

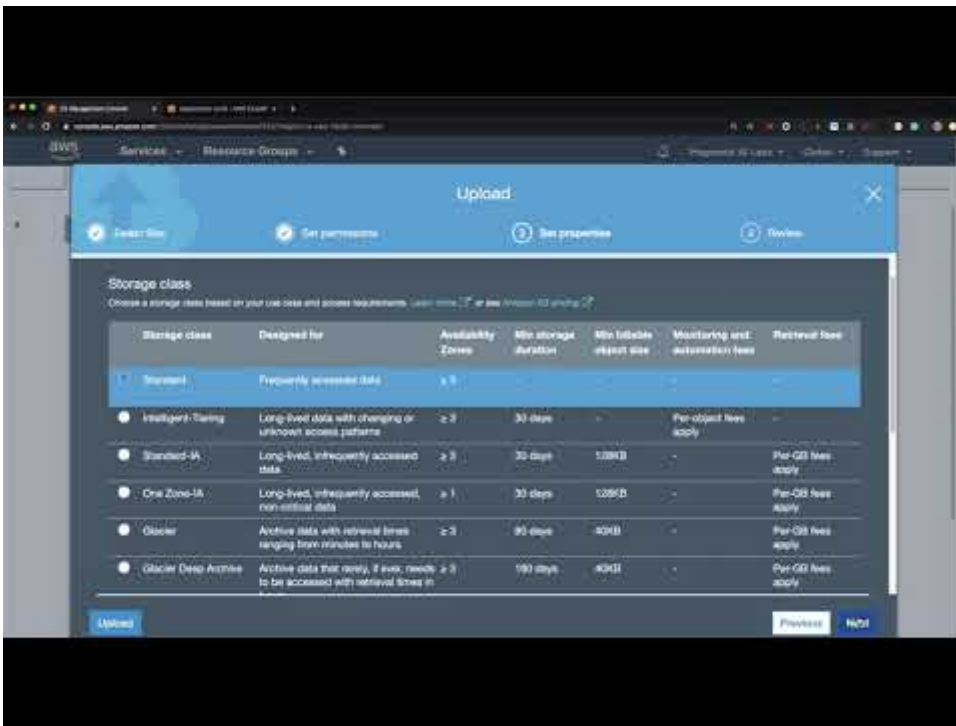
# Cloud Storage Types

AWS is an excellent starting point to discuss the different storage options available in the cloud. You can see a list of the various storage options they provide here. Let's address these options one by one.

## Object Storage

Amazon S3 is object storage with (11 9's) of durability, meaning yearly downtime measures in milliseconds. It is ideal for storing large objects like files, images, videos, or other binary data. It is often the central location used in a Data Processing workflow. A synonym for an object storage system is a "Data Lake."

Learn how to use Amazon S3 in the following screencast.



Video Link: <https://www.youtube.com/watch?v=BIWfOMmPoPg>

Learn what a Data Lake is in the following screencast.



*Video Link: <https://www.youtube.com/watch?v=fmsG91EgbBk>*

## File Storage

Many cloud providers now offer scalable, elastic File Systems. AWS provides the Amazon Elastic File System (EFS) and Google delivers the Filestore. These file systems offer high performance, fully managed file storage that can be mounted by multiple machines. These can serve as the central component of NFSOPS or Network File System Operations, where the file system stores the source code, the data, and the runtime.

Learn about Cloud Databases and Cloud Storage in the following screencast.



*Video Link: [https://www.youtube.com/watch?v=-68k-JS\\_Y88](https://www.youtube.com/watch?v=-68k-JS_Y88)*

Another option with Cloud Databases is to use serverless databases, such as AWS Aurora Serverless. Many databases in the Cloud work in a serverless fashion, including Google BigQuery and AWS DynamoDB. Learn to use AWS Aurora Serverless in the following screencast.



*Video Link: <https://www.youtube.com/watch?v=UqHz-Il2jVA>*

## Block Storage

Block storage is similar to the hard drive storage on a workstation or laptop but virtualized. This virtualization allows for the storage to increase in size and performance. It also means a user can “snapshot” storage and use it for backups or operating system images. Amazon offers block storage through a service, Amazon Block Store, or EBS.

## Other Storage

There are various other storage types in the cloud, including backup systems, data transfer systems, and edge computing services like AWS Snowmobile can transfer 100 PB, yes petabyte, of data in a shipping container.