

## A Powerful Backup Strategy in the Cloud for Allakos

### About Allakos

Based in San Carlos, CA, Allakos is a fast-growing clinical stage biotechnology company developing therapeutic antibodies that target allergic, inflammatory and proliferative diseases. The company's lead antibody AK002 is being tested in a Phase 2 trial for the treatment of eosinophilic gastritis and eosinophilic gastroenteritis.

### Challenge/Problem: A Viable Backup Solution

Allakos needed to replace its cloud backup and recovery solution. Small and medium companies such as Allakos need to keep their businesses up and running just as much as bigger ones. However, they can face numerous challenges when seeking out a backup solution that meets their mission-critical data recovery and retention and application uptime needs, such as limited funds and limited IT resources. And although it

may seem like a basic IT implementation, the choice of a backup and recovery is one of the most important decisions that an IT administrator can make. Data loss and corruption, administrative mishaps, malicious attacks or any other disaster could result in the loss of critical data. Disaster can only be mitigated with an effective backup strategy.

In search of a cloud backup to its on-prem data, Allakos was looking for a simple yet scalable solution with feasible costs, that would satisfy the company's various storage needs.

### The Solution: Cohesity DataPlatform & AWS Backup

Groupware worked with Allakos to satisfy their technical and business requirements and recommend a solution to leverage Cohesity's DataPlatform and configure backup to Amazon Simple Storage Service (S3) with lifecycle management to Amazon S3 Glacier for archiving.

Cohesity's DataPlatform is a software-defined, scale-out solution which consolidates all of an organization's secondary workloads, including backup and disaster recovery, long term archival, test/dev and analytics in a single, cloud-native solution. It supports AWS, empowering organizations to take advantage of the agility, scalability and cost effectiveness of AWS while benefiting from a hyperconverged solution. This allows organizations to eliminate vast arrays of data silos that are highly inefficient and costly to manage. Everything is brought together in a single interface that is simple to use, highly efficient and able to unlock new opportunities to extract valuable insights from untapped data.

## The Benefits of AWS

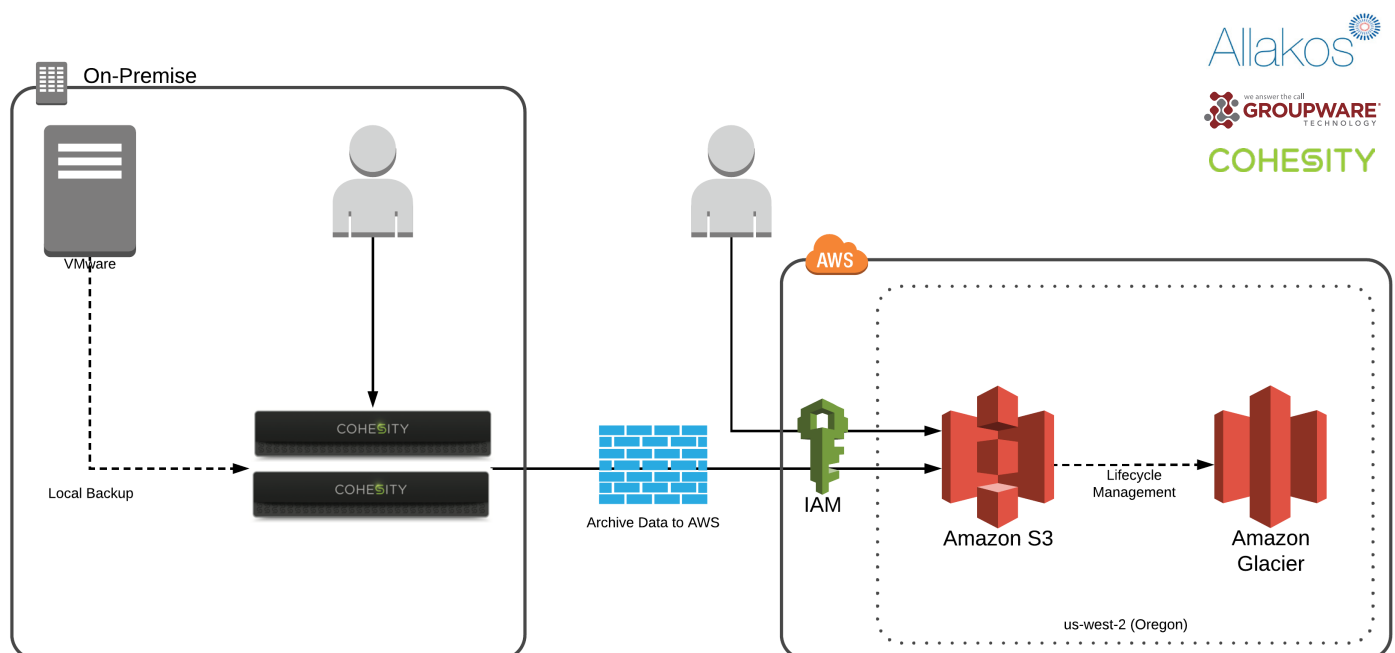
The Groupware team also deployed a number of AWS services, in support of the backup solution.

