



**EBOOK:**

# Backup & Recovery on AWS





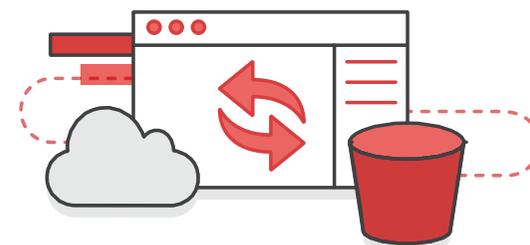
# Contents

Backup and Recovery on AWS .....	2
AWS Object Storage Services .....	3
Featured Backup and Recovery Providers .....	5
APN Storage Partner Benefits on AWS .....	6
King County, Washington Case Study .....	7
The Town of Edgartown Case Study .....	8
Icelandair Case Study .....	9
Getting Started .....	10

# 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) & 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 needing to recover 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 eliminate the need for ongoing maintenance. AWS Amazon 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



## **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 99.999999999% durability and will scale past trillions of objects worldwide.

## **Amazon S3 Transfer Acceleration**

Fast, easy, and secure file transfers over long distances between clients and Amazon 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 connectivity to deliver virtually unlimited scalability.

# AWS Object Storage Services Cont.



## **Amazon Glacier**

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



## **AWS Snowball**

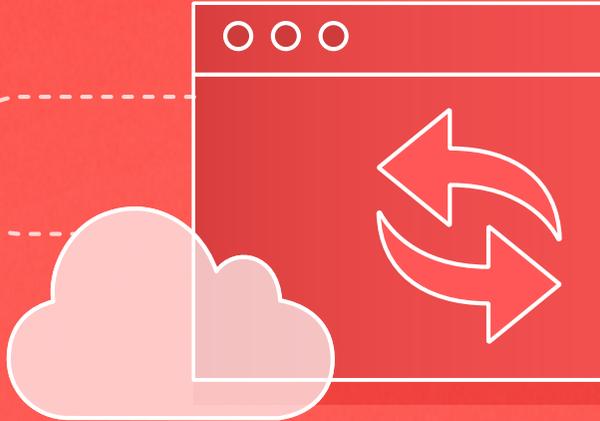
Secure petabyte-scale data transport solution reducing network costs and transfer times for transferring large amounts of data to the cloud.

## **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.



# Featured Backup and Recovery Providers



CloudBerry Lab Explorer offers an easy-to-use, scalable and flexible backup and disaster recovery solution with centralized control to help organizations schedule backups and monitor network health.



Commvault provides a heterogeneous data management and protection solution for organizations of all sizes helping them realize value from their data using AWS. Commvault supports Backup & Recovery of data generated on-premises and data generated in Amazon EC2, as well as cross-platform recovery to Amazon EC2.



IBM Spectrum Protect™ simplifies backup and recovery by delivering an intuitive and comprehensive data protection solution that takes full advantage of the AWS infrastructure.

# APN Storage Partner Benefits on AWS

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



## Improved Security Posture

Bring data and data protection processes to the cloud at the same time to enable governance, compliance, and resiliency in your storage solution without having to maintain an on-premises infrastructure.



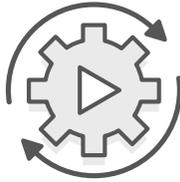
## Simplified Searching

Index and catalog functions make searching and retrieving your data down to the file level faster and easier.



## Improved Operational Efficiency

Faster backup times, rapid data recovery, and reduced infrastructure costs enable organizations to increase their operational efficiency.



## Built for AWS

Data is backed up and transferred directly from the organization's source to their AWS account.



**King County**

## AWS Case Study: King County, Washington State

King County, the most populous county in Washington State, needed a cost-effective and efficient solution to replace their legacy tape-based backup system. They had been using to store information for all of the county agencies. King County is composed of 17 different agencies, supporting 1.9 million people, ranging from law enforcement to public health. It was important to the county that their system was up and running 24/7 to support these agencies. Prior to AWS, the county was using a legacy backup system that had been around for ten years. The system was tape-based and required a lot of hands-on manual work to maintain. King County reviewed multiple solutions and ultimately chose AWS for long-term storage and archiving due to its rich feature-set, ease of use, and low cost. The county leveraged AWS services like Amazon Glacier and solutions offered by APN Partners to implement their storage solution. With this backup and archiving solution in place, King County was able to meet several security standards, including HIPAA. They also saved close to \$1 million in the first year by not having to replace their outdated servers and will save a projected annual amount of \$200,000 by reducing their operational costs related to storing data. From a strategic point of view, one of the long-term visions is to leverage cloud services completely and have a virtual datacenter.

“

We were looking for a rich feature-set. We were looking for something that was cost-effective. And something that was easy to use. Ultimately, we ended up going with AWS.

”

**Bob Micielli**

Formerly  
Senior Enterprise Technology Manager  
King County Washington



## CloudBerry Case Study: The Town of Edgartown

The IT department of Edgartown, Massachusetts is responsible for all government hardware, networking, phone systems, the town website, and the data pertaining to the government and all of its residents. Their on-premises storage systems and offsite tape libraries had very slow recovery times, and their tapes were susceptible to local natural disasters. Edgartown's IT department needed to find an efficient backup solution and develop a disaster recovery strategy for their 1.5 terabytes of data.

