



# CLOUD COMPUTING WITH AWS

# AGENDA

01

Introducing Of Cloud Computing

02

Computer Service

03

Virtual Private Cloud (VPC)

04

Database Service



# **CLOUD COMPUTING WITH AWS**

## **INTRODUCING OF CLOUD COMPUTING**



## EMAIL

## STREAMING VIDEO



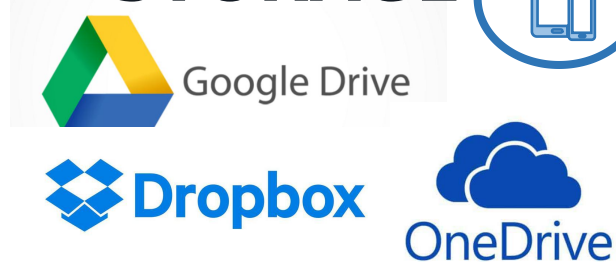
## CHAT & POSTING



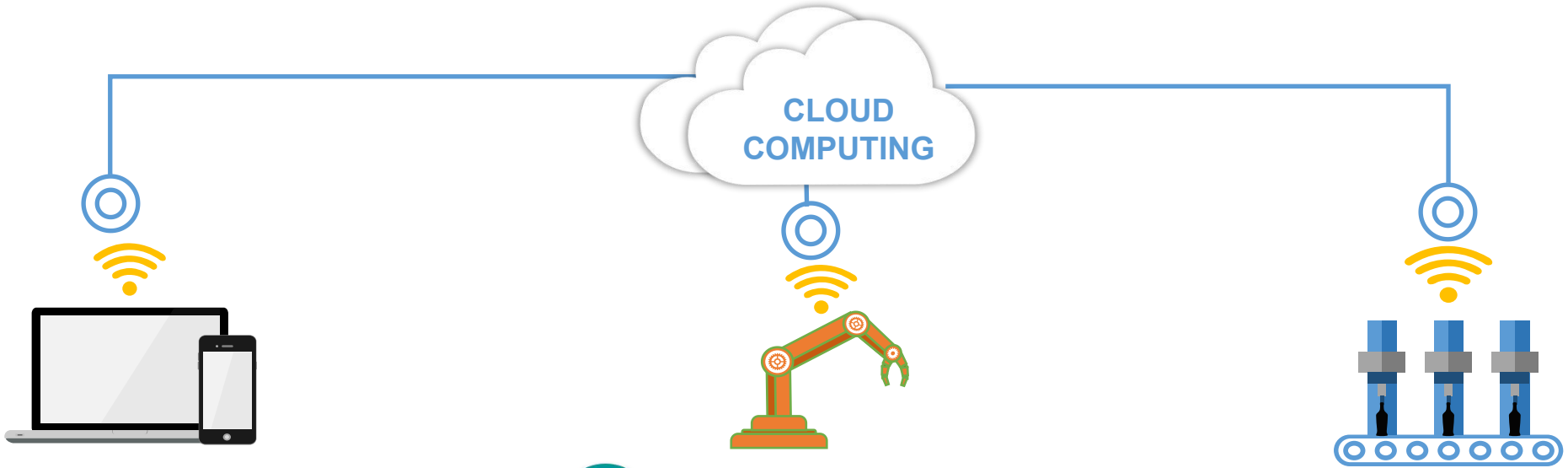
## DOCUMENT



## STORAGE



amazon



# WHAT IS CLOUD COMPUTING ?

(Mell, 2009)

