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Protecting AWS Native Services

Enterprises are moving their workloads to the cloud, and many—regardless of their organizational size—have chosen to do so with industry leading Amazon Web Services (AWS). They understand that cost benefits, increased productivity, and availability are just a few reasons to move their critical workloads to AWS.

However, organizations using AWS often don't think through all the implications of backing up and recovering their data in this evolving environment. This leaves their data open to risks--the most critical being data loss from accidental deletion, ransomware, and malware and the challenge of meeting compliance demands due to excessive retention costs. Enterprises need to employ a dedicated, robust backup strategy to protect their workloads in AWS accounts.

The Challenge of Existing Approaches for AWS Backup

There are two approaches for backing up native AWS services today: Snapshot managers and legacy on-premise tools that are repurposed for the cloud. In moving workloads to the cloud, enterprises assume that these approaches are enough to protect their data, however each of these present significant limitations.

Snapshot managers are not a complete nor cost effective backup strategy. Relying on Snapshot managers for backup can be expensive, adding unexpected costs. Meeting data retention requirements with Snapshots alone incurs significant storage expenses, as well as the complexity of estimating overall data retention costs based on data growth, change rates, deduplication and compression. Furthermore, managing snapshots happens at the account level; for enterprises with more than a few AWS accounts, this is complicated to manage manually.

Legacy, on-premise backup solutions are equally troublesome. They were not purpose-built for the cloud, creating unnecessary management complexity. They require additional CAPEX and are resource-intensive to deploy, troubleshoot and manage. Using an on-premise solution for the cloud requires workarounds that can be both inefficient and expensive. Not to mention the backup solution has to be deployed per account—creating a management burden.

A New and Game-Changing Approach to AWS Data Protection

For data protection that is easy and effective, enterprises need a backup solution that is architected and built for AWS Native Services—an authentic SaaS solution that replaces the complexity and limitations of legacy and snapshot products with a simple yet complete approach. Enterprises need Clumio.

At Clumio, we believe that to achieve the promised benefits of cloud computing, the complexity of backup should be eliminated for internal teams, so the enterprise can focus on their core business.

Moving a complex on-premises backup product to the cloud or trying to create your own snapshot and replication automation is not a strategic use of time for most IT teams. Clumio has fully moved the game to the cloud and is unleashing all its potential. As companies migrate to the cloud, they want to take full advantage of its attributes—its ability to scale, its flexible economics, and its inherent elasticity. Clumio offers a secure backup as a service for Amazon AWS that delivers SaaS simplicity, offers a predictable cost structure, protects against data loss, and enables quick and efficient data restoration.

Authentic SaaS for Backing up Amazon EBS

Clumio removes the complexity of infrastructure, cloud management, and snapshot orchestration with its purpose-built backup service for EBS. To get up and go, all an enterprise needs to do is a simple 15-minute setup that discovers all EBS volumes and sets up policies based on existing tags, and their backup is off and running. By providing a true SaaS solution that requires no sizing, tuning, or cloud resource management, organizations can scale on-demand to any size environment without needing to change anything. If they have 10s to 1000s of AWS accounts, they can discover them all and consistently protect them with the same policies with Clumio.

And because Clumio protects Amazon EBS volumes based on tags, enterprises simply need to ensure the EBS volumes they wish to protect have the correct tag key/value that is listed in their Clumio policies. If for some reason a volume is unprotected, either by mistake or by design, they'll be able to quickly see which volumes are out of policy through the Clumio dashboard, or through the Clumio daily email report.



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Predictable EBS Storage Costs

Without Clumio, every snapshot stored to meet data retention for EBS increases storage costs. Clumio provides efficient data storage by only charging for provisioned terabytes, without the surprise egress charges typical of cloud providers. Clumio stores data in a compressed, de-duplicated format in Amazon S3, which drives down the cost of long-term retention of Amazon EBS data with a more predictable cost model compared to simply retaining EBS snapshots.

Clumio provides advanced protection at up to 30% to 50% of the cost of EBS snapshots. At three to seven years of retention, an organization can expect upwards of 80% to 90% savings. And the lower cost of Amazon EBS data retention allows enterprises to create retention strategies based on business and regulatory requirements, rather than cost. Enterprises can now meet compliance requirements for data retention with reasonable and predictable costs.

Protecting EBS Against Data Loss

EBS snapshots might be adequate for restoring an entire volume, but they still leave customers open to the vulnerabilities of data loss since snapshots typically reside in the same account as the production data.

To get around this, some enterprises replicate their snapshots across accounts, which doubles the price, adds replication costs, and increases complexity.

With Clumio, EBS data is protected outside the customer's AWS account, providing a secure solution that removes data loss vulnerabilities from ransomware or bad actors who gain access to the AWS account. During backups, data is written to an S3 object store in an immutable format, creating an air gapped security layer, with an isolated copy of data separated from production data. This ensures that Clumio continues to keep a copy of data for the duration specified in the Clumio backup policy. Furthermore, Clumio encrypts data in transit and at rest, protected by a unique key for each customer. This provides additional peace of mind for a sound recovery in the case of a data breach.

Efficient Restoration of Data in EBS

For most organizations, the majority of restores are single files, but EBS snapshots lack that granularity and are riddled with complexity. Recovering full volumes just to get one file or figure out when the file changed is painful, and neither an elegant nor fast process. Typically, AWS requires an EBS volume to be created from an EBS snapshot, which can take a significant amount of time. The EBS volume must then be mounted to an existing or new EC2 instance before searching for the file in the filesystem and then finally restoring the file.

