



Cloud Storage Edge Cache

S3 REST Acceleration Server

Key Benefits

- Accelerate S3 data transfers to Cloud Storage
- Save Cloud Storage Fees as reads may come from local storage instead of the Cloud
- Active/Active Support for high availability
- SSL Support to the Cloud
- Native File Support allowing. BridgeSTOR does not mangle objects
- Physical hardware support with SSD, SATA, SAS, NFS or SMB storage support
- Virtual Machine Architecture allowing for flexible deployment on premises or in the cloud
- Set it and Forget it simple GUI allowing less than 30-minute install

The BridgeSTOR Cloud Storage Edge Cache has been designed for companies that require accelerated file access to existing Cloud Storage. The Cloud Storage Edge Cache is similar to a standard HTML proxy but has been designed specifically for the Amazon S3 protocol. Like a Proxy, it will store and forward data to the Cloud Storage, unlike a proxy it has been designed to cache data to the Cloud so reads may come from the local disk cache and not from the Cloud Storage.

Challenge

Cloud Storage has proven to be resilient and highly available and desirable to use as a secondary storage solution. However, current programs and tools have not been programmed to operate with the Cloud Storage protocols. Cloud Storage Protocols also tend to be slow due to high latency between on premise locations and Cloud Storage locations.

BridgeSTOR Cloud Products support SMB and NFS, but these protocols must still wait for the round trip to the Cloud Storage frustrating users as they wait for data to be committed. Backup to the Cloud slows down backup windows. Latency cannot be eliminated but it may be fooled.

Solution

The BridgeSTOR Cloud Storage Edge Cache accelerates S3 REST packets by acting as a *bump in the wire* reducing wait times for Cloud Users. All write requests will be written to disk and logged in a transactional database and once both have been written successfully, an acknowledgement is immediately returned to the application allowing it to continue. The Cloud Storage Edge Cache background threads monitor the transaction log and send all the data into the Cloud Storage forcing these background threads to suffer the latency not the user. While data is being transferred existing users may use the local copy for reading and updating. Global File Locking is used for remote users so they may not access the file until it has been officially transferred into the Cloud Storage. For high availability an active/active system is available.

