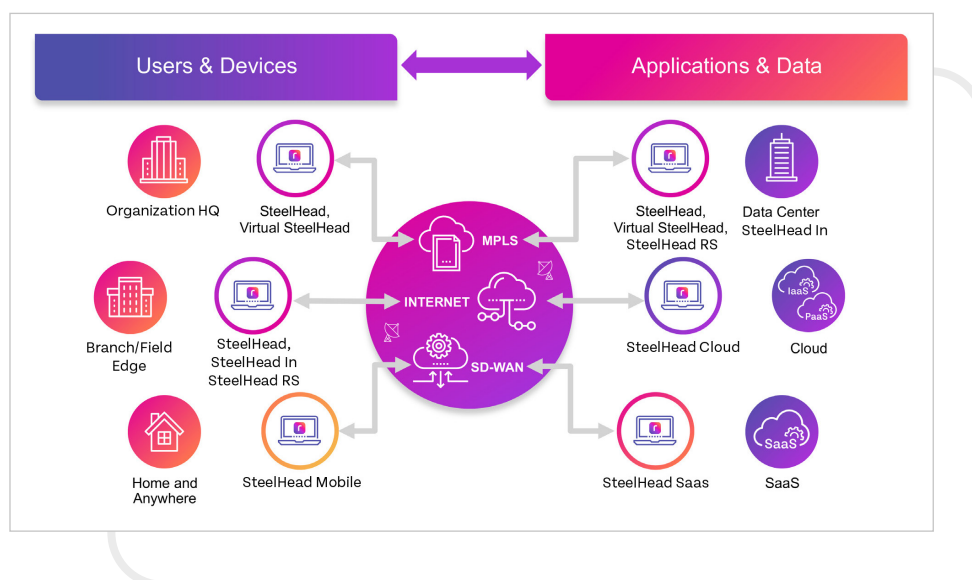


Figure 1: SteelHead solutions enable resilient networking and bring users, apps, and data together.

Key Benefits

Accelerated application performance and reduced bandwidth consumption

- Reduces bandwidth utilization by up to 95%, deferring costly network bandwidth upgrades
- Increases performance by up to 100x for on-premises applications
- Acceleration of TLS/SSL-encrypted traffic to eliminate the security versus performance trade-offs
- Offers secure protocols optimization, with options to deploy in Microsoft recommended Tier0 model
- Fully IPv6 ready – both single stack and dual stack
- Leverages application awareness to distinguish between business and noncritical network traffic to select optimal acceleration path

- Enables rapid, resilient, and secure replication and backup over the WAN
- Available with virtual platforms such as VMware, Microsoft Hyper-V, KVM, and Nutanix AHV
- Compatible with Cisco TrustSec, with support for SGT Inline Tagging

Integrated visibility

- SteelHead can send Riverbed SteelFlow, enriched flow data to Riverbed NetProfiler for analysis of:
 - Optimized network performance – Network optimization reporting (i.e., bandwidth reduction) – SteelHead QoS configuration and usage

Enhanced control and management

- Performs ongoing centralized management through SteelHead Central Controller, Web Interface, or from CLI
- Discovers and reports on applications in use across the organization
- Leverages simplified configuration with REST API for hybrid features—path selection, QoS, and secure transport—and custom API scripts for monitoring
- Secures optimized traffic between SteelHead solutions across private and Internet links with standards-based encryption
- SteelHead Central Controller indicates configuration changes as compared to policy

Riverbed Flex for Acceleration Benefits

Riverbed Flex for Acceleration is a subscription model delivering:

- **License Portability:** Riverbed Acceleration licenses can be transferred from SteelHead appliances, SteelHead Virtual or SteelHead Cloud at no cost, providing architectural freedom to best meet networking needs. This means you can move capacity across your fleet, from hardware, to virtual, to cloud.
- **Optimized ROI:** Right-size your acceleration needs with an OPEX approach that protects your investment but allows you to scale up or scale down licenses. Because licenses are independent of deployment, you can easily add capacity without stranding existing investments in software, leading to lower cost upgrades.
- **Future-proof:** Flex allows you to future proof acceleration infrastructure by scaling capacity up or down to meet changing requirements, simplified upgrades and access to the latest software features.

SteelHead License Comparison

Feature	Flex Licenses	Perpetual License
Software Features		
RiOS upgrade	License Mobility	Within major release (dot releases only)
Easily adopt future capabilities	Yes, Evergreen	No
Performance tier	Yes	No
License Mobility		
Move licenses	Yes	No
Scale licenses up and down	Yes	No
Move licenses anytime	Yes	No
Move capacity across fleet	Yes	No
Use Burst Capacity	Yes	No
Increase capacity on demand with existing hardware	Yes	No
Financial Considerations		
Payment structure	Subscription	Up front + maintenance
Expense method	OPEX	CAPEX
Lower cost upgrades	Yes	No
No stranded assets	Yes	No

SteelHead CXA-02090, CXA-04090, CXA-06090, CXA-08090

The newest SteelHead product family, The SteelHead 90 Series, supporting next generation CPUs to take advantage of new instruction sets, compression and security assistance capabilities with RiOS 10, delivers twice the performance vs. the 80 series and three times the performance vs. our older 70 series.




Flex or Perpetual Licensing Model

Deployment	Branch		Data Center	
Model	CXA-2090*	CXA-4090	CXA-6090*	CXA-8090
Max capacity	200Mbps	500 Mbps	2Gbps	6Gbps
Max connections	10,000	30,000	150,000	220,000

*Anticipated availability Q3FY2025.


SteelHead CX-580/CX-780/CX-3080

Small office appliances that leverages the full performance capabilities of the hardware. Offers a flexible feature set broken into 3 tiers (Essentials/Standard/Enterprise) depending on the customer requirements.

	 Essentials	 Standard	 Enterprise
Description	Basic WAN Optimization	Full WAN Optimization with App Acceleration	Full Featured App Acceleration + Next Gen Features
Sample Features	<ul style="list-style-type: none">• Full Deduplication• TCP Optimization / MXTCP• Hybrid Networking: QOS / Secure Transport / Path Selection	Essentials + <ul style="list-style-type: none">• HTTPS Optimization• Most Protocol Blades (MAPI, SMB 2/3, CIFS)• WebProxy• SteelHead SaaS• Secure Protocols Optimization (TLS/SSL, encrypted/signed SMB)	Standard + <ul style="list-style-type: none">• Data Center Protocol Blades (Replication, NFS)• SCPS / FIPS

SteelHead CX-5080/CX-7080

Fully featured appliances designed for large offices or datacenters that delivers best in class WAN optimization to accelerate the performance of enterprise applications. Licensing tiers determine the bandwidth and connection performance boundaries.

	 Enterprise	
Model	5080	7080
Maximum Connections	20,000 / 60,000	100,000 / 150,000 / 220,000
Maximum Bandwidth	300 / 622 (Mbps)	1000 / 2000 / 3000 (Mbps)
Full Featured WAN Optimization (See specification sheet for details)		



About Riverbed

Riverbed, the leader in AIOps for observability, helps organizations optimize their user's experiences by leveraging AI automation for the prevention, identification, and resolution of IT issues. With over 20 years of experience in data collection and AI and machine learning, Riverbed's open and AI-powered observability platform and solutions optimize digital experiences and greatly improves IT efficiency. Riverbed also offers industry-leading Acceleration solutions that provide fast, agile, secure acceleration of any app, over any network, to users anywhere. Together with our thousands of market-leading customers globally – including 95% of the FORTUNE 100 – we are empowering next-generation digital experiences.

Learn more at riverbed.com.