

## OVERVIEW

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

### Key Whitewater Benefits

- » 10-30x deduplication on average for lower cost
- » Dual-layer AES 256-bit and SSL v3 encryption
- » Drops into existing backup tool and cloud storage provider flows

The Riverbed Whitewater product family unlocks the benefits of public cloud storage while overcoming the challenges of deploying it as a storage tier. Whitewater appliances dramatically optimize and accelerate backup and archiving to cloud storage, slashing costs, simplifying management, and enabling unlimited scalability, all while preserving data security. Whitewater integrates seamlessly with existing backup infrastructure and with a range of cloud storage providers, allowing you to avoid complex changes or rip-and-replace approaches to storage optimization.

# Riverbed Whitewater

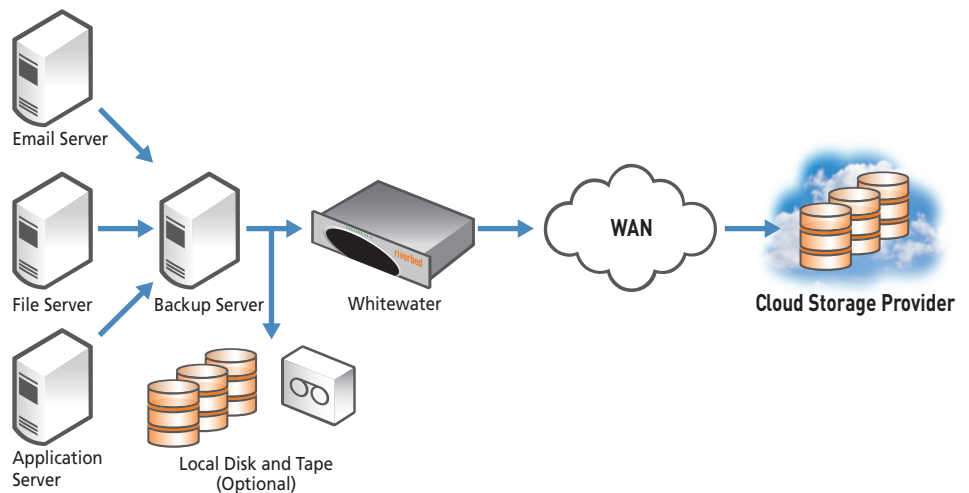
## Revolutionizing Cloud Storage through Optimization

The Riverbed® Whitewater™ cloud storage gateway provides high-performance LAN-like access to public cloud storage in a pre-configured, drop-in appliance. By leveraging industry-proven acceleration and deduplication technology that simultaneously delivers network (data-in-flight) and storage (data-at-rest) encryption, Whitewater appliances enable organizations to instantly transform their backup and archiving technology into a highly-efficient cloud-ready infrastructure.

For decades, organizations have relied on tape or local disk for their data protection needs. As accelerating data growth and strict SLAs reduce the appeal of these solutions, organizations have begun to turn to private clouds to consolidate and reduce the cost of storage. But private clouds still require extensive storage management and cost. Public cloud storage provides a compelling alternative.

Whitewater cloud storage gateways enable organizations to enhance their data management and protection strategies by:

- Driving down the duration and cost of backup, replication, and DR
- Securely moving data offsite without investing in a second data center
- Enabling LAN-like access to, and rapid recovery of, that data
- Providing flexibility and scalability in storage provisioning



The Whitewater appliance integrates seamlessly with existing backup software such as Symantec NetBackup and Backup Exec, Quest vRanger, IBM Tivoli Storage Manager, EMC NetWorker, or CA Arcserve, ensuring that organizations can utilize cloud storage without any changes to their fine-tuned backup software and processes. The appliances also have built-in support for the APIs from Amazon S3, AT&T Synaptic Storage as a Service (EMC Atmos-based), and Nirvanix SDN.

| Front End  | Back End  |
|--|---|
| <ul style="list-style-type: none"> <li>• CA ArcServe</li> <li>• EMC NetWorker</li> <li>• IBM Tivoli Storage Manager</li> <li>• Symantec Backup Exec</li> <li>• Symantec NetBackup</li> <li>• Vizioncore/Quest VRanger</li> </ul> | <ul style="list-style-type: none"> <li>• Amazon S3</li> <li>• AT&amp;T Synaptic Storage as a Service (EMC Atmos)</li> <li>• Nirvanix SDN</li> </ul> |

## Key Benefits of Whitewater

### Reduce Backup Costs

The Whitewater gateway's industry-leading in-line network and storage deduplication reduces data size by 10-30x, on average, cutting the cost of data protection by reducing the bandwidth requirements for moving backup data into the cloud, and the amount of cloud storage needed. Organizations can also eliminate the capital costs of current data protection strategies by reducing the dependence on disk-to-disk backup and tape archiving and by using a pay-as-you-go cloud storage model.

### Simplify and Optimize Backup

Whitewater gateways give you a direct and secure 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, uninstalls, shipping, and offsite storing of tape media or forward provisioning and managing backup storage disk arrays. And as a single-ended solution, Whitewater does not need to be paired with another gateway in the cloud.

### Maximize Flexibility and Scalability

Public clouds provide access-anywhere capacity of near unlimited scale that can be adjusted in real-time to meet an organization's current needs. Whitewater appliances unlock access to this flexible, scalable tier of storage, dramatically reducing financial and operational risk while enabling users to respond nimbly to shifting IT requirements.

### Simplify and Accelerate Recovery and DR

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

### Secure Off-Site Data More Effectively

Whitewater gateways 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. It also complements data security measures deployed by cloud service providers. Whitewater appliances leverage an innovative key management system that allows organizations to carefully manage data security while giving them 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 (and backup tools), 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-510   | WWA-710   | WWA-2010  |
|-------------------------------------|-----------------------------------|-----------|-----------|-----------|
| Raw capacity <sup>1</sup>           | Up to 2TB                         | 3.5TB     | 7TB       | 11TB      |
| Cloud storage capacity <sup>2</sup> | Unlimited                         | Unlimited | Unlimited | Unlimited |
| RAID protection level <sup>3</sup>  | Customer provisioned <sup>4</sup> | RAID-6    | RAID-6    | RAID-6    |
| Maximum LAN throughput, aggregate   | 250 GB/hr                         | 400 GB/hr | 600 GB/hr | >1 TB/hr  |
| Average Deduplication               | 10-30x                            | 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 delivers performance for the globally connected enterprise. With Riverbed, enterprises can successfully and intelligently implement strategic initiatives such as virtualization, consolidation, cloud computing, and disaster recovery without fear of compromising performance. By giving enterprises the platform they need to understand, optimize and consolidate their IT, Riverbed helps enterprises to build a fast, fluid and dynamic IT architecture that aligns with the business needs of the organization. Additional information about Riverbed (NASDAQ: RVBD) is available at [www.riverbed.com](http://www.riverbed.com).



2005, 2006, 2007, 2008, 2009, 2011



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