

# Cloud Storage and Storage Classes

# What is Cloud Storage?

- It is a service offered by google cloud platform to store objects in cloud. An object is an immutable data which can be in any format.
- All objects are stored collectively in the buckets in GCP.
- Buckets can have multiple objects and are tied to a particular project.
- A project is under an organization and can have multiple buckets inside it.

# Key Features of GCS

- World Wide Storage
- Disaster recovery
- Different pricing for different use cases
- Unlimited Scalability
- Efficient retrieval
- Multi-language support to interact with buckets

# Storage Classes

Storage class can be defined as metadata associated with an object/bucket which determines the availability and pricing of the object.

Different classes can be used for different use cases such as archival, hosting the website or for exposing large objects for download over internet.

# Types of Storage Classes

Storage Class	Minimum Duration	Region	Availability SLA	Monthly Availability
STANDARD	None	multi-region	99.95%	>99.99%
		dual-region	99.95%	>99.99%
		region	99.90%	99.99%
NEARLINE	30 days	multi-region	99.90%	99.95%
		dual-region	99.90%	99.95%
		region	99.00%	99.90%
COLDLINE	90 days	multi-region	99.90%	99.95%
		dual-region	99.90%	99.95%
		region	99.00%	99.90%
ARCHIVE	365 days	multi-region	99.90%	99.95%
		dual-region	99.90%	99.95%
		region	99.00%	99.90%