- Each region is a separate geographic area and is completely independent
- Each Amazon region is designed to be completely isolated from the other regions & helps achieve the greatest possible fault tolerance and stability
- Communication between regions is across the public Internet and appropriate measures should be taken to protect the data using encryption
- Data transfer between regions is charged at the Internet data transfer rate for both the sending and the receiving instance
- Resources aren't replicated across regions unless done explicitly

Edge Locations

- Edge locations are locations maintained by AWS through a worldwide network of data centers for the distribution of content.
- These locations are located in most of the major cities around the world and are used by CloudFront (CDN) to distribute content to end user to reduce latency.

- Each Region has multiple Availability Zones.
- Each AZ is physically isolated from each other so that an uncommon disaster such as fire, earthquake would only affect a single AZ
- AZs are geographically separated from each other, within the same region, and acts as an independent failure zone
- AZs are redundantly connected to multiple tier-1 transit providers
- AZs in a region are connected with low-latency private links and not through public internet
- Multi-AZ, distribution of resources across multiple Availability Zones, feature can be used to distribute instances across multiple AZ to provide High Availability
- AWS ensures that resources are distributed across the Availability Zones for a region by independently mapping Availability Zones to identifiers for each account. for e.g. us-east-1 region with us-east-1a AZ might not be the same location as us-east-1a AZ for another account. There's no way for you to coordinate Availability Zones between accounts