

Brief AWS Overview

Regions & Availability Zones

History

- Early 2000, Amazon was expanding its B2B
- Standardized around early Agile, CICD, RESTful practices
- 2006, Amazon's S3 and EC2 launched
- Shortly after, several other products shipped: DynamoDB, CloudFront, RDS, etc
- Some that no longer exist (e.g. SimpleDB)

Regions

- Regions are logical groupings of physical close but isolated data centers
- Regions contain 3 or more Availability Zones (AZs)
- Original region is Northern Virginia (us-west-2) in Arlington



Availability Zones (AZs)

- Each region 3+ AZs
- Each AZ is a cluster of DC buildings
- Locations unknown but considered 'fault tolerant' b/w other AZs
- Interconnects are fiber and redundant



Non-Standard Regions

AWS GovCloud (US-East, US-West)

Requires US entity that is incorporated. Individual must be a US citizen or green card holder. Must be able to handle International Traffic and Arms Regulation (ITAR) export controlled data^{[1](#)}.

AWS China (Beijing, Ningxia)

Operated by another provider. Requires dedicated account.