

SESSION-1:

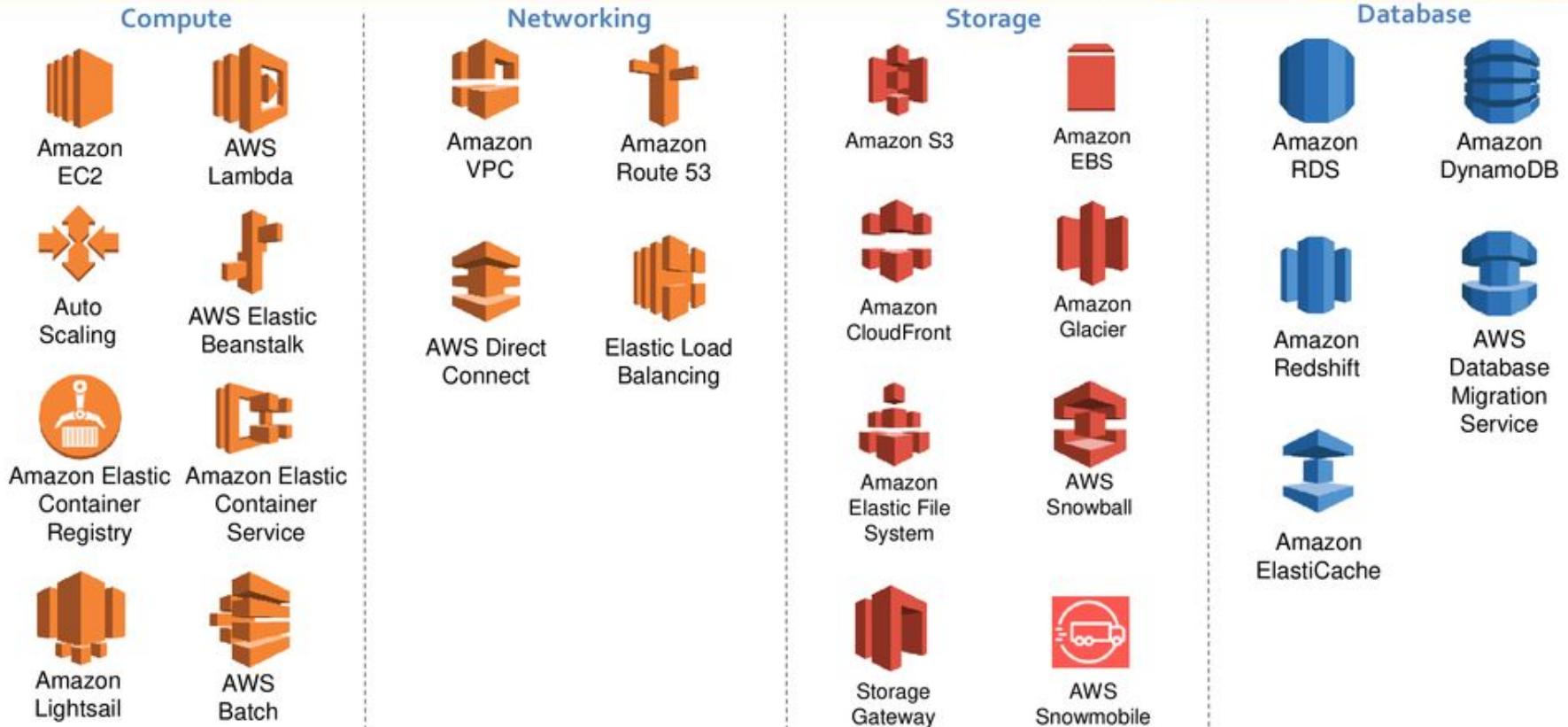
ARCHITECTING ON AWS

Amazon Web Services (AWS)

- Global Data Centers and more than 200 services
- Pay as you go
- Built for business needs
- Secure and robust



