

Whitewater Gateways and IBM Tivoli® Storage Manager

Enabling 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 IT departments keep up with the volume of new enterprise data and flat capital budgets, yet continue to meet strict data protection and availability service levels?

These trends are encouraging IT professionals to consider new solutions to meet the growth and reduce the cost of their existing data protection infrastructures. As data protection systems consume large amounts of storage and often require long retention periods, the public cloud is an ideal location due to its scalability, pay-for-use pricing, off-site data location and reduced administration requirements. Until recently, however, concerns around security, transmission speeds and the costs of storing large data set have been barriers to cloud storage adoption.

Riverbed Whitewater

Riverbed® Whitewater® cloud storage gateways allow organizations to reduce costs by 30 to 50%, eliminate tape, streamline administration and improve disaster recovery readiness by leveraging the scalability, flexibility and pay-for-use pricing of cloud storage.

Implementation is non-disruptive: customers can continue to use their installed data protection products, such as Tivoli Storage Manager, with the same schedules, policies 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.

Disaster recovery capability is greatly improved by secure off-site storage within the public cloud without the expense of redundant hardware, power, cooling and hosting costs. Backup data stored in the cloud is available anywhere with an internet connection to provide fast, flexible recovery should the unexpected occur.

Whitewater safeguards data during transmission and at rest using secure socket layer V3 (SSLv3) technology and strong AES 256 bit encryption. This dual layer of security ensures that sensitive data is protected end-to-end.

Whitewater gateways offers users a wide choice of popular cloud storage providers including: Amazon Web Services S3, AT&T Synaptic Storage as a Service, Microsoft Windows Azure, Nirvanix Cloud Storage Network, Rackspace Cloud Files, clouds based on EMC Atmos or OpenStack (Swift) object storage.

A Joint Solution by Riverbed and

Ready for

IBM | Tivoli.

software

BENEFITS

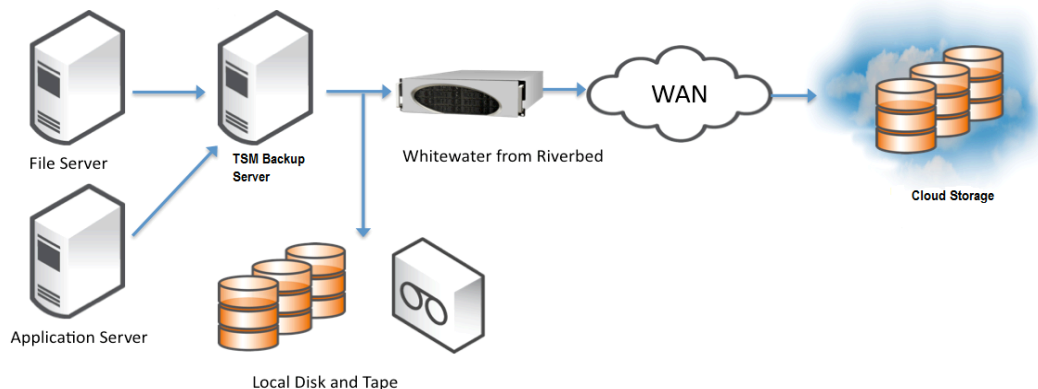
Key benefits of the cloud backup storage solution with Whitewater and Tivoli Storage Manager:

- TSM users can backup directly to cloud storage.
- Reduce costs 30 to 50% by eliminating tape systems, tape vaulting and remote disaster recovery hardware.
- Whitewater is TSM aware which improves optimization and results in improved network throughput and reduce storage consumption.
- Reduce cloud data storage requirements by 10 to 30x with Riverbed's byte level based deduplication.
- Easy, drop-in integration into existing TSM installations – no change to the existing infrastructure is required.
- Improve disaster recovery readiness with secure, off-site data sets in the public cloud
- Replace over a petabyte of tape with a single Whitewater gateway.

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 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 gateway, securely to cloud storage.



Whitewater Gateways Reduce TSM Backup Windows and Accelerate Recovery

Whitewater gateways 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.

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, 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. The Whitewater gateway'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.

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 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.



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