01

Pay-as-you-go pricing

02

On-demand delivery through internet

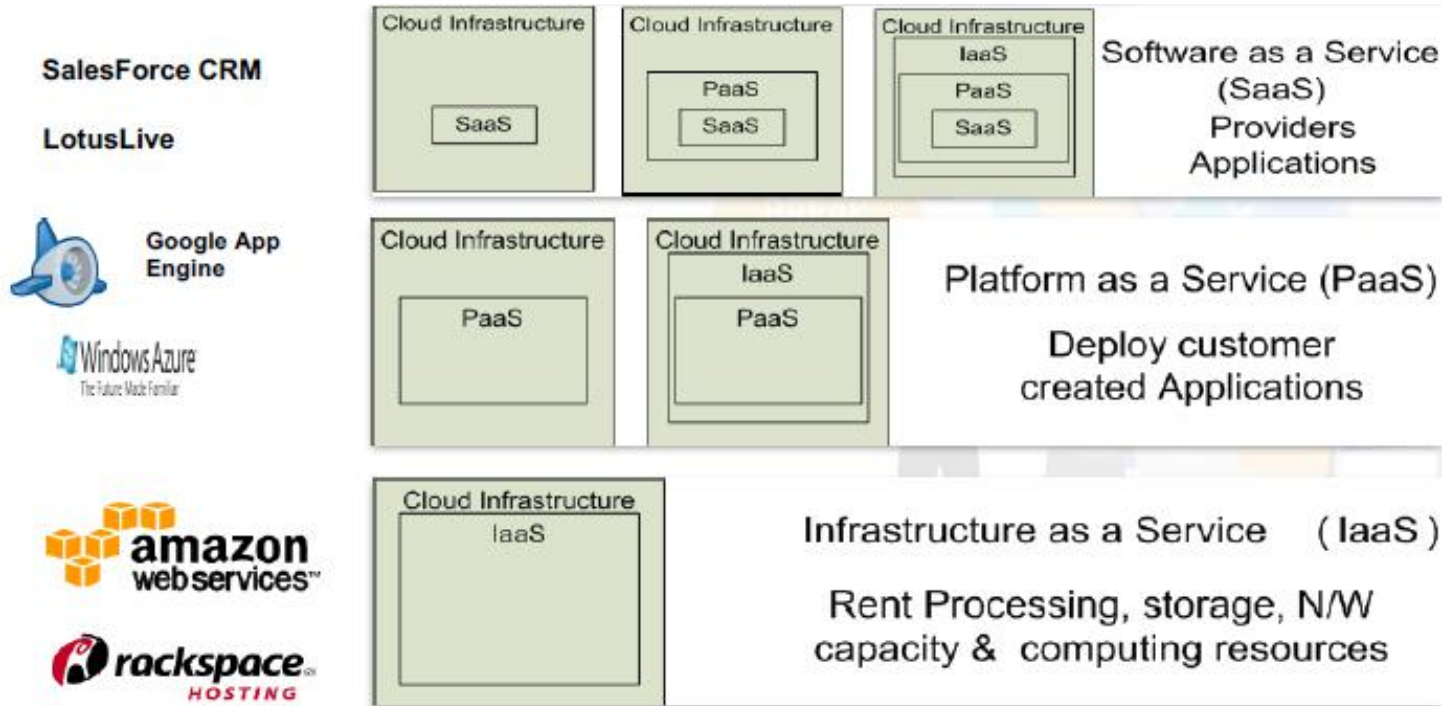
03

Provisioned by the service provider

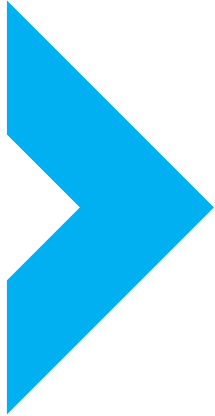
04

Shared pool of configurable computing resources

# CLOUD ARCHITECTURE (MELL, 2009)



# DEPLOYMENT MODEL



## **PRIVATE CLOUD**

Digunakan oleh sebuah organisasi yang menaungi banyak konsumen (unit bisnis)



