

1. On demand
2. Reserved
3. Dedicated
4. Spot

Flexible for start and end. IF AWS terminates your instances you won't be charged. IF you terminate, you will be charged. Be wise

SSD

	General Purpose SSD		Provisioned IOPS SSD		
Volume type	gp3	gp2	io2 Block Express ‡	io2	io1
Durability	99.8% - 99.9% durability (0.1% - 0.2% annual failure rate)	99.8% - 99.9% durability (0.1% - 0.2% annual failure rate)	99.999% durability (0.001% annual failure rate)		99.8% - 99.9% durability (0.1% - 0.2% annual failure rate)
Use cases	<ul style="list-style-type: none"> Low-latency interactive apps Development and test environments 		Workloads that require sub-millisecond latency, and sustained IOPS performance or more than 64,000 IOPS or 1,000 MiB/s of throughput	<ul style="list-style-type: none"> Workloads that require sustained IOPS performance or more than 16,000 IOPS I/O-intensive database workloads 	
Volume size	1 GiB - 16 TiB		4 GiB - 64 TiB	4 GiB - 16 TiB	
Max IOPS	16,000		64,000	16,000	

Max IOPS per volume (16 KiB I/O)	16,000		256,000	64,000 †
Max throughput per volume	1,000 MiB/s	250 MiB/s *	4,000 MiB/s	1,000 MiB/s †
Amazon EBS Multi-attach	Not supported		Not supported	Supported
Boot volume	Supported			

HDD can't be used for boot

- **Throughput Optimized HDD** — A low-cost HDD designed for frequently accessed, throughput-intensive workloads.
- **Cold HDD** — The lowest-cost HDD design for less frequently accessed workloads.

The following is a summary of the use cases and characteristics of HDD-backed volumes. For information about the maximum IOPS and throughput per instance, see [Amazon EBS-optimized instances](#).

	Throughput Optimized HDD	Cold HDD
Volume type	st1	sc1
Durability	99.8% - 99.9% durability (0.1% - 0.2% annual failure rate)	99.8% - 99.9% durability (0.1% - 0.2% annual failure rate)
Use cases	<ul style="list-style-type: none"> • Big data • Data warehouses • Log processing 	<ul style="list-style-type: none"> • Throughput-oriented storage for data that is infrequently accessed • Scenarios where the lowest storage cost is important
Volume size	125 GiB - 16 TiB	125 GiB - 16 TiB
Max IOPS per volume (1 MiB I/O)	500	250
Max throughput	500 MiB/s	250 MiB/s

per volume		
Amazon EBS Multi-attach	Not supported	Not supported
Boot volume	Not supported	Not supported

Load Balancer

1. Application Load Balancer
2. Network Load Balancer
3. Classic Load Balancer.

Route 53

Responsible of the dns.

Always prefer nodes over access Key. =

Database Summary

Multi_Az only for DR.

Read Replica

*Read Replica
can have multi AZ
Used for scaling. NOT FOR DR*

*Is allowed to have read replica of
primary instance*

another read replica.

Up to S of any database

