

# Burton Snowboards

Top snowboard manufacturer/retailer deploys SwiftStack as backup/archive tier



## About Burton

Burton Snowboards is a privately held manufacturer and retailer of snowboards, outerwear and shoes founded in 1977. With headquarters in Burlington Vermont, its operations and retail stores have a global reach across 6 continents, with an online store and thousands of sporting goods retailers and specialty snowboarding shops.

While Burton's IT department includes 35 experts, most of these resources are focused on SAP support. The IT infrastructure group, responsible for storage along with server OS support and backups, consists of only 4 staff.

## Challenge

Burton's infrastructure group was facing two key needs and one new opportunity. First, mounting costs from using their tier 1 NAS/SAN for both primary and backup storage. Expanding tier 1 to meet the demands of backup and DR were prohibitive.

Second, completing backups within the available time window was becoming increasingly difficult. Full recovery of file share data from tape backups was unpredictable. For both these reasons Burton decided to implement another tier of storage focused on serving as a backup target.

Burton's choice in solving its cost and performance needs for backup created an opportunity to add offsite disaster recovery. Previously, mirroring of backup data to a remote site to ensure availability and DR was not practical for them with their tier 1 storage.

## Solution

To meet their goals of significantly lowering the purchase and ongoing price per TB, Burton needed to avoid vendor lock-in and have the freedom to select the

right storage hardware and media technology. With limited staff, whatever solution they selected had to be very efficient at automating all deployment and management tasks, and had to provide proactive monitoring of the backup storage.

Burton started their evaluation process for their new backup storage tier in May 2014. After looking at vendor-specific hardware-based solutions, it became clear that a software-defined object storage solution would better meet their needs for cost, scalability and functionality.

They chose OpenStack Swift as an ideal fit for their requirements. When deploying an initial cluster of 3 object nodes, it took over 17 hours to complete all of the manual tasks. Burton then found SwiftStack could automate the deployment process. With SwiftStack, the total time required for deployment dropped to 1.5hrs, a savings of over 90%. That same automation and simplicity made ongoing management 10X easier and faster in comparison to doing it themselves.

## Deployment

Burton initially deployed a SwiftStack cluster with two regions, using a total of 6 object nodes along with 2 proxy/account/container servers. A 3<sup>rd</sup> region with additional object and proxy nodes is being configured as a remote co-location site for DR and availability purposes.

All of the nodes are connected using 10 Gb Ethernet via a HAProxy-based load balancer node that also uses one of the proxy nodes as a failover load balancer.

The object node hardware consists of Silicon Mechanics 4U chassis based on Supermicro components. Each server is configured with dual AMD Opteron 6300 Series Processors, sixteen DDR3 DIMM sockets, and thirty-six hot-swap SAS / SATA drive bays, providing a very high storage density.

Populated with 4TB SATA hard drives, each node can provide up to 144 TB of raw capacity or 48 TB of useable capacity in the SwiftStack cluster.

## CASE STUDY

Commvault's Simpana backup software uses the native Swift API interface to SwiftStack's object storage, and is the primary Enterprise application for moving and managing backup images within the new storage tier.

### Savings

One of the key drivers for implementing SwiftStack was to reduce overall storage costs. Burton's existing NAS tier was costing roughly \$5,000 / TB to purchase, with recurring costs of about \$1,000 / TB annually.

The new SwiftStack object storage tier aimed to keep purchase costs under 1/5<sup>th</sup> the NAS tier costs. SwiftStack's deployment has more than met these goals by keeping purchase costs between \$500 and \$800 per TB, or as low as 10% of the cost of additional NAS/SAN storage. SwiftStack's recurring costs also ran as low as \$200 per TB, or only 20% of the recurring costs for the legacy NAS tier.

### Future Plans

Burton is in the process of extending the use of the SwiftStack storage tier to include direct support for user file shares using SwiftStack's Filesystem Gateway. Burton had over 170 TB of user file shares that needed on-premises storage for archiving, where individuals were buying unmanaged external drives to meet this need. The infrastructure group needs to store both the online file shares and the file cabinets of 4TB external drives holding archived content.

The data on these external drives still has value as Burton's marketing campaigns often include historical photo and video content, some up to 20 years old. This data needed to be brought into the planned tier of backup and archival storage and off the primary storage tier. Though challenging, this migration greatly reduces storage costs, increases the life cycle of the NAS tier, ensures all data was redundantly and securely stored, and gets it online to be properly cataloged, curated and deduplicated.

Burton also plans to implement the file share support at their Innsbruck and Tokyo offices. They can take advantage of Swift's native replication to limit bandwidth requirements between remote offices, while still providing high performance access to the local replicas of user files.

To provide additional automated access to marketing assets stored in SwiftStack, Burton is also investigating the use of Python scripts and the [Swift Python Client](#).

### Find Out More

For more information on SwiftStack's features, support, pricing and product documentation, visit [swiftstack.com](http://swiftstack.com).

*"SwiftStack cut our storage management overhead for backup by over 90% – deploying our proof of concept using just OpenStack Swift took us 17 hours – but with SwiftStack the entire process took only an hour and a half. And, they're more responsive to our needs than 90% of the enterprise IT vendors that have been around forever."*

— Jim Merritt, Senior Systems

### SPOTLIGHT

- Cost effective backup target for Database, Virtual Machine images, user file shares
- Leveraging CommVault Simpana 10 for Enterprise Backup
- SwiftStack Filesystem Gateway planned for extending object storage value to file shares
- Very low price per TB cost with no hardware lock-in and simplified management
- 6 object nodes based on Silicon Mechanics Storform nServ A518.4 servers for object nodes with 36 hot-swap SAS/SATA slots
- 2 proxy/account/container nodes with HAproxy load balancing on the front-end
- Data backed up growing at 100 GB/week
- Planning new storage region offsite for DR