## **COMMUNITY CLOUD**

Digunakan oleh suatu komunitas dari berbagai konsumen dalam satu organisasi



## **PUBLIC CLOUD**

Digunakan untuk public atau masyarakat luas



## **HYBRID CLOUD**

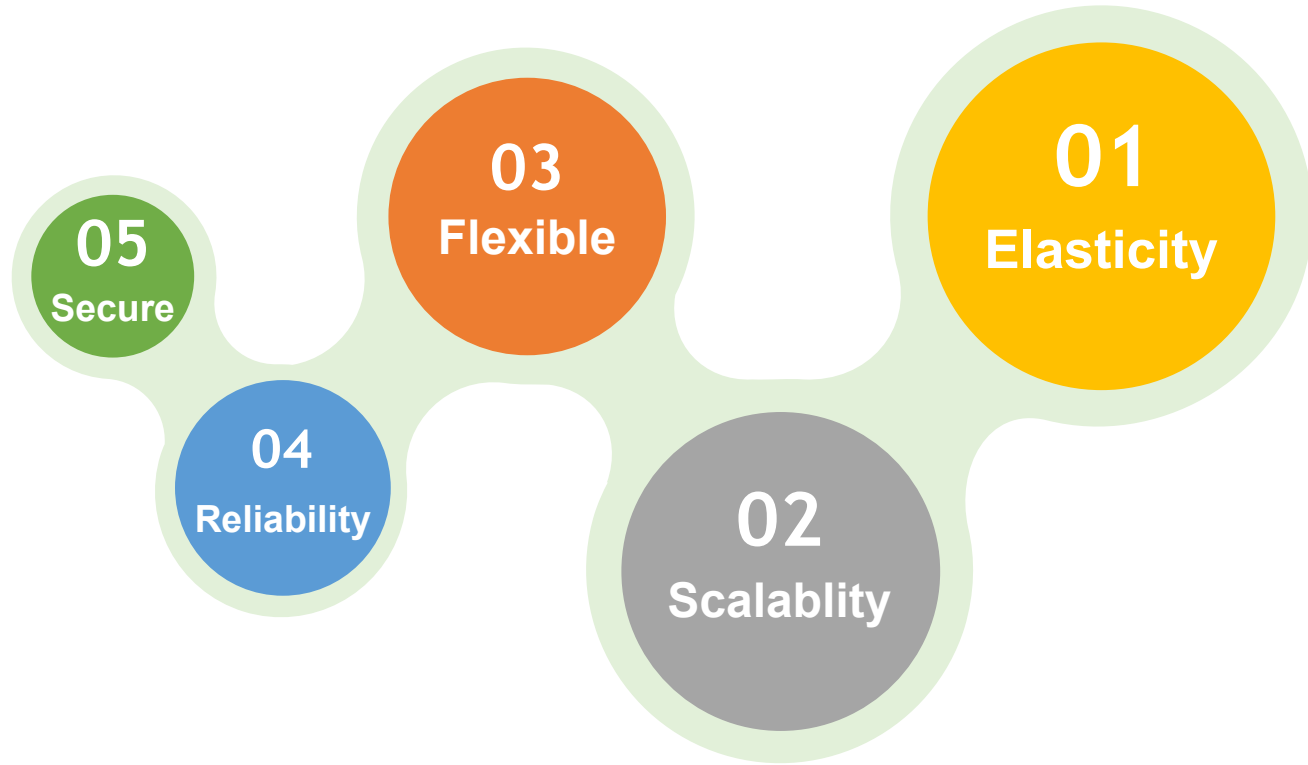
Gabungan dari dua atau lebih model deployment



**AWS (Amazon Web Service) termasuk dalam Cloud Computing, yang memiliki kelebihan pengiriman resource IT berdasarkan permintaan dan aplikasi melalui internet hanya akan dibayar sesuai penggunaan**



# AWS INFRASTRUCTURE



# AWS GLOBAL INFRASTRUCTURE



## Explore Our Products



Analytics



Application Integration



AR & VR



AWS Cost Management



Blockchain



Business Applications



Compute



Customer Engagement



Database



Developer Tools



Edge User Computing



Game Tech



Internet of Things



Machine Learning



Management & Governance



Media Services



Migration & Transfer



Mobile



Networking & Content  
Delivery



Robotics



Satellite



Security, Identity &  
Compliance



Storage





# **CLOUD COMPUTING WITH AWS**

## **COMPUTE SERVICE**

# Compute Service

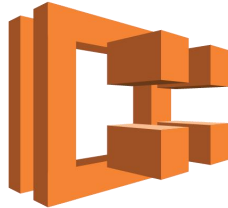
“

Menyediakan platform dan infrastruktur untuk komputasi

”



