

# **Cloud Storage Overview**



#### At the core of the lesson

You will learn how to do the following:

- Define cloud storage, how it works, and its uses.
- Identify Amazon Web Services (AWS) Cloud storage services and categories.





# **Cloud storage**

### What is cloud storage?

Cloud storage is a service that stores data on the internet through a cloud computing provider that manages and operates data storage as a service.





### How cloud storage works





### **Cloud storage formats**







#### Object

Each piece of data is an object with a unique identifier.



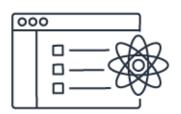
Data is organized in a hierarchical format with files and folders.

#### **Block**

Each piece of data is broken down into blocks with unique identifiers.



#### Use cases for cloud storage







Data warehouses



Internet of Things (IoT)



**Databases** 



Backup and archive





## **AWS Cloud storage**

### **AWS storage service categories**



Storage

The AWS storage services can be grouped into the following general categories:

- Object storage
- File storage
- Block storage
- Hybrid storage



### Object, file, and block storage on AWS



Amazon Simple Storage Service (Amazon S3)



Amazon Simple Storage Service Glacier (Amazon S3 Glacier)



Amazon File Cache





**Amazon FSx** 



Amazon Elastic Block Store (Amazon EBS)



### Hybrid cloud storage and edge computing on AWS





**AWS Snow Family** 



### **AWS Cloud storage scenarios**

If You Need:	Consider Using:
<ul> <li>A scalable, durable platform that makes data accessible from any internet location</li> <li>Storage for user-generated content, active archive, serverless computing, big data storage, or backup and recovery</li> </ul>	Amazon S3
A secure, durable, and extremely low-cost cloud storage service for data archiving and long-term backup	Amazon Simple Storage Service Glacier
A simple, scalable network file system for Linux workloads that uses both AWS Cloud services and on-premises resources	Amazon EFS
A service that provides file systems for various workloads, such as storage for Windows applications, machine learning, electronic design automation, and high-performance computing	Amazon FSx
<ul> <li>Persistent block storage for Amazon Elastic Compute Cloud (Amazon EC2)</li> <li>Storage that works well for databases and applications</li> </ul>	Amazon EBS
<ul> <li>Hybrid storage that augments your on-premises environment with AWS Cloud storage</li> <li>Hybrid storage for disaster recovery (DR), price tiering, or migration</li> </ul>	Amazon Storage Gateway



### **Checkpoint questions**

- 1. What are the three components of cloud storage?
- 2. A solutions architect is looking for a low-cost, long-term data storage option for data archiving and backups. Which AWS storage service best meets those requirements?
- 3. Which AWS storage services uses block storage?



### Key ideas



- Cloud storage is a critical component of cloud computing. It holds the information that applications use.
- AWS offers a range of cloud storage services to support various needs.
- AWS provides services that support object, block, file, and hybrid storage.





### Thank you

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