topic :cloud storage

Noll_no:15

Name:Karuna Goswami

Certainly! Here's a simplified overview of Google Cloud storage products:

1. Google Cloud Storage

- **What It Is:** A service to store files and data online.
- **How It Works:** Think of it like an online hard drive where you can keep and retrieve your files from anywhere.
- **Good For:** Storing large amounts of data like photos, videos, backups, and big datasets.
- **Storage Tiers:**
    - **Standard:** For data you use frequently.
    - **Nearline:** For data you access less than once a month.
    - **Coldline:** For data you access less than once a year.
    - **Archive:** For data you rarely access but need to keep for a long time.

2. Google Cloud Filestore

- **What It Is:** A service for file storage that works with applications needing a file system.
- **How It Works:** Provides a shared network drive that your applications can access.
- **Good For:** Applications needing a shared file system, like content management systems or media storage.

3. Google Cloud Persistent Disk

- **What It Is:** Disk storage for virtual machines (VMs) in Google Cloud.
- **How It Works:** Provides the storage space your VMs need to run, like the hard drive in a computer.
- **Types:**
    - **Standard:** For general use.
    - **Balanced:** For a mix of performance and cost.
    - **Extreme:** For high-performance needs.
- **Good For:** Data storage for virtual machines, databases, and applications.

4. Google Cloud Local SSD

- **What It Is:** High-speed, local storage attached directly to your VM.
- **How It Works:** Provides very fast storage directly connected to your VM, like having a super-fast external hard drive.
- **Good For:** Applications needing super-fast access to data, like high-performance computing tasks.

5. Google Cloud Storage for Firebase

- **What It Is:** Storage service for apps built with Firebase (a platform for mobile and web apps).
- **How It Works:** Allows you to store user files and other data from your apps.
- **Good For:** Storing user uploads like photos and videos in mobile and web apps.

6. Google Cloud Bigtable

- **What It Is:** A database for handling huge amounts of data with fast access.
- **How It Works:** Think of it as a giant, super-fast database that stores and processes lots of data.
- **Good For:** Large-scale data projects like time-series data, IoT data, or analytics.

Summary

Google Cloud provides various storage solutions to fit different needs:

- **General File Storage:** Google Cloud Storage.
- **File Systems for Applications:** Google Cloud Filestore.
- **Disk Storage for Virtual Machines:** Google Cloud Persistent Disk and Local SSD.
- **App-Specific Storage:** Google Cloud Storage for Firebase.
- **Large Data Handling:** Google Cloud Bigtable.

Each service is designed to handle different types of storage needs, from basic file storage to high-speed data access and large-scale databases.