



Lecture 1 - Intro to the Cloud concepts

[Intro to Cloud](#)

[Starting using AWS](#)

[AWS Global Infrastructure overview](#)

[Q&A session](#)

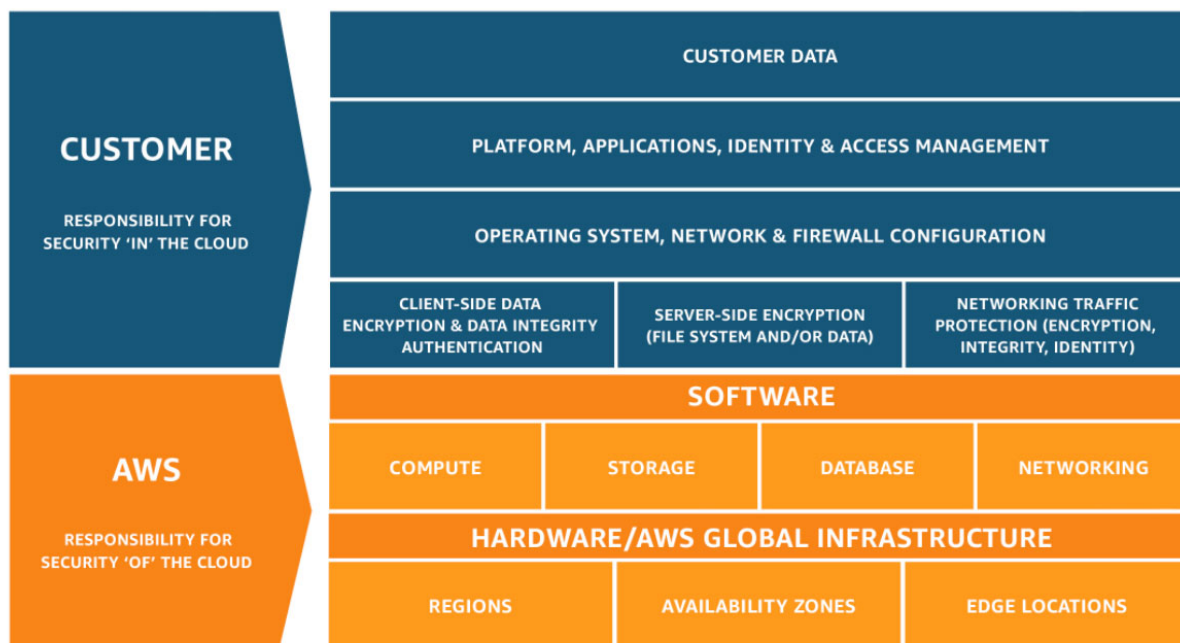
[Homework](#)

Intro to Cloud

<https://aws.amazon.com/what-is-cloud-computing/>

- traditional IT vs Cloud Computing
- what problems Cloud solve
 - flexibility: use on-demand. change resource types when needed
 - cost-effectiveness: pay as you go
 - scalability: scale on demand
 - elasticity: scale-out and scale out on-demand
 - HA and FT
 - agility: rapidly develop, test, launch new applications all in one place.
- cloud services customers example
 - AWS
 - Dropbox, Netflix
 - Azure
 - Microsoft Services
 - GCP

- CAPEX vs OPEX
- private cloud / public cloud / hybrid cloud and differences
- characteristics of cloud computing
 - on-demand self-service
 - broad network access
 - multi-tenancy and resource pooling
 - rapid elasticity and scalability
 - measured service - pay exactly for is used
- Shared responsibility model → <https://aws.amazon.com/compliance/shared-responsibility-model/>



- AWS certifications as a career booster
 - AWS Cloud Practitioner
 - AWS Certified Developer Associate

Starting using AWS

- initial look at the AWS console
- core services to start with
 - EC2
 - S3
 - CloudWatch
 - VPC
 - IAM
- AWS services naming explanation
 - EC2 - **e**lastic **c**ompute **c**loud
 - S3- **s**imple **s**torage **s**ervice
 - etc...
- how to choose a region (you don't usually choose it but still)
- pricing and billing (cost explorer service, billing dashboard, budgets)
 - per service (some service have different pricing models, i.e. EC2
 - per region (some regions are more expensive than others)
 - by pricing model

AWS Global Infrastructure overview

<https://aws.amazon.com/about-aws/global-infrastructure/>

- Key points
 - what is region
 - what is AZ
 - what is Edge Location

- what are global and regional services
 - Global
 - iam
 - route53
 - Cloudfront
 - ...
 - Regional
 - EC2
 - S3 (global console but resources are regional)
 - VPC
 - ...

Q&A session

- topic discussion
- sharing useful external resources resources and links

Homework

- Create an IAM programmatic user and attach a poweruser policy to it
- Configure a first AWS CLI profile
- Learn more about S3
- Create your first S3 + cloudfront static website hosting (clean that up afterwards)