Edgartown's IT department chose the AWS Cloud for its variety of backup options, allowing Edgartown to customize their backup and recovery solution. For the town's archive data, Amazon Glacier provides low-cost, long-term archive storage. Edgartown IT decided on CloudBerry Backup for its seamless integration with Amazon S3. This integration helps Edgartown IT ensure that their local and cloud storage lifecycle policies are correctly configured. Since choosing CloudBerry Backup on AWS, the town of Edgartown has successfully backed up over 1.5 terabytes of data from its on-premises storage and tape libraries, freeing up additional storage space and lowering overhead costs. Leveraging CloudBerry Backup alleviated the stress of unknown data security and safety. CloudBerry on AWS has been able to provide the Edgartown IT team with easy-to-use software, inexpensive backup and archive storage, and dedicated support.



“

My costs have remained approximately the same but my storage has increased. The same amount of storage would have been more expensive elsewhere.

”

**Adam Darack**  
IT Manager  
The Town of Edgartown

**ICELANDAIR**



## IBM Case Study: Icelandair

Icelandair Group, Iceland's largest corporation, consists of a global airline, logistics, and several related business units. Like most organizations managing data centers, Icelandair had been acquiring IT infrastructure upfront, and consuming it over time. As such, they built in a buffer to capacity planning and naturally, sacrificed flexibility by paying for resources they never ended up using.

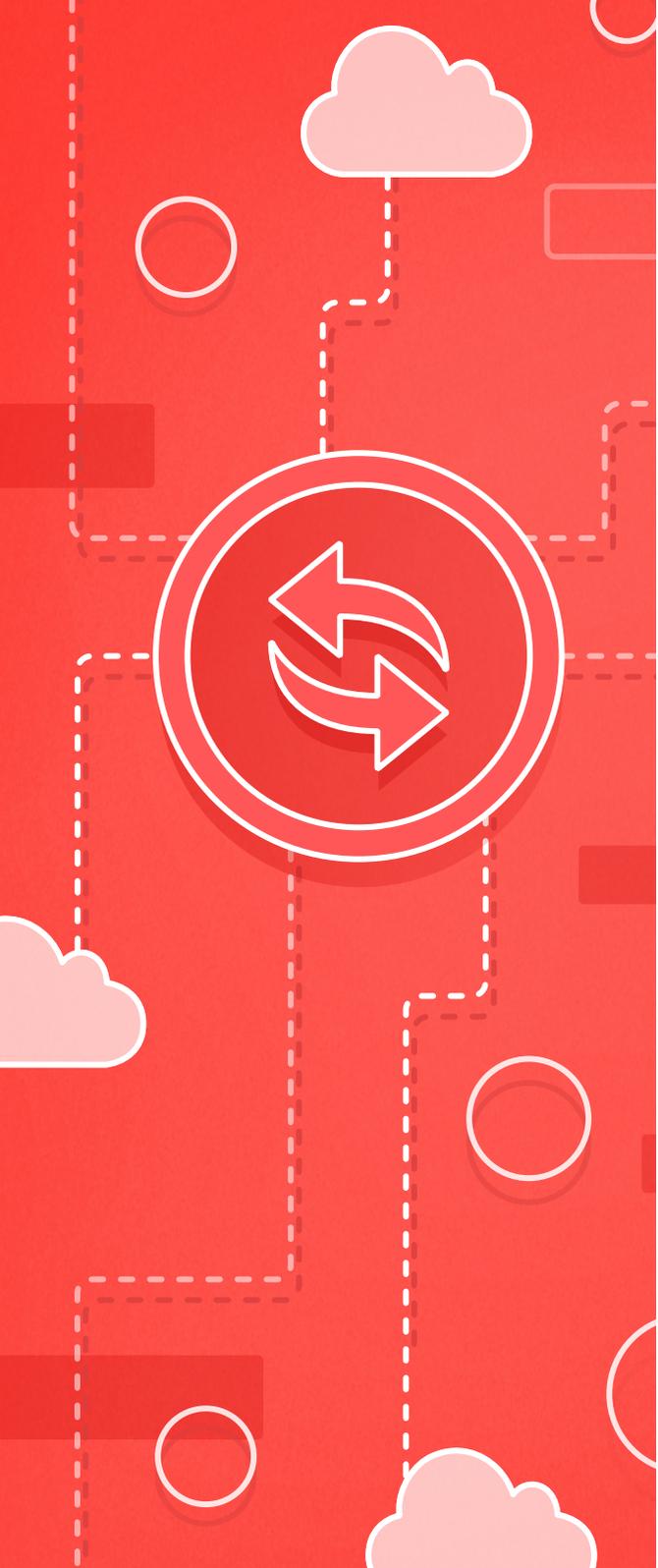
Icelandair Group chose the AWS Cloud because of its global reach, auto-scaling, and resiliency capabilities. Another benefit of their AWS migration was the shift in the IT consumption model from capital intensive investments to pay-as-you-go operating expense. As part of their digital transformation, Icelandair Group is also moving their IBM Spectrum Protect backups to AWS. Icelandair Group and their managed service provider, Nyherji, developed a proven process to audit backups and restores, which is easily adaptable to the AWS Cloud. The existing backup software, IBM Spectrum Protect, recently added cloud integration features, so migration was straightforward. The combination of AWS Cloud and cloud-optimized IBM Spectrum Protect delivered scalable backup performance and faster restores.

“

Our ability to acquire IT infrastructure as needed gives Icelandair increased business flexibility to respond to changes in demand.

”

**Elisabet Halldorsdottir**  
Director IT Operations  
Icelandair Group



# Getting Started

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

- > [Storage Competency](#)
- > [Storage Partners on AWS](#)
- > [Cloud Storage with AWS](#)

## **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](https://aws.amazon.com)



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