**AWS Identity & Access Management (IAM)** securely controls access to AWS services. With IAM, one can centrally manage users, security credentials such as access key and permissions that control which AWS resources users and applications can access.

In addition to the aforementioned agility, scalability and cost effectiveness, AWS also has numerous other benefits including ease of use, reliability and security and offers a number of data storage options. Amazon S3 and Amazon S3 Glacier both offer secure, dependable and highly durable storage solutions. Amazon Simple Storage Service (S3) was designed for rapid retrieval. With S3, data is stored in different “buckets” which are placeholders for data, similar to folders in a computer file system. Unlike a regular file server, data stored in S3 is highly durable.

Amazon S3 Glacier is ideal long-term solution to minimize data storage costs and to easily archive to cold storage. It provides long-term storage at a low cost while retrieving data with three retrieval options. Expedited retrievals return data in as little as 1-5 minutes. Standard retrievals usually take 3-5 hours and are ideal for less time-sensitive needs such as backup data, media editing or long-term analytics. Bulk retrievals are the lowest-cost option and return large quantities of data in 5-12 hours.

Used together, Amazon S3 and Amazon S3 Glacier offer the best of both worlds in a powerful way: rapid retrieval of fresh data stored in S3, with automatic, policy-driven archiving to lower cost Glacier storage as an organization’s data ages, along with easy, API-driven or console-powered retrieval. Together, they offer a cost-effective and practical backup solution for Allakos. Data in an S3 bucket can be configured with a lifecycle policy so that when it reaches a certain age, it’s automatically transferred to Glacier. This is an ideal solution for a biotech company like Allakos which needs to keep its data archived for long periods of time for regulatory and compliance purposes. The data at Allakos will be staged in S3 for 48 hours and then moved to Amazon S3 Glacier for archiving.



## The Implementation

The Groupware team's thoroughness and attention to detail on projects was evident in its work for Allakos. During the implementation phase, the team performed the installation of the Cohesity appliance, as well as verified licensing and configured network requirements as necessary. In the backup configuration process, the team also set up a target storage account in AWS, created a protection policy and protection job, configured lifecycle management and validated backup/restore.

Upon completion of the project, a high-level diagram of the Cohesity backup to AWS solution was provided to Allakos.

### Benefits:

Groupware's install of the Cohesity/AWS combination enabled Allakos to easily address many storage requirements. According to Allakos' Director of IT Samuel Lee, the company had been looking for various solutions to accommodate its business needs in NFS, NAS, backup and archival. The Cohesity solution delivers NFS, NAS and backup capability thru an intuitive administrative console. Best of all, Allakos won't need to maintain a complex backup environment.

The AWS partnership also enhances the vast Cohesity storage capability. Even though some of the data is archived to Amazon S3 and Amazon S3 Glacier, Allakos' users would not notice the difference thanks to Cohesity's seamless file structure layout.

Allakos has been very pleased with the scalable backup solution and gave kudos to the Groupware team as well. Said Samuel Lee: "The Groupware team is very engaged and passionate about their work and have deep expertise and knowledge to back up their designs. Each engineer on the team spent extra effort to ensure we were satisfied by the engagement before signing off."

Samuel Lee also noted: "The switch to AWS allows us to save at least \$85k a year because I don't need to hire another engineer to maintain the data warehouse environment."