NETGEAR

About NETGEAR

NETGEAR is a multinational computer networking company based in San Jose, CA with offices in 25 other countries. The company turns ideas into innovative networking products that connect people, power businesses and advance the way we live. Among its products are:

For homes—advanced wireless internet connectivity, streaming, remote home monitoring and storage solutions

For businesses—networking, storage and security solutions

For service providers—home connectivity, home media, security, automation and mobile solutions

Challenge/Problem

In order to maintain data compliance, NETGEAR's legal department mandated that data be retained for a longer period of time. This put stress on the current hardware and made the process cumbersome, as there were many moving parts involved. In the current environment, data was backed up to a backup appliance and then offloaded to a remote location with longer retention—this was a multistep approach.

Data protection is an area of focus to offload on-premises infrastructure and reduce complexity. However, cloud data protection initiatives are often met with challenges such as complexity, inefficiency and high costs.

The ideal scenario for organizations is to have the ability to leverage the cloud with their on-premises infrastructure but without incurring the associated tradeoffs of architecting a hybrid solution.

## The Solution: Cloud Data Protection with CloudSnap and Amazon S3

NETGEAR engaged with Groupware Technology to design a solution.

Groupware architected a backup solution according to industry best practices and the AWS Well-Architected Framework. In order for the solution to work, there were several AWS components required. An S3 bucket, AWS Identity and Access Management (IAM) user and IAM policy were needed. Considering security best practices, encryption was added to the S3 bucket for additional security.

The Solution: Cloud Data Protection with CloudSnap and Amazon S3 (continued)

The IAM policy that was created was also designed using best practices. The policy utilized least privilege and only grants the user access to a specific S3 bucket and no other buckets in NETGEAR's AWS account. The IAM user is also granted only programmatic access and no console access.

The solution that Groupware designed also utilized a new Pure Storage tool, CloudSnap. Groupware worked with NETGEAR to perform a readiness validation, configured backup to AWS using CloudSnap, then demonstrated its backup and restore capabilities. Groupware also provided guidance and support around storage and backup best practices.
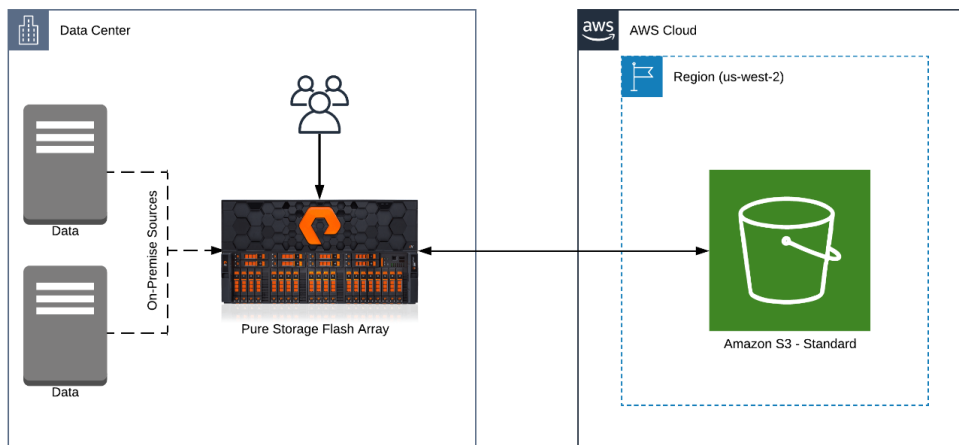
CloudSnap

CloudSnap is a built-in feature of FlashArray to offload snapshots to a less expensive repository such as Amazon Simple Storage Service (Amazon S3.) It is ideal for long-term snapshot retentions, backups, disaster recovery and data migrations. Groupware Technology is an early adopter of this effortless cloud protection solution for its enterprise customers. Besides cost efficiency, the benefits of CloudSnap include:

• Delivers effortless, simple and built-in protection in FlashArray and delivers efficient backup and restores

• Maximizes the cloud's potential for backup storage by providing efficient data transfer to and from the cloud

• Offers rapid recovery on-premises to help customers meet demanding SLAs and compliance policies

Amazon S3

The multi-purpose Amazon S3 is the largest and most performant and feature-rich object storage service, providing scalability, durability and industry-leading security. It enables organizations of any size to store any amount of data for any use. Benefits include:

• Data durability of 99.999999999% (11 9's) to protect against site-level failures, errors and threats. AWS achieves this by creating copies of all objects uploaded to S3 and storing them across multiple systems within a single AWS region

• S3 is cost efficient as it scales on-demand and only charges for what is used

• S3 provides ease of integration from the largest community of third-party solutions, system integrator partners and other AWS services

Working Together

CloudSnap allows FlashArray to directly offload snapshots into an S3 bucket without the need for any additional software or cloud gateway. Once the S3 bucket is configured as a replication target in FlashArray, it appears like any other target. Users can then create a protection group, select the data they want to replicate, add the S3 bucket to the protection group and create a schedule to determine the frequency of replication and a retention period.

Once a protection group has been created and configured, the FlashArray will begin replicating snapshots to the S3 bucket. Restoring data is simple as well—snapshots in the S3 bucket can be browsed by way of the FlashArray GUI and recovered from the cloud back to FlashArray.

The Outcome

At the conclusion of the project, Groupware had provided NETGEAR with the full and complete backup of over 14 terabytes of on-premises production Oracle DB and VMware data. In working with Groupware, NETGEAR was now able to successfully deploy the Pure snap-to-cloud application onto their array and facilitate the backup process. From not having to purchase additional arrays, NETGEAR saved an estimated $115,000, based on previous purchase, support and installation costs.

NETGEAR would also be reducing administrator overhead and improving operational efficiency as well as take advantage of cloud economics for their low-cost backup in the AWS cloud.

"The Groupware team did a great job of analyzing our challenge and architecting a backup solution for our data that was cost-effective, yet met our needs. I was very impressed with their knowledge and confidence in the integration of Amazon S3 with a relatively new tool such as CloudSnap in the deployment of the solution," noted **Satish Nair, NETGEAR's Datacenter Manager**.