AWS by Category: Core Services



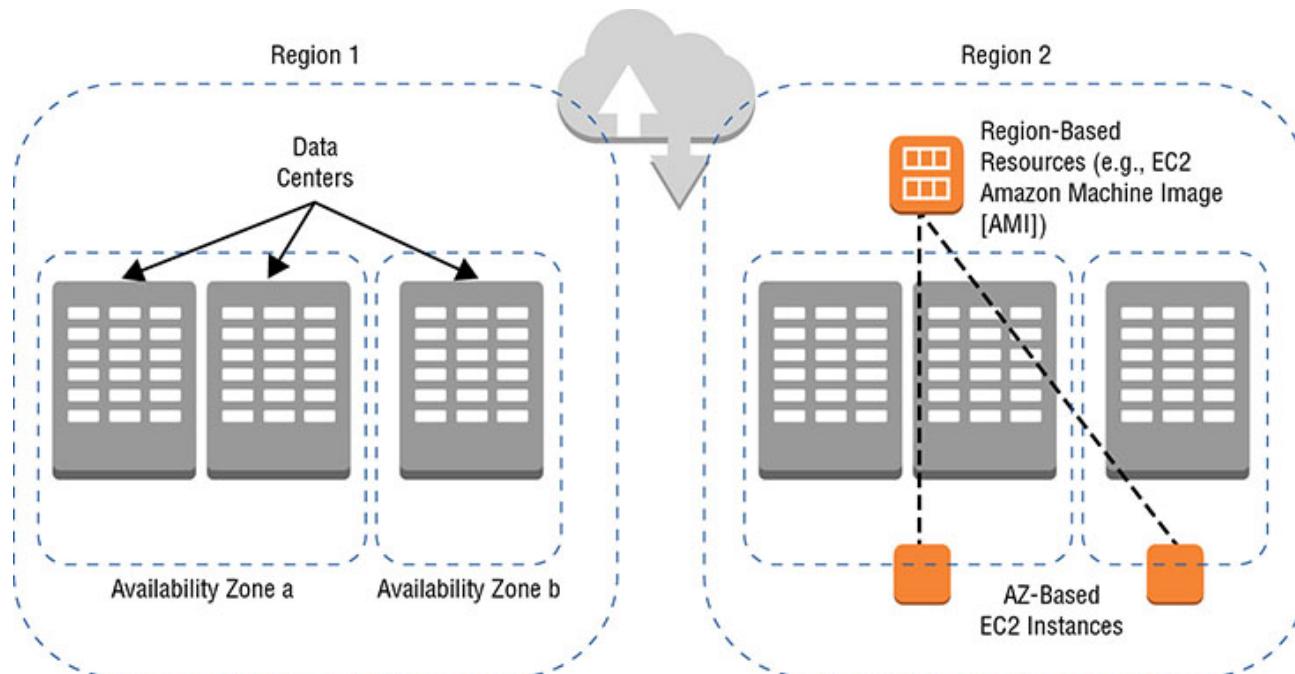
AWS Data Centers

- AWS Services operate within AWS Data Centers which consist of thousands of servers.
- Each location uses AWS proprietary network equipment.
- Data Centers are organized into Availability Zones.



Availability Zones

- Data centers in a Region which interconnected by high-speed private links.
- Designed for fault toleration.
- Used to achieve high availability.



Regions

- They are completely independent from each other.
- They use AWS network infrastructure.
- They have multiple Availability Zones.