**AWS ECR**



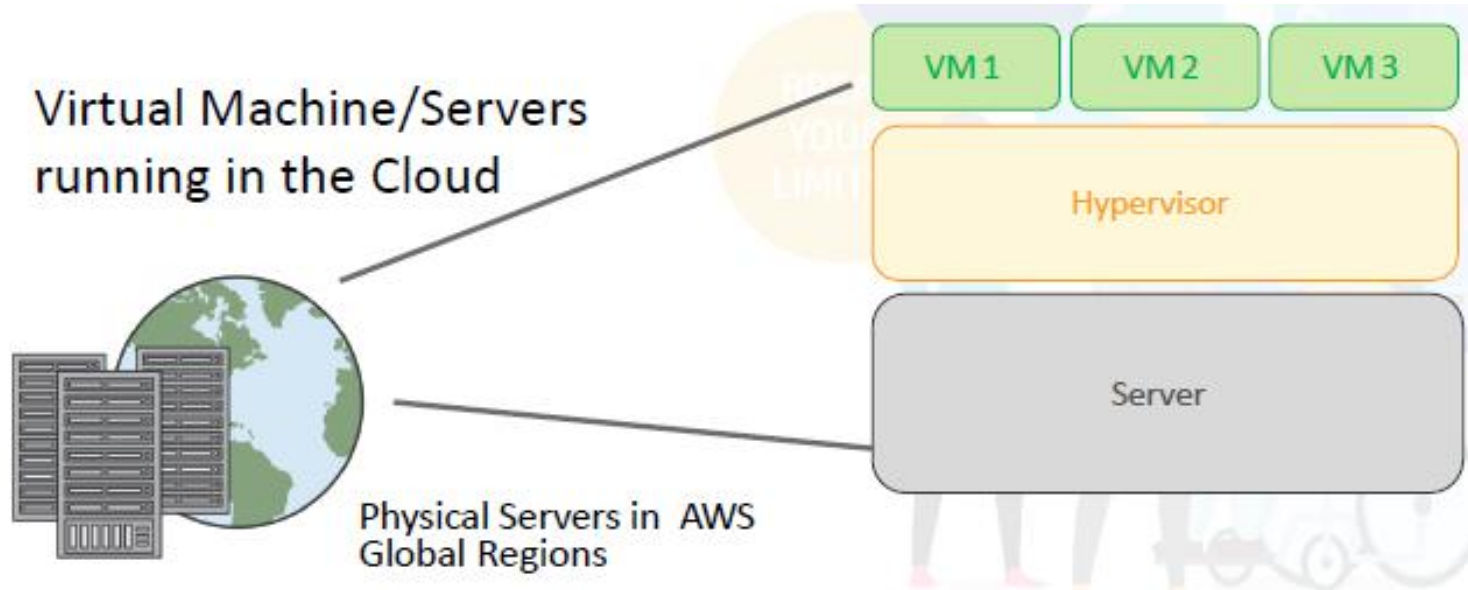
**AWS ECS**



Amazon EC2



# Amazon EC2 Overview



# Keuntungan Server pada Cloud



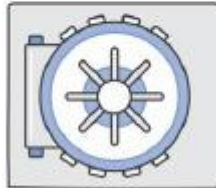
Fast Deployments Access  
computing infrastructure  
in minutes



Globally Accessible Easily  
support customers around  
the world



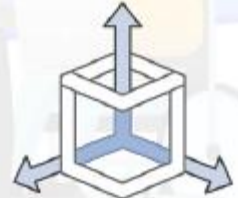
Low Cost  
Pay-as-you-go pricing



Secure  
A collection of tools to  
protect data and privacy

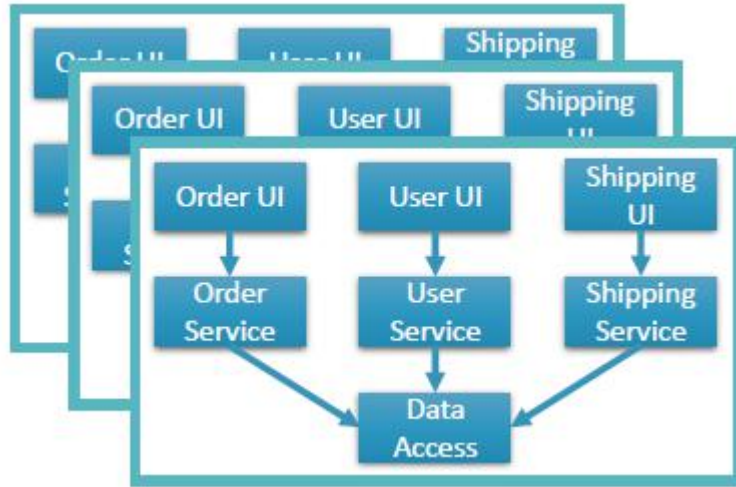


Elastic  
Easily add or remove capacity

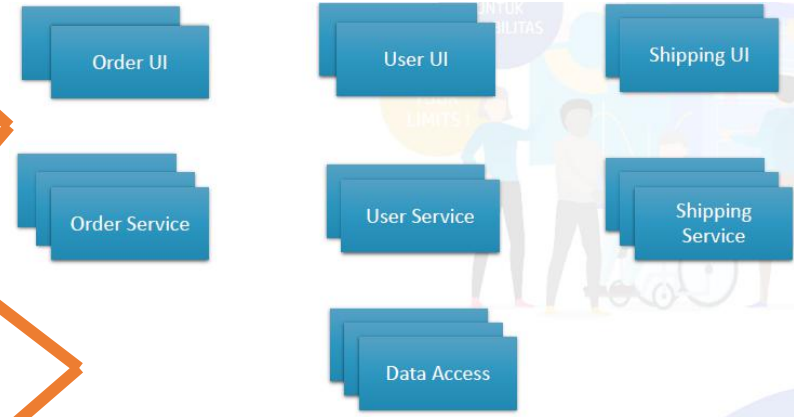


Scalable  
Access to effectively  
limitless capacity

# Monolithic Architecture



# Microservices Architecture



