

Designing and Implementing Storage on AWS

Course description

AWS offers a broad portfolio of storage services and solutions with diverse capabilities for storing, accessing, and protecting your data. In this course, you will learn where, how, and when to take advantage of these different service offerings. You will learn which services to consider when looking to solve your data storage challenges. You will learn how to best evaluate your options in selecting the appropriate AWS storage service to meet your use case and business requirements. You will also gain a better understanding of how to store, manage, and protect your data in the cloud. Through a series of hands-on exercises that demonstrate the ease and power of AWS platform, you will learn how to quickly provision powerful storage solutions in minutes.

- Course level: Intermediate
- Duration: 3 days

Activities

This course includes presentations, hands-on labs, demonstrations, and group exercises.

Course objectives

In this course, you will learn to:

- Describe the benefits of the core AWS storage services and identify some of their primary use cases
- Select and design an appropriate storage solution according to application and business requirements
- Configure storage resources to work with the broad array of AWS service offerings
- Select the right method to move data between on-premises workloads and the AWS Cloud
- Design storage solutions to protect data at rest and in transit
- Set up monitoring and observability for Cloud storage to gain insight into access patterns, utilization, and efficiency
- Design and optimize storage solutions according to cost, scalability, and performance requirements

Intended audience

This course is intended for:

- Solution Architects
- Cloud Storage Engineers
- Cloud Operations Specialists
- DevOps Engineers

Prerequisites

We recommend that attendees of this course have:

- Completed AWS Cloud Practitioner Essentials, AWS Technical Essentials, or equivalent real world experience

Course outline

Day 1

Module 1: Introduction to Cloud Storage

- Storage in the AWS cloud
- Designing Well Architected Storage Solutions
- Designing Durable and Available Storage Solutions
- Building Accessible and Secure Storage Solutions

Module 2: Designing Object Storage Solutions in AWS

- What is object storage?
- Planning and designing your Amazon S3 deployment

- Managing Amazon S3
- Access Control with Amazon S3
- Hands-On Lab: Exploring S3 Access Control and S3 Object Lambda

Module 3: Implementing Object Storage solutions with S3

- Cost management and the data lifecycle
- Managing data transfers into Amazon S3
- Data protection in Amazon S3
- Manage objects stored in Amazon S3 at scale
- Hands-on Lab: Multi-Part Uploads, Batch Operations, and Cross-Region Replication with Amazon S3

Module 4: Designing Block storage solutions in AWS

- Block storage fundamentals
- Amazon Elastic Block Store (Amazon EBS)
- Configuring EBS volume types
- EC2 and EBS encryption

Day 2

Module 5: Implementing Block Storage Solutions with Amazon EBS

- Creating EBS volumes
- Managing EBS volumes
- Managing EBS snapshots at scale
- Hands-On Lab: Managing EBS Volumes: Capacity, Performance, and Data Protection

Module 6: File Storage and Amazon EFS

- Cloud-based file storage
- Amazon EFS overview
- Accessing Amazon EFS
- Securing and protecting Amazon EFS file systems
- Hands-On Lab: Using Amazon EFS with AWS Lambda and Amazon ECS

Module 7: Cloud file storage with Amazon FSx

- Amazon FSx overview
- Amazon FSx for Windows File Server

Day 3

Module 8: Hybrid and Edge Cloud Storage

- Hybrid and edge cloud storage overview

- Introduction to AWS Storage Gateway
- AWS Storage Gateway architectures
- AWS Snow Family

Module 9: Moving data to AWS

- Moving data to AWS
- Working with AWS DataSync
- Implementing AWS Transfer Family
- Hands-On Lab: Moving Data with Storage Gateway and DataSync

Module 10: Backup and Disaster Recovery with AWS

- Designing a data protection strategy
- AWS Backup
- Creating backup plans
- Working with AWS DRS
- Hands-On Lab: Creating and Restoring Backups with AWS Backup

Module 11: Monitoring, Automating, and Optimizing your AWS Storage

- AWS Observability Services
- Amazon S3 Storage Lens
- Amazon CloudWatch
- AWS CloudTrail
- AWS Config
- AWS Compute Optimizer
- Hands-On Lab: Storage Monitoring, Automation, and Optimization

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About CloudThat

Established in 2012, CloudThat is an award-winning company and the first in India to offer cloud training and consulting services for individuals and enterprises worldwide. Recently, it won Google Cloud's New Training Partner of the Year Award for 2025, becoming the first company in the world in 2025 to hold awards from all three major cloud giants: AWS, Microsoft, and Google. CloudThat notably won consecutive AWS Training Partner of the Year (APJ) awards in 2023 and 2024 and the Microsoft Training Services Partner of the Year Award in 2024, bringing its total award count to an impressive 12 awards in the last 8 years.

CloudThat specializes in Cloud Migration, Data Platforms, DevOps, IoT, and cutting-edge technologies like Gen AI & AI/ML. As a Microsoft Solutions Partner, AWS Premier Tier Training Partner, Google Cloud Platform Partner, and collaborator with leading organizations like HPE, Oracle, Nvidia and Databricks, CloudThat has trained over 850,000 professionals across 600+ cloud certifications, empowering students and professionals worldwide to advance their skills and careers.

To know more about our cloud certification training, email at sales@cloudthat.com or call us at +91-8880002200 or +1-8555588830 for those from outside India.