

✓ ESB Volume

08:03 PM

What's an EBS Volume?

EC2
EBS →



- An EBS (Elastic Block Store) Volume is a network drive you can attach to your instances while they run →
- ✓ • It allows your instances to persist data, even after their termination
- They can only be mounted to one instance at a time (at the CCP level)
- ✓ • They are bound to a specific availability zone
- ✓ • Analogy: Think of them as a "network USB stick"
- ✓ • Free tier: 30 GB of free EBS storage of type General Purpose (SSD) or Magnetic per month

store

$\begin{cases} 6 \\ 3 \\ 2 \end{cases}$

10

mult

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EBS Volume

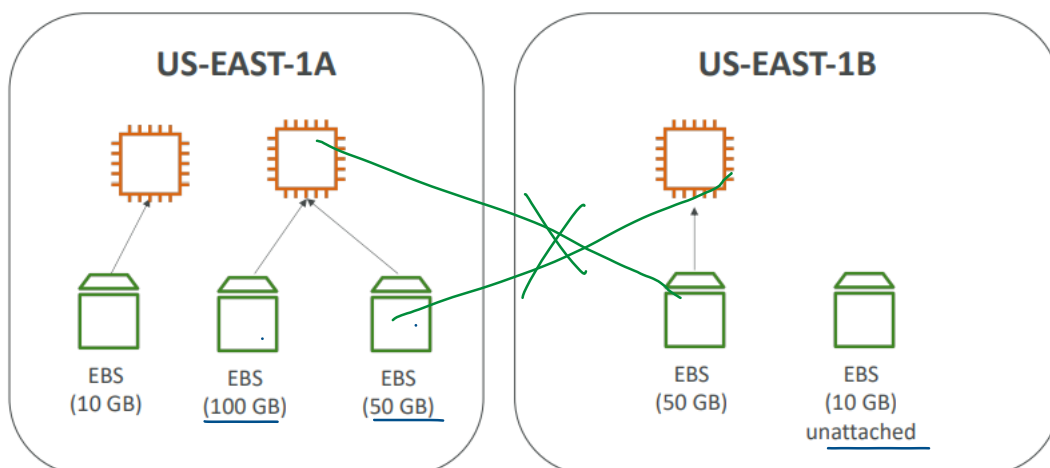
- It's a network drive (i.e. not a physical drive)
 - It uses the network to communicate the instance, which means there might be a bit of latency
 - It can be detached from an EC2 instance and attached to another one quickly
- It's locked to an Availability Zone (AZ)
 - An EBS Volume in us-east-1a cannot be attached to us-east-1b
 - To move a volume across, you first need to snapshot it
- Have a provisioned capacity (size in GBs, and IOPS)
 - You get billed for all the provisioned capacity
 - You can increase the capacity of the drive over time

slow

↓
2
Us-east

Elz

EBS Volume - Example



- ✓ FRS – Delete on Termination attribute

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encryption
Root	/dev/xvda	snap-09f18f682f23a1b1	8	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted
EBS	/dev/sdb	Search (case-insensit)	8	General Purpose SSD (gp2)	100 / 3000	N/A	<input type="checkbox"/>	Not Encrypted

Add New Volume

- Controls the EBS behaviour when an EC2 instance terminates

- By default, the root EBS volume is deleted (attribute enabled)
- By default, any other attached EBS volume is not deleted (attribute disabled)

- This can be controlled by the AWS console / AWS CLI
- Use case: preserve root volume when instance is terminated

EBS Snapshots

- Make a backup (snapshot) of your EBS volume at a point in time
- Not necessary to detach volume to do snapshot, but recommended
- Can copy snapshots across AZ or Region

