

Around the World With AWS

- **AWS Availability Zone**

- When thinking about AWS availability zones think of them as data centers. Data centers are buildings that are filled with servers, server racks, networking gear, etc. These data centers typically have their own power, security features, networking, and connectivity.
- For AWS availability zones they could actually be comprised of several data centers. However, because these data centers are located so close to each other they count as one. Note that they are close to each other but not directly next to each other. This is by design. In case one data center is taken offline due to flood, earthquake, fire for example it won't damage all of them at once and force the entire availability zone to shut down.

- **AWS Region**

- A region is a geographical area that consists of 2 or more availability zones.

- **AWS Edge Locations**

- Edge locations are endpoints for AWS which are used for caching content.
- Typically, it consists of CloudFront, AMZ content delivery network.
- Note that there are many more edge locations than regions

- **Choosing the Right AWS Region**

- When choosing an AWS region there are 3 primary options to consider:
 - Data Sovereignty Laws – Depending on location and laws regarding data you might be required to select a specific region.
 - Latency to End Users – Depending on your user base location you might want to select that one that is closest to them to reduce latency. For example, if the bulk of your customers / users bases in located in London select the London region and not the East Virginia.
 - AWS Services - Not all AWS services will be available for all AWS regions. When selecting an AWS region make sure that it has the services that you need.