RiOS 10: Driving High-Performance Resilient Networking

In response to the surging demand for rapid application performance and the proliferation of AI technologies, networks are once again emerging as a critical bottleneck in driving businesses forward. Addressing these network constraints requires a revolutionary approach—an innovative mindset and a transformative method of connecting all your data with a network capable of overcoming this challenge.

Riverbed has risen to this challenge with RiOS 10, marking a monumental advancement in resilient networking technologies. Engineered to meet the rigorous networking demands of the AI era, RiOS 10 serves as the cornerstone software that powers all of Riverbed's cutting-edge acceleration solutions.

New Network Imperatives
Resilient networking in this new era of AI means delivering:

Peak Performance

Goes beyond just speed—it is about ensuring lightning-fast application responses and delivering critical data exactly where and when it is needed.

Secure Delivery

Ensures secure data delivery from data storage—whether in the cloud or data center—straight to the edge.

Agility

Easily and affordably evolve your network as your business needs change.

Our leading RiOS 10-based network optimization solutions, with innovative acceleration for cloud, SaaS, and premise-based applications and services, improve application performance and securely move the massive amount of data required in this new era of artificial intelligence.

This family of Riverbed SteelHead solutions ensures peak performance for every digital experience and AI applications and are delivered in a flexible licensing model providing architectural freedom, license portability and improved TCO.

Key Benefits of RiOS 10

Performance

The performance of networks and applications is a critical driver of business productivity. Drawing from nearly two decades of expertise, Riverbed has revolutionized network and application performance with the SteelHead family of solutions, now enhanced by RiOS 10.

RiOS 10 delivers unparalleled performance improvements across data center, edge, and cloud environments. Peak Performance transcends mere speed—it ensures lightning-fast application responses and delivers vital data precisely where and when it is needed.

SteelHead appliances offer turnkey deployment ease, while SteelHead Virtual brings the same Riverbed Acceleration benefits to virtualized server environments in data centers or at the edge. Additionally, SteelHead Cloud extends these capabilities to AWS, Azure Cloud, Oracle Cloud Infrastructure, and Google Cloud Platform.

- **Appliance Performance:** RiOS 10 offers up to twice the performance compared to the previous XX80 series and three times the performance compared to the XX70 series. This includes up to 50 Gbps of data movement in each direction, leveraging next-generation Intel CPUs and advanced compression assistance capabilities. With the convenience and simplicity of an appliance, the updated XX90 series includes the 8090, 4090[1], 6090 and 2090 models, offer optimized throughput and compatibility with existing network products.

- **SteelHead Virtual and SteelHead Cloud Performance:** Running RiOS 10, SteelHead Virtual and SteelHead Cloud achieve up to 2X the performance, with data movement capabilities reaching up to 20 Gbps per second. Future scaling is facilitated through cloud load balancing, ensuring efficient and cost-effective capacity management.

- **SteelHead Mobile:** Delivered as a software solution, SteelHead Mobile extends best-in-class network optimization and application acceleration technology to remote users working from anywhere.

- **SteelHead RS:** Designed for secure data delivery between edge and core across constrained networks, SteelHead RS is a resilient edge networking software solution compatible with leading server, storage, cloud storage and virtualization vendors.

- **SteelHead SaaS:** With SteelHead SaaS, Riverbed delivers the only cloud-based Software-as-a-Service (SaaS) acceleration service, purpose-built for today's dynamic workforce to ensure consistent performance of leading SaaS applications for anyone, anywhere, regardless of distance.

Security Enhancements

Resilient Networking is not just about performance but also security. In today's hybrid world of cloud workloads, SaaS applications, Internet Broadband, and MPLS, the SteelHead family of products and solutions, built on RiOS 10, introduces robust security features to protect data against emerging threats:

- **Platform Security:** New security features include Secure Boot to assure software integrity, TPMs for secure key storage, and Total Memory Encryption to protect data and code from unauthorized access.

- **Confidential Computing:** RiOS 10 supports Intel TDX for hypervisor-specific security, preventing hyperjacking and ensuring secure data processing. This confidential computing technology in Riverbed solutions provides strong protection against unauthorized access, even by privileged users such as system administrators, hypervisors, or malicious software, thus also guaranteeing data integrity. Attestation provides the mechanism to validate that the environment is secure and has not been tampered with before sensitive operations are executed.

- **Post-Quantum Cryptography:** RiOS 10 implements post-quantum cryptography (PQC) and hybrid cryptographic solutions, allowing organizations to seamlessly secure their networks against quantum risks while maintaining compatibility with existing infrastructure and ensuring compliance with NIST and IETF standards.

[1] Anticipated availability in Q3FY25

Agility and Flexibility

RiOS 10 is designed to provide architectural freedom and adaptability in dynamic environments through Riverbed Flex subscription. This new offering allows customers to flexibly manage software licenses across hardware, virtual, and cloud deployments, enabling seamless transitions and capacity upgrades without upfront commitments.

Architectural Freedom	Improved ROI	Future-Ready
Riverbed Flex addresses this with portable licenses and streamlining hardware refreshes, enabling seamless Accelerations solution transitions between hardware in your data centers and cloud environments.	This license flexibility means you can adapt to the rapid changes in the era of AI without being penalized by outdated licensing models or hardware. It also eliminates the need to renegotiate perpetual licenses as needs change and networks evolve.	Riverbed Flex innovative subscription-based Acceleration solutions provide a future-ready approach by decoupling Acceleration software licenses from hardware, offering seamless transitions between physical, virtual, and cloud-based deployments, and ensuring continuous software and hardware refreshes as part of the subscription.

Innovation To Move You Forward

RiOS 10 represents a transformative advancement in networking technology, delivering enhanced performance, robust security, and unparalleled agility. These capabilities form Riverbed empower you to lead in the era of AI, providing your customers and employees with the tools they need to succeed in a rapidly evolving digital landscape.

Next Steps

To learn more about RiOS 10 and the new products recently introduced, please visit riverbed.com.

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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.