



# **AWS Storage**

# INTRODUCTION

Cloud storage enables storing data & files on the internet through cloud computing provider.

## Types:

1. Block storage
2. File storage
3. Object storage

# Block Storage

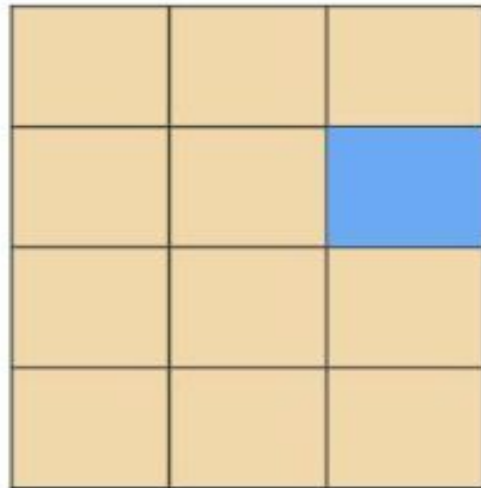
File storage treats files as a singular unit, block storage splits files into fixed-size chunks of data called blocks that have their own addresses.

When we want to change a character in a file, we just change the block that contains the character.

## PROS:

1. It is choice for high-performance enterprise workloads.
2. Optimal for low-latency operations.

What if you want to **change** one character in a 1-GB file?



## Block Storage

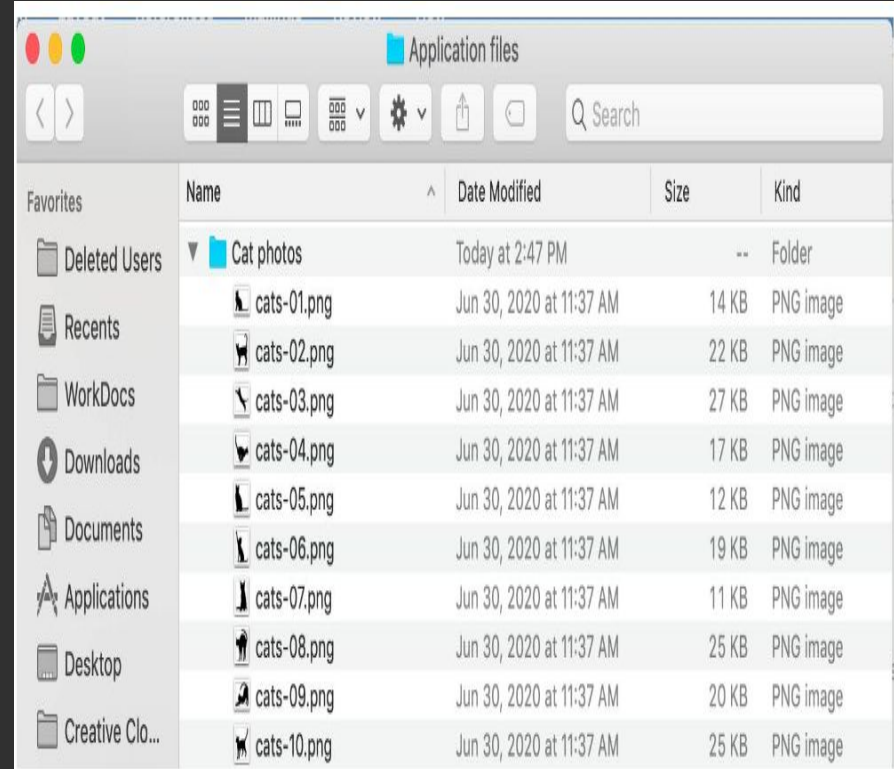
Change one block (piece of the file)  
that contains the character

# File Storage

Key element that is unique to file storage is its hierarchical model.

For instance, you have a folder called “Employee Details”, then within this folder, you can have multiple other folders like “salary details”, “perks”, “bonus”, etc.

Every file gets stored as one single piece.



# Object Storage

Objects, much like files are also treated as a single unit of data when stored.

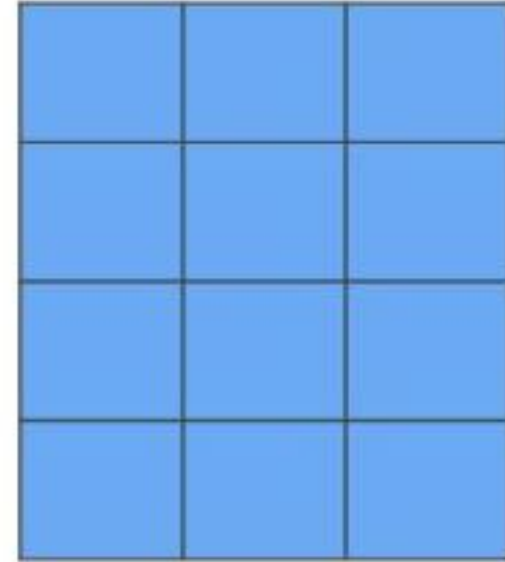
Each object has a unique identifier.

Changing just one character in an object make you change the entire file.

## PROS:

1. We can store any type of data i.e, unstructured files, large data sets, etc.
2. No limits on the number of objects stored.

What if you want to **change** one character in a 1-GB file?



## Object Storage

Entire file must be updated