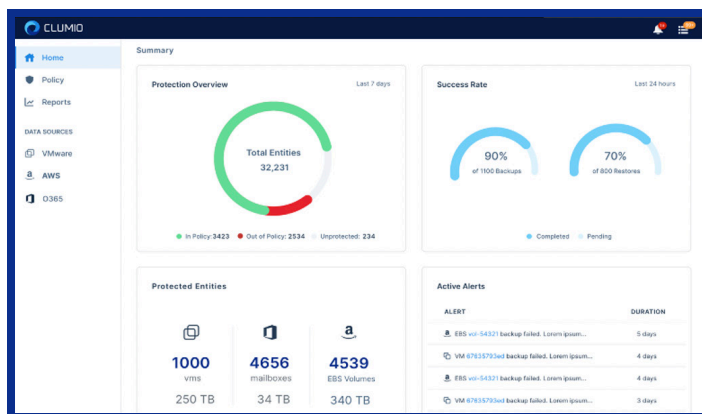
With Clumio, restorations can occur at the EBS volume, file, or even application level through tagging. Global file search is available with quick restores, which can be downloaded from S3 directly from the GUI without the need for the volumes to be attached. If an enterprise wants to restore an entire volume, or if a disaster occurs, EBS volumes can be restored to any AWS account that is set up in Clumio, so an organization can get back up and running quickly. All restored Amazon EBS volumes from the Clumio service are fully "warmed" and are ready for use, ensuring consistent performance of the EBS volume from the moment the restore has been completed.

Tackling the Data Protection Demands of Amazon RDS

As organizations increasingly move their workloads to the cloud, they are also turning to services such as Amazon's Relational Database Services (RDS) to simplify the setup and operation of databases for cloud-based applications. As these companies migrate their databases to the cloud, they want to take full advantage of its benefits.

The challenge, as with moving to EBS, is protecting their data in the cloud as simply and affordably as possible. The existing approaches for backup in the RDS environment—snapshot managers, AWS RDS backups, or Native SQL support—are all severely limited. Typically, they are complex and hard to manage and are not as effective as they need to be.

Clumio is taking its innovative, cloud-centric approach to data protection and designing it specifically for the world of Amazon RDS. Our goal is the same as with our strategy for EBS. We are building an authentic SaaS solution that replaces the complexity and limitations of existing approaches to data protection with a simple yet complete solution. As we build our backup solution for RDS, we are committed to solving four key enterprise pain points: their vulnerability to account compromise, the complexity of management, the demands of compliance, and the challenges of database restoration.



RDS Vulnerability and Security Risks

In RDS, snapshots protect workloads alongside production data so there is no air gap to provide protection without expensive replication. In the almost inevitable case of a ransomware attack or other security breach, the account and its data will be compromised, creating significant risk to the enterprise. By storing data outside of production accounts with end to end encryption and backups that can't be deleted before expiration, Clumio will provide always on security for RDS. When accounts are compromised, row level restorations will make data recovery simple and easy.

Management Complexity with RDS

Since each RDS account is managed separately, there is no ability to apply consistency for data protection with existing backup solutions. It is difficult to manage RDS snapshots on a per account basis and the number of manual snapshots is limited—only 100 per account. Clumio's ability to apply policies consistently across all accounts, workloads, and operations, along with its single user interface for unified compliance visibility will drastically simplify policy management for RDS backup.



Meeting Compliance Demands with RDS

An organization's ability to meet compliance requirements is severely hampered by the limits of existing RDS backup solutions, including native AWS tools. The standard snapshot retention is a mere 35 days, while long term retention is costly and unpredictable.

By directly storing long term data and with a pricing model based on number of terabytes protected, Clumio will deliver cost effective compliance, combining reduced long-term retention costs with the ability to predict expenses over time.

The Challenge of RDS Litigation Support

For organizations facing any type of litigation, the ability to access historical data in a timely and efficient way is critical. The existing backup solutions for RDS, however, do nothing to make this essential process easy. The key to dealing with unpredictable and complex legal requirements is granular record retrieval. Clumio is focused on delivering record level search queries and the ability to extract specific data. By moving beyond the inefficiency of full snapshots, Clumio will provide faster and more efficient database restoration, making the painful reality of legal issues that much easier to handle.

Optimizing the AWS Experience—from EBS to RDS

Clumio was founded to make the cloud experience for our customers the best it can be. From the beginning, we have focused on building SaaS solutions that not only take advantage of the clear benefits of the cloud but amplify their value to enterprises.

Our commitment to cloud first, allows us to leverage the innovations built by public cloud vendors such as Amazon and to maximize their impact. Our platform provides public cloud scale that is built in the age of serverless and microservices maturity that provides parallelism and scale to meet the demands of any workload. And, with the micro partitioning of our application, we can update and add value on a weekly basis without disruption or impact to the end users. This allows Clumio to provide new services and innovations to our customers faster than the competition.

When it comes to Amazon AWS we started with a secure backup as a service for EBS volumes. We are now finalizing our solution for Amazon RDS. For organizations who have already experienced the ease and effectiveness of Clumio with EBS, it should be an easy decision to extend our data protection to their workloads in RDS. For those who haven't taken a close look at Clumio, it's time to check us out.

Clumio is the innovator of authentic SaaS for enterprise backup. Using this secure service, organizations eliminate hardware and software for on-premise backup and avoid the complexity and cost of running third-party backup software in the cloud. As enterprises move aggressively to cloud, they use Clumio to protect workloads like VMware Cloud on AWS and AWS native services. Born in the public cloud, Clumio can leverage the most modern cloud services to ensure it meets the current and future backup requirements of the most demanding enterprises.

For more information, visit: www.clumio.com

