

# Background

- AWS **Regions**: Separate datacenters.
  - E.g., us-east-1, us-west-1, etc.
  - Each region consists of **availability zones**
    - can have automatic data replication across zones in a region (but not all customers do it)
- AWS Elastic Block Storage (**EBS**) – mountable storage “devices”, accessible from EC2 instances
- 1 EBS volume runs inside an Availability Zone
  - Two networks: primary n/w used for EC2 and EBS control plane; secondary n/w used for overflow – has *lower capacity*
  - Control information replicated across zones (for availability)
- EBS volumes replicated for durability
  - Each volume has a primary replica
  - If out of sync or node failure, replicas programmed to do aggressive re-mirroring of data