

Amazon EC2 Instance Storage & Amazon EBS

Instance Store (Ephemeral Storage)

Type:

It provides temporary block-level storage for our instances.

Located:

This storage is located on disks that are physically attached to host computer.

Lifecycle:

Equivalent to EC2. If we delete instance then store is also deleted as well.

Instance store is well-suited for temporary storage of information that is constantly changing, such as buffers, caches, and scratch data.

Note:

Recently AWS has announced multi-attach feature for EBS so multiple EC2 can be attached to EBS.

Condition:

All of the instances must be in same AZ for multi-attach feature.

Exception:

This feature is only for some instances.

Amazon EBS

Type:

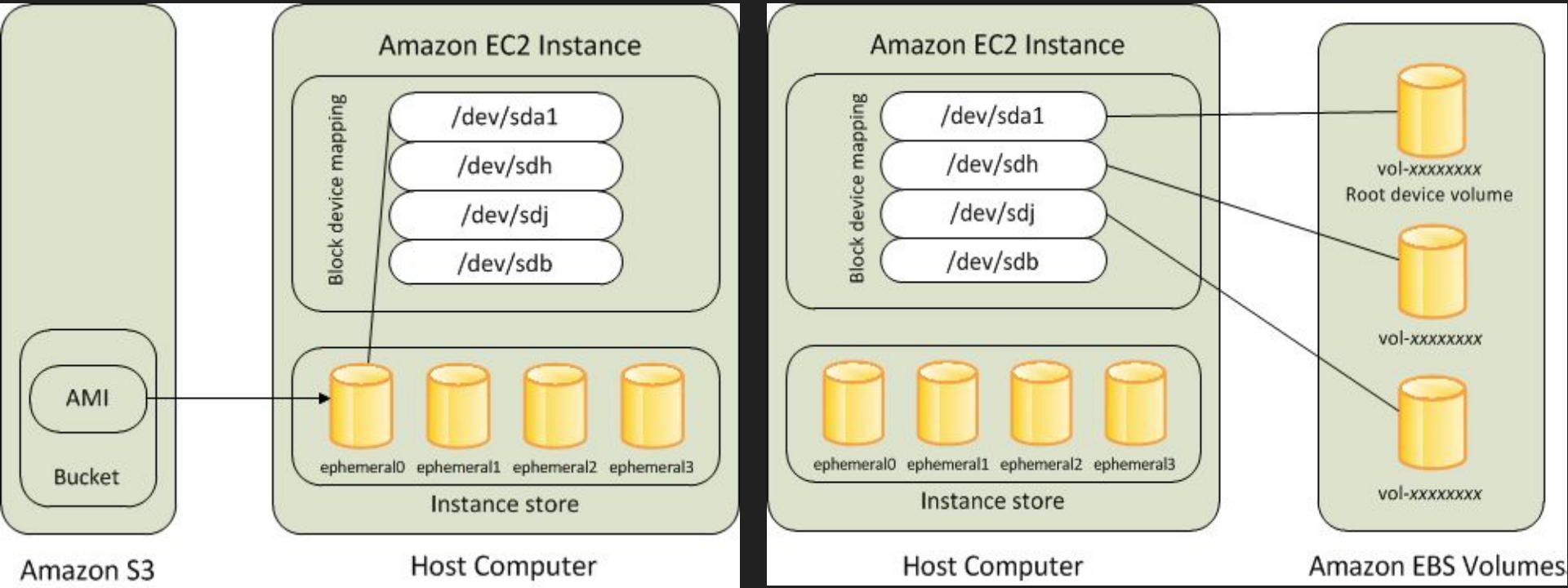
EBS is also block-level storage that we can attach to EC2 instance.

Connection:

EBS can be connected to one computer at a time i.e, can't be shared by multiple instances at a time.

EBS is for data that changes frequently and needs to persist through instance stops, terminations, or hardware failure.

Instance store Vs EBS



Instance store Vs EBS

1. Non-persistent data store.
2. Data must be replicated manually.
3. No snapshot support

1. Persistent block storage volumes.
2. Automatic data replication within the AZ.
3. Point-in-time snapshot support.

EBS snapshots

A backup storage for EBS volumes.

EBS snapshots are incremental backups i.e, they only save the blocks on the volume that have changed after our most recent snapshot.

For example,
If we have 10 GB of data on a volume.

Only 2 GB have been modified since last snapshot.

Then only the 2 GB that have been changed are written to Amazon S3.