

## OVERVIEW

Thousands of organizations worldwide rely on Riverbed to extract more value from existing storage, application, and network investments.

With Riverbed Whitewater, organizations can now access all the benefits of cloud storage without compromising on performance and availability. Whitewater dramatically optimizes and accelerates backup and archiving to cloud storage, allowing unlimited scalability in storage infrastructures. Whitewater integrates seamlessly with existing storage management, data protection and archiving tools, avoiding complex changes or rip-and-replace approaches to storage optimization.

## Riverbed® Whitewater™

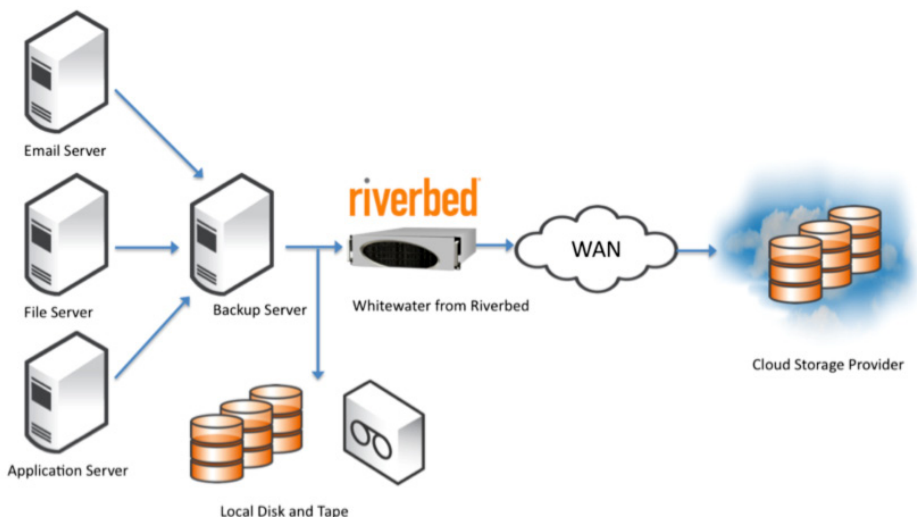
### Revolutionizing Cloud Storage through Acceleration and Optimization

The Riverbed Whitewater appliance is a cloud storage accelerator that provides high-performance LAN access to cloud storage by leveraging industry-proven deduplication technology that simultaneously delivers network (data-in-flight) and storage (data-at-rest) deduplication, enabling organizations to seamlessly extend their storage to the cloud. Data center consolidation, an ever-growing volume of data, and significant resource constraints around space, power, and cooling, have created a perfect storm for IT managers. Massive amounts of consolidation put further pressure on organizations for a sound disaster recovery (DR) strategy and off-siting data to avoid a single point of failure. Traditional storage approaches, such as tape, fail miserably under these stringent IT requirements. Cloud storage presents an excellent opportunity for organizations to extend their infrastructure for much of their data protection, archiving, and long-term storage management needs.

Traditional backup, recovery, and DR strategies combine local storage with local disk backup and other forms of long-term storage such as VTL or tape. While these strategies were viable in the past, they are rarely sufficient to truly meet all of an organization's recovery needs.

Organizations are looking to enhance their data management and protection strategies further by:

- Securely moving data off site, without investing in a secondary data center.
- Enabling LAN-like access to, and rapid recovery of, that data.
- Driving down the duration and cost of backup, replication, and DR.



The Whitewater appliance integrates seamlessly with existing backup software such as Symantec NetBackup and Backup Exec, and IBM Tivoli Storage Manager, ensuring that organizations can utilize cloud storage without any changes to their fine-tuned backup software and processes. Whitewater also accelerates communication and data transfer to public cloud storage, enabling organizations to utilize off-site storage while making backup and recovery feel local.

**Key Benefits of Whitewater**

**Simplify and Accelerate Backup**

Whitewater appliances give you a direct interface from your existing backup software straight to the cloud. This provides reliable, off-site data protection without the need to invest in a new backup infrastructure, a secondary data center, or underutilized storage capacity. No more installing, data loading, uninstalling, shipping, and offsite storing of tape media.

