# Cloud Computing General Characteristics

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## General Characteristics



## Features

#### **Easy Maintenance:**

The servers are easily maintained and the downtime is very low and even in some cases, there is no downtime. Cloud Computing comes up with an update every time by gradually making it better. The updates are more compatible with the devices and perform faster than older ones along with the bugs which are fixed.

**Resilient Architecture:** Failover architecture

#### **Availability:**

The capabilities of the Cloud can be modified as per the use and can be extended a lot. It analyzes the storage usage and allows the user to buy extra **Cloud storage** if needed for a very small amount.

#### **Automatic System:**

Cloud computing automatically analyzes the data needed and supports a metering capability at some level of services. We can monitor, control, and report the usage. It will provide transparency for the host as well as the customer.

## Features

#### **Economical:**

It is the one-time investment as the company (host) has to buy the storage and a small part of it can be provided to the many companies which save the host from monthly or yearly costs. Only the amount which is spent is on the basic maintenance and a few more expenses which are very less.

#### **Security:**

**Cloud Security**, is one of the best features of cloud computing. It creates a snapshot of the data stored so that the data may not get lost even if one of the servers gets damaged. The data is stored within the storage devices, which cannot be hacked and utilized by any other person. The storage service is quick and reliable.

#### Pay as you go:

In cloud computing, the user has to pay only for the service or the space they have utilized. There is no hidden or extra charge which is to be paid. The service is economical and most of the time some space is allotted for free.

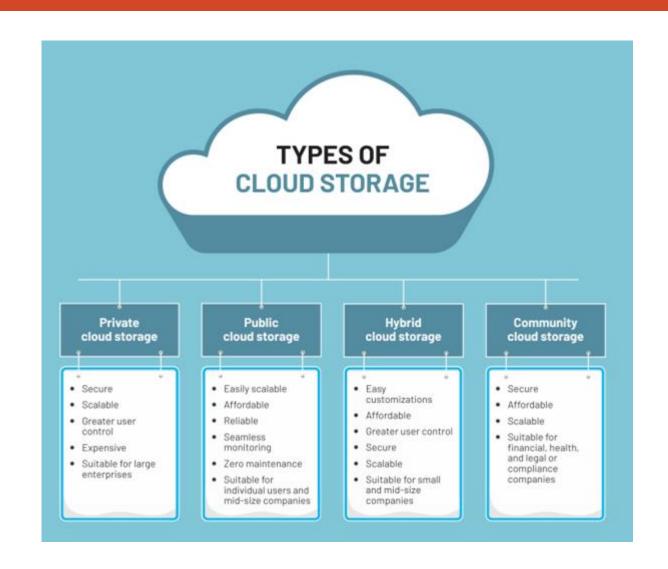
#### **Multitenant**

# Cloud Storage

Cloud storage is defined as "the storage of data online in the cloud," wherein a company's data is stored in and accessible from multiple distributed and connected resources that comprise a cloud.

Cloud storage can provide the benefits of greater accessibility and reliability; rapid deployment; strong protection for data backup, archival and disaster recovery purposes; and lower overall storage costs as a result of not having to purchase, manage and maintain expensive hardware.

There are many benefits to using cloud storage, however, cloud storage does have the potential for security and compliance concerns that are not associated with traditional storage systems.



# Types of Cloud Storage

There are four main types of cloud storage — personal, public, private and hybrid;

#### 1. Personal Cloud Storage

Also known as mobile cloud storage, personal cloud storage is a subset of public cloud storage that applies to storing an individual's data in the cloud and providing the individual with access to the data from anywhere. It also provides data syncing and sharing capabilities across multiple devices. Apple's iCloud is an example of personal cloud storage.

#### 2. Public Cloud Storage

Public cloud storage is where the enterprise and storage service provider are separate and there aren't any cloud resources stored in the enterprise's data center. The cloud storage provider fully manages the enterprise's public cloud storage.

#### 3. Private Cloud Storage

A form of cloud storage where the enterprise and cloud storage provider are integrated in the enterprise's data center. In private cloud storage, the storage provider has infrastructure in the enterprise's data center that is typically managed by the storage provider. Private cloud storage helps resolve the potential for security and performance concerns while still offering the advantages of cloud storage.

#### 4. Hybrid Cloud Storage

Hybrid cloud storage is a combination of public and private cloud storage where some critical data resides in the enterprise's private cloud while other data is stored and accessible from a public cloud storage provider.

# Benefits and Disadvantages of Cloud Storage

There are many benefits to using cloud storage.

- **1. File Accessibility**: Files stored in the cloud can be accessed at any time from any place so long as you have Internet access.
- **2.** Cloud storage provides organizations with off-site (remote) backups of data which reduces costs associated with disaster recovery .

The disadvantages to cloud storage are:

- **1. Limited bandwidth**: If your Internet connection is slow or unstable, you might have problems accessing or sharing your files.
- **2**. Organizations that require a large amount of storage may also find costs increase significantly after the first few gigabytes of data stored.

