



# Types of EBS Volumes

EBS offers several different volume types, each tailored to meet the performance and cost requirements of various use cases. The different EBS Volume types are as follows:

**General Purpose SSD (sub-types: gp3, gp2):** A balanced storage option suitable for a wide range of workloads. gp3 allows independent scaling of IOPS and throughput, while gp2 provides baseline performance with burst capabilities. Ideal for boot volumes, medium-sized databases, and general-purpose applications.

**Provisioned IOPS (sub-types: io1, io2)** is a storage option offered by AWS for applications requiring high-performance and consistent input/output operations per second (IOPS). It is designed for use with Amazon EBS (Elastic Block Store) and is ideal for I/O-intensive applications such as large databases, transactional systems, and other performance-sensitive workloads especially when compared to General Purpose SSD.

**Throughput Optimized HDD (sub-types: st1):** Low-cost, high-throughput storage optimized for large, sequential workloads. Ideal for big data processing, data warehousing, and log processing, where throughput is more important than IOPS.

**Cold HDD (sub-types: sc1):** The most cost-effective storage option, designed for infrequently accessed data. Best suited for archival storage, long-term backups, and datasets that require occasional access at a low cost.