

EBOOK:

Backup & Recovery on AWS

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Backup and Recovery on AWS

Amazon Web Services (AWS) backup and recovery services allow customers to leverage Amazon object storage services like Amazon Simple Storage Service (Amazon S3) and Amazon Glacier for cost-effective online storage of their backup data. Storing data in Amazon object storage eliminates the cost and maintenance needed to manage an on-premises storage solution. Amazon object storage is scalable, allowing organizations to use and pay only for what they need. Implementing a secure and durable backup and recovery solution is useful for organizations in cases of data loss, logical errors, or recovery of data for audit purposes. In addition to Amazon S3, services like Amazon Glacier offer customers storage services for data archiving and long-term backup for small to large amounts of data for significantly less than the cost of on-premises storage solutions. On-premises storage solutions for backup and recovery often require a large upfront investment and ongoing specialized maintenance, but Amazon Glacier and Amazon S3 allow organizations to pay for storage per gigabyte and eliminates the need for ongoing maintenance. AWS Partner Network (APN) Partners offer solutions that, when combined with AWS, deliver secure, efficient and durable backup and recovery solutions for organizations of any size.

Secure, efficient and durable backup and recovery solutions for organizations of any size.



AWS Object Storage Services



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Amazon Simple Storage Service (Amazon S3)

Objects storage designed to store and access any type of data from anywhere on the web. It is designed to deliver 99.99999999% durability and scale past trillions of objects worldwide.

Amazon S3 Transfer Acceleration

Fast, easy, and secure file transfers over long distances between clients and S3 buckets. Transfer Acceleration leverages Amazon CloudFront's globally distributed edge locations, by routing data as it arrives at an edge location to Amazon S3 over an optimized network path.

AWS Storage Gateway

Seamlessly enables hybrid cloud storage with local integration. It combines multi-protocol storage appliance with highly efficient network conntectivity to deliver virtually unlimited scalability.

AWS Object Storage Services Cont.



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Amazon Glacier

Secure, highly durable, and low-cost storage service designed for data archiving and long-term backup.



AWS Snowball

Secure petabyte-scale data transport solution reducing network costs and transfer times for transferring large amounts of data to the cloud.

AWS Snowball Edge

Secure 100TB data transfer device with on-board storage and compute capabilities.

AWS Snowmobile

Exabyte-scale data transfer service to move extremely large amounts of data to the cloud (up to 100PB per Snowmobile) via a secure 45-foot long ruggedized shipping container.

Think Stack

Think|Stack is an Advanced AWS APN Partner, specializing in security, migrations and ongoing AWS optimization and adoption management.

Think|Stack's unique approach to AWS environments built on foundational cybersecurity and DevSecOps provides organizations with a complete design, migration, project and ongoing management solution. By combining AWS best practices such as the "6 R's of migration" with their design thinking methodology, Think|Stack conducts Journey Map sessions, cloud strategy workshops and technology assessments that provide a blueprint for step by step application and server migrations and security projects at any scale. The process focuses on the ongoing evolution of agile, resilient, cost optimized AWS environments that are aligned with business and user experience goals. Each environment Think|Stack builds leverages Infrastructure as Code for rapid change management and provides their clients with a robust suite of AWS cybersecurity/DR tools alongside ongoing management and regular testing. Think|Stack also operates a 24/7 SOC/SIEM and NOC and will often align cybersecurity and networking projects with their AWS migration strategy. This combination of expertise allows Think|Stack to support organizations wherever they are on their cloud adoption journey to enter them into a continual cycle of design, build, execution and optimization.

Once improvement opportunities are uncovered and an initial road map is in place, Think|Stack quickly leverages AWS POA/POC credits to jump start projects, usually in application/server migrations, DR and Backups.



Case Study: Mid Sized Credit Union

Problem:

Like many credit unions this mid sized organization was running an on premise data center. To make matters more complicated they are located in a disaster zone. When we started working with them they had a long recovery time, three days for full Disaster Recovery, this can feel like a lifetime when members need constant access to their services. Their backups were hosted in a colocation data center that wasn't rapidly scalable and enabled to grow with their needs.

Solution:

Think|Stack, implemented a hybrid cloud strategy consisting of: 60% of servers and data migrated to AWS with 40% residing in their data center and road mapped to migrate over the next couple of years. We revised their backup strategy, storing backups in AWS regions for DR purposes allowing the credit union to be able to recover quickly without needing to procure redundant equipment.

Outcome:

Backup and DR using AWS has greatly increased their speed of recovery, and saved them on monthly costs as it's only utilizing servers when they use it. Their recovery time has gone from three days to under 60mins. They have peace of mind knowing that should a disaster of any kind happen, their members data would be secure and their downtime would not be prolonged.

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"Lack of flexibility with in house servers or local data centers led us to AWS and Think|Stack which made more sense with the additional service and flexibility available. When a server is at capacity, we can add more in real time versus ordering memory or hardware and scheduling installation. We have also improved our security posture by adding resiliency and redundancy in AWS. The events of 2020 have accelerated our plan to move to a cloud first vs on premise strategy and we'll be stronger for it."

CEO Mid Sized Credit Union



AWS Storage Partner Benefits

AWS APN Storage partners enhance the backup and recovery experience by leveraging AWS for durable and secure data backup.



Reduced Hardware Investment

The online, distributed data storage design of the AWS Cloud eliminates the bottlenecks and constraints of on-premises disk and tape solutions. Instant replication ensures your data is safe by automatically generating three copies of your data to different AWS Regions.



Lower Operational Costs

Use a solution you know and trust, now with AWS as the storage target. Pay-as-you-go pricing ensures you only pay for the resources you consume, eliminating the need to overprovision for peak demand. Lifecycle policies automate the migration of data between storage tiers to remove manual overhead, minimize management complexity, and further reduce costs.



Faster Data Recovery

Amazon S3 gives you control over the region in which your data resides, to minimize network latency for easier and faster data recovery. Online storage provides faster recovery than that of tape, with millisecond latency.



Think|Stack - Transform & Protect

Think|Stack build secure, efficient, fast and cost-effective backup and recovery solutions using solutions you know and trust, with the scale and reliability of the AWS Cloud.



Getting Started

For more information about Backup & Recovery on AWS, visit:

- > Cloud Storage on AWS: https://aws.amazon.com/products/storage/
- > Email: acasey@thinkstack.co to learn about Think|Stack BackUp/DR projects
- > https://www.thinkstack.co/awsnpocu

About AWS

For 10 years, Amazon Web Services has been the world's most comprehensive and broadly adopted Cloud platform. AWS offers over 70 fully featured services for compute, storage, databases, analytics, mobile, Internet of Things (IoT) and enterprise applications from 33 Availability Zones (AZs) across 13 geographic regions in the U.S., Australia, Brazil, China, Germany, Ireland, Japan, Korea, and Singapore. AWS services are trusted by more than a million active customers around the world – including the fastest growing startups, largest enterprises, and leading government agencies – to power their infrastructure, make them more agile, and lower costs.

To learn more about AWS, visit aws.amazon.com.



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