* **Regions**: AWS divides the world into geographic regions, each containing multiple data centers that are isolated from each other. These regions are separate geographic areas, such as US East (N. Virginia), Europe (Ireland), Asia Pacific (Tokyo), etc. Each region is designed to be completely isolated from other regions to provide fault tolerance and stability. Customers can choose which region(s) to use based on factors such as latency, regulatory requirements, and data residency.
* **Availability Zones (AZs)**: Within each region, AWS further divides the infrastructure into isolated locations called availability zones. Availability zones are distinct data centers, each with redundant power, networking, and connectivity, located within a region. They are physically separate from each other but are interconnected via high-speed, low-latency links. The purpose of availability zones is to provide high availability and fault tolerance for applications and services running in the AWS cloud. By distributing resources across multiple availability zones, customers can design highly resilient and fault-tolerant architectures.
* **Edge Locations**: Edge locations are part of AWS's content delivery network (CDN) service known as Amazon CloudFront. They are distributed globally and are used to cache copies of data closer to end-users to reduce latency and improve performance when accessing content or services hosted on AWS. Edge locations are typically smaller facilities compared to regions and availability zones, optimized for content delivery rather than general-purpose computing. They are strategically located in major cities and highly populated areas around the world. Additionally, some AWS services, such as AWS WAF (Web Application Firewall) and Amazon Route 53, leverage edge locations to provide low-latency access and DDoS protection.