Region Selection Factors



Governance



Latency



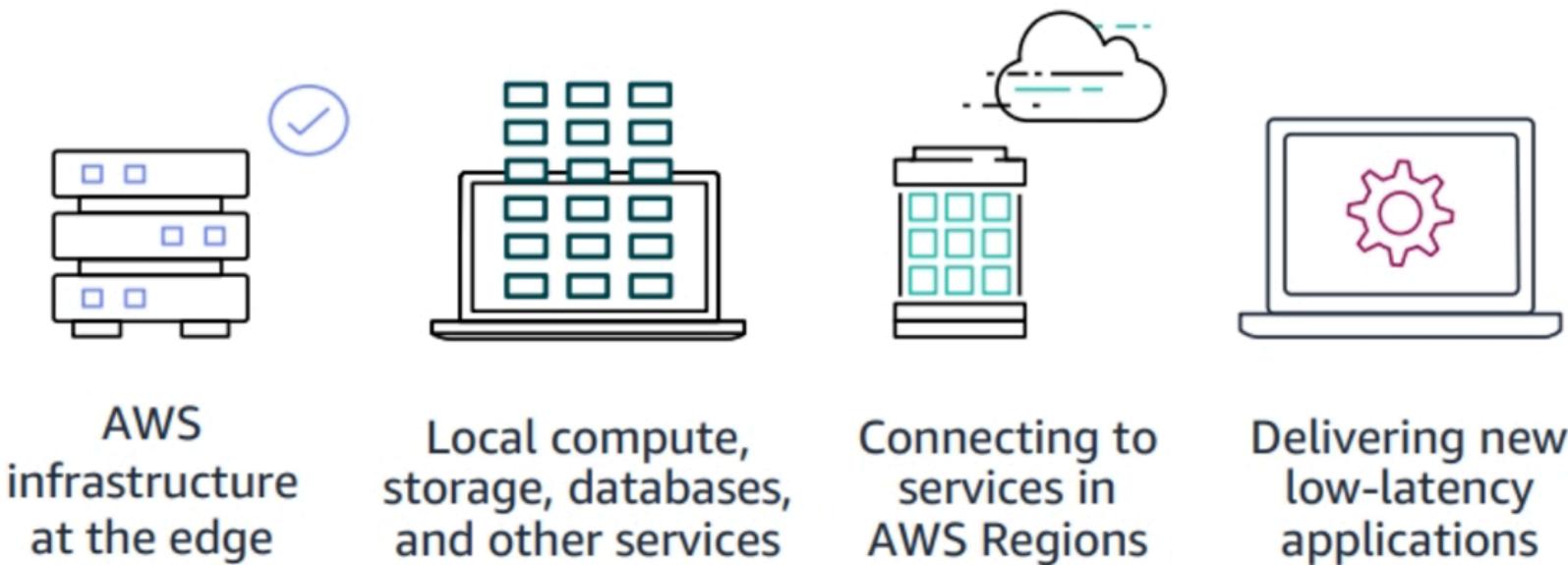
Service availability



Cost

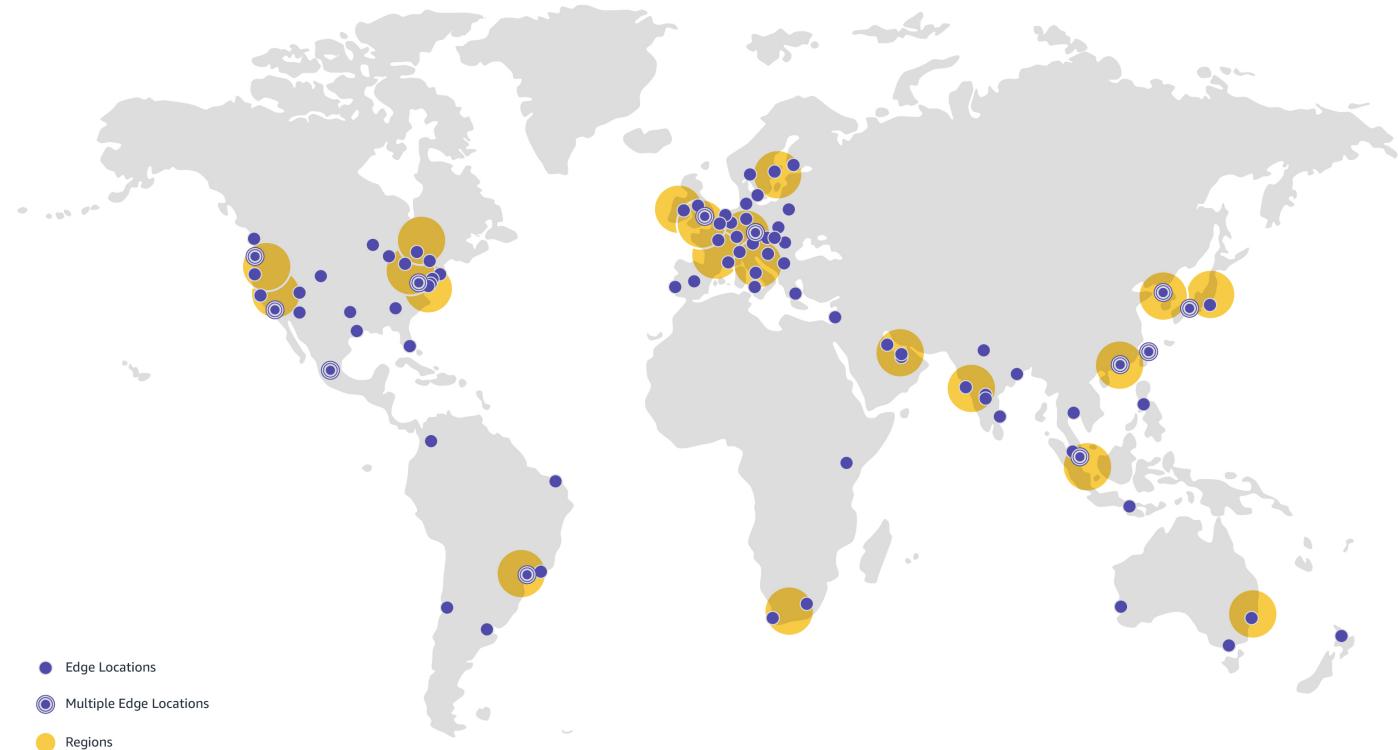
Local Zones

- Use cases: Media and entertainment content creation, real-time gaming, machine learning inference, live video streaming, augmented virtuality (AR) and virtual reality (VR)

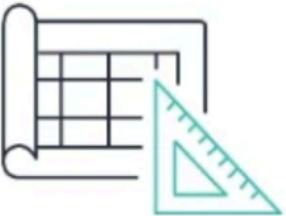


Edge Locations

- Supports AWS Services such as Amazon Route 53 and Amazon Cloudfront.



AWS Architecting Steps



Plan

- Set technical cloud strategy with business leads.
- Analyze solutions for business needs and requirements.

Research

- Investigate cloud services specs and workload requirements.
- Review existing workload architectures.
- Design prototype solutions.

Build

- Design the transformation roadmap with milestones, work streams, and owners.
- Manage the adoption and migration.



AWS Pillars



Operational Excellence

Run, manage and monitor production workload to deliver business value and continuous improve on supporting process and events

Security

Protecting information, systems, and assets along from outside world with risk assessment, unplanned failures, and mitigation strategies

Reliability

Auto recover workload from infrastructure, power or system failures with dynamic resource management to meet operational threshold.

Performance Efficiency

Use computing resources efficiently to support on demand changes for delivering workload with maximum performance to meet the SLA

Cost Optimization

Avoiding & eliminate un-needed cost or replace resources with cost-effective resources without impacting the best practices and business need

THANKS FOR LISTENING