**TYPES OF CLOUD STORAGE**

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|  | Direct Attached | File Storage | Block Storage | Object Storage |
| Features | * It is attached directly to a computer without network usage. * In SSD or HDD | * Data is stored in files with extensions according to the type of the file. * Hierarchical structure * Accessible with file name and path | * Data is divided into blocks with unique identifiers. * Blocks can be stored in different OSs. | * Objects with the identifier, data, and metadata * API is used to access objects |
| + | * Fastest * Easy setup (plug & play) | * Easy to access if the file system is relatively small. * Familiar to users * Simple interface * Easy to set access rights | * Easy to modify unlike object storage * Faster than file and object storage | * Easy to retrieve data using metadata * Purchase only for the storage you need unlike the file storage * Good for unstructured data |
| - | * Only one person at a time can use the data. * Data is not sharable. | * Challenging to manage when the number of files is large * Expensive (extra hardware is needed for storage) | * Hard to search if the blocks have large volumes * No metadata | * No locks unlike file and block storage * Slowest among the storage types * You cannot change the object after it is created |
| Use Cases |  | * Archiving * Storage requiring data protection | * Databases * Business applications for being reliable and fast | * Storing video recordings * Backup & recovery (slowness does not matter here) |

Reference <https://www.ibm.com/cloud/blog/object-vs-file-vs-block-storage> <https://www.backblaze.com/blog/object-file-block-storage-guide/> Lecture 2 Slides