

Riverbed® Whitewater™ and IBM Tivoli Storage Manager

Accelerating Cloud Storage for Enterprise Data Protection

Today's ongoing and rapidly accelerating growth in enterprise data comes at the same time that companies of all sizes are focused on reducing costs. How can customers balance these seemingly incompatible goals? In particular, how can IT departments keep up with the volume of new enterprise data—more and more of it critical and subject to compliance—and continue to meet data protection and availability service levels?

Data protection is a mature practice, and existing approaches are well optimized for fast, reliable backup, typically to local disk, tape, or virtual tape libraries (VTLs). But traditional backup strategies can be limited by an IT organization's ability to accurately size, trend, and source budget for. They can also be limited by organizations' ability to manage multiple disks, tapes, and libraries, in different locations around the globe, and often on different platforms. Moreover, backup data often needs to be available for restore to new environments and distant locations, which can strain corporate WAN links. Many innovative enterprises are turning to cloud storage to meet both demands. Cloud storage promises an elastic, pay-as-you-go storage pool for backups and archives, which reduces disk and tape costs and eliminates the need to maintain secondary sites for off-site disk or tape storage.

Riverbed Whitewater

Riverbed® Whitewater™ appliances allow enterprises to meet cost reduction and data management goals by combining the scalability and reliability of cloud storage with a customer's existing data protection strategy. Whitewater appliances are cloud storage accelerators that secure, optimize, and accelerate backup and recovery to private and public clouds.

Whitewater appliances are essentially cloud storage acceleration in a box. Customers leverage pay-as-you-go cloud storage services for off-site storage of backup data and enjoy benefits that include simple configuration, faster data transfers, and built-in security.

Moreover, implementation is non-disruptive: customers can use the same backup and data protection products they use today, such as Tivoli® Storage Manager, the same protocols, and the same schedules and procedures. This creates a significant operational benefit due to the time and effort saved by no longer having to manage off-site disks and tapes. The cloud becomes a secure and reliable backup target, accessed like any other storage target at the customer's site. However, now the backup target can be sized up or down on-demand.

IBM Tivoli Storage Manager (TSM)

TSM is a centralized, policy-based data backup and recovery software solution. The software enables a user to backup, restore, archive, and retrieve data from a hierarchy of data storage areas. The storage areas, known as storage pools, can be a hierarchy of disk, optical and tape-based media.

A Joint Solution by Riverbed and

Ready for

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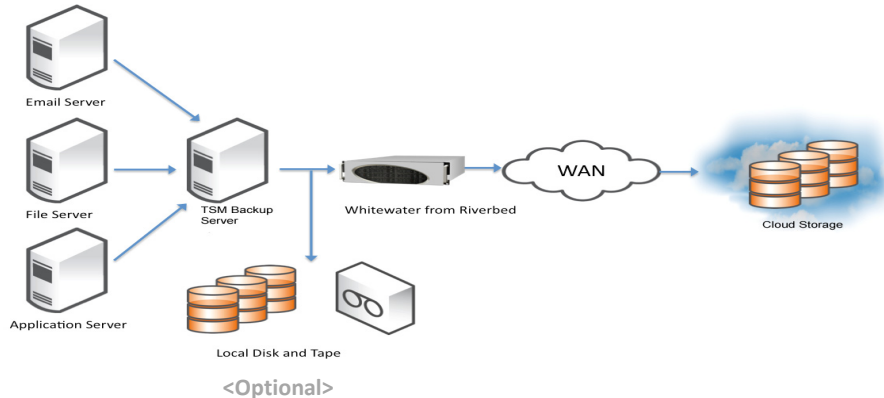
software

BENEFITS

Key benefits of the cloud backup storage solution with Whitewater and Tivoli Storage Manager:

- With Whitewater appliances, TSM users can backup directly to the public cloud
- Users can continue to leverage their existing TSM tools and settings, without change
- Dual-level security using AES 256-bit and SSLv3 to encrypt data, both in motion and at rest
- Enhance data speeds while reducing total storage costs 10 – 30 times on average
- Accelerate data transfers to improve performance

A typical TSM installation allows data backups from TSM clients to be spooled to random-access disk storage attached to the TSM server. This data is then migrated at a later time to less-expensive, sequential-access storage such as tape, optical disk or, with the addition of a Whitewater appliance, secure cloud storage.



Whitewater Appliances Reduce TSM Backup Windows and Accelerate Data Restore

Whitewater appliances can greatly reduce the amount of time required to complete backup and restoration jobs with IBM Tivoli Storage Manager. This enables customers to take advantage of inexpensive public cloud storage over a WAN link, and eliminate the need to maintain backup media, servers, and additional backup infrastructure in a distributed environment.

Disaster restores typically span many days, because you have 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. This dramatically accelerates the recovery of anything from a file to a volume or more, thereby reducing recovery time from days to hours. Whitewater's industry-leading, in-line deduplication capabilities cut data protection costs by reducing bandwidth requirements and the overall consumption of cloud storage.

IBM and Riverbed Technology

Through a Global Alliance Relationship Agreement, Riverbed and IBM provide combined market-leading solutions. This alliance provides focused coordination to provide innovative and effective combined solutions, drawing on the knowledge, expertise, and resources of both companies. Organizations across all industries can be confident that Riverbed and IBM business processes are positioned to deliver these combined solutions that provide high value to clients.

About IBM

International Business Machines Corporation (IBM) develops, manufactures, and delivers Information technology (IT) products and services worldwide. For more information, visit www.ibm.com.

About Riverbed

Riverbed is the IT performance company. WAN optimization solutions from Riverbed liberate 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 trust Riverbed to deliver greater productivity and cost savings by making their IT infrastructure faster, less expensive and more responsive. Riverbed solutions are also available as managed services through select providers. Additional information about Riverbed (NASDAQ: RVBD) is available at www.riverbed.com.



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