**S3 101:**

* Provides developers and IT teams with secure, durable , highly scalable object storage .
* Amazon s3 is easy to use , with a simple web services interface to store and retrieve any amount of data from anywhere on the web
* Safe place to store a files
* Object based storage
* The data is spread across multiple devices and multiple facilities
* S3 object based allowed you to upload files
* Files can be from 1 Byte to 5TB
* There is unlimited storage
* Files is store in bucket
* S3 is a universal namespace that’s is name must be unique globally
* <https://s3-eu-west-1.amazonaws.com/acloudguru> (Normal bucket)
* <http://Bucket-Name-s3-website-eu-west-1.amazonaws.com> (web hosted )
* **Read after write consistency for puts of new objects**(immediately visible after upload)
* **Eventual Consistency for overwrite PUTS and deletes**(can take some time to propagate)
* S3 is Simple key value store Object consist of key and value pair and version id metadata Sub resources and access control list as mention below

1. Key => This is simply Name of the object

1. Value => This is simply the data and is made up of a sequence of byte
2. Version id => Important of versioning
3. Metadata => data about the data you are storing date and all
4. Sub resources

* Access Control list (Secure your data using access control list and bucket polices )
* 99.99 availability of the S3 platform
* Amazon guarantees 99.999999999 % durability for s3 information (11\* 9’s)
* Tiered Storage Available
* Lifecycle Management
* Versioning
* Encryption

**S3 Storage Tiers/ Classess:**

* **S3**  (Frequent acess data )99.99% availability ,99.999999999 % durability , Stored redundantly across multiple device in multiple facilities and is designed to sustain the loss of 2 facility concurrently
* **S3 – IA (Infrequently accessed )** for data that is accessed less frequently but requires rapid access when needed lower fee than s3 but you are charged a retrieval fee
* **Reduced Redundancy storage-**  Designed to provide 99.99% durability and 99.99% Availability of object over a given year
* **Glacier-** Very cheap but used for archival only. It takes 3-5 hours to restores from glacier

**S3 Charged for:**

* Storage ( Amount of storage and **Tiers**)
* Number of request
* Data Transfer Pricing