**Simplify and Accelerate Recovery and DR**

Restoring from disasters typically span many days to request tape retrieval, wait for delivery, search for data that needs restoration, load tapes, and recover data. With Whitewater appliances, all restores from the cloud leverage industry-leading deduplication and WAN optimization techniques to dramatically accelerate recovery of anything from a file to a volume or more, reducing recovery time from days to hours.

**Reduce Backup Costs**

The Whitewater appliance's industry-leading in-line deduplication capabilities cut the cost of data protection by reducing both bandwidth requirements for moving backup data into the cloud, as well as reducing the overall consumption of cloud storage. Organizations can also eliminate the capital costs of current data protection strategies by reducing the dependence on disk-to-disk backup and tape archiving.

**Secure Off-Site Data More Effectively**

Whitewater appliances encrypt data in-flight to the Cloud with SSL v3, and at rest using 256-bit AES encryption. This double layer of encryption ensures that any data moved into cloud storage is not compromised and creates complete end-to-end security. Whitewater appliances leverage an innovative key management system that allows organizations to carefully manage data security and at the same time allows you the flexibility to restore to any location.

**Avoid Cloud Vendor Lock-in**

Whitewater appliances give organizations the flexibility to work with multiple cloud vendors. Unlike alternatives that tie you to a specific cloud, Whitewater appliances act as a broker and can seamlessly accelerate access across multiple cloud providers. This allows you to off-site data to multiple locations or transition to a different cloud provider as needed.

**System Specifications**

Whitewater series specifications	Virtual WWA	WWA-1000	WWA-2000
Physical storage capacity, usable <sup>1</sup>	Up to 2TB	4TB	8TB
Cloud storage capacity	Unlimited <sup>2</sup>	Unlimited <sup>2</sup>	Unlimited <sup>2</sup>
RAID protection level <sup>3</sup>	Customer provisioned <sup>4</sup>	RAID-6	RAID-6
Network integration**	2 x 1GbE	4 x 1GbE	4 x 1GbE
Maximum LAN throughput, aggregate	Up to 200 GB/hr	Up to 1 TB/hr	Up to 1 TB/hr
Average Deduplication	10-30x	10-30x	10-30x

1. All capacity values are calculated using Base 10 (i.e. TB – 1,000,000,000,000 bytes)  
 2. Cloud storage is provisioned by the Cloud Services Provider (Amazon S3 or AT&T Synaptic Storage)  
 3. Local storage with the Whitewater appliance only. (Excludes cloud storage).  
 4. Any customer provisioned RAID level that is valid and supported by VMWare ESXi 4.x

**About Riverbed**

Riverbed Technology is the IT performance company. The Riverbed family of wide area network (WAN) optimization solutions liberates businesses from common IT constraints by increasing application performance, enabling consolidation, and providing enterprise-wide network and application visibility – all while eliminating the need to increase bandwidth, storage or servers. Thousands of companies with distributed operations use Riverbed to make their IT infrastructure faster, less expensive and more responsive. Additional information about Riverbed (NASDAQ: RVBD) is available at [www.riverbed.com](http://www.riverbed.com).



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**Riverbed Technology**  
 199 Fremont Street  
 San Francisco, CA 94105  
 Tel: +1 415 247 8800  
 Fax: +1 415 247 8801  
[www.riverbed.com](http://www.riverbed.com)

**Riverbed Technology Ltd.**  
 Farley Hall, London Road  
 Binfield  
 Bracknell  
 Berks RG42 4EU  
 Tel: +44 (0) 1344 401900

**Riverbed Technology Pte. Ltd.**  
 391A Orchard Road #22-06/10  
 Ngee Ann City Tower A  
 Singapore 238873  
 Tel: +65 6508-7400

**Riverbed Technology K.K.**  
 Shiba-Koen Plaza Building 9F  
 3-6-9, Shiba, Minato-ku  
 Tokyo, Japan 105-0014  
 Tel: +81 3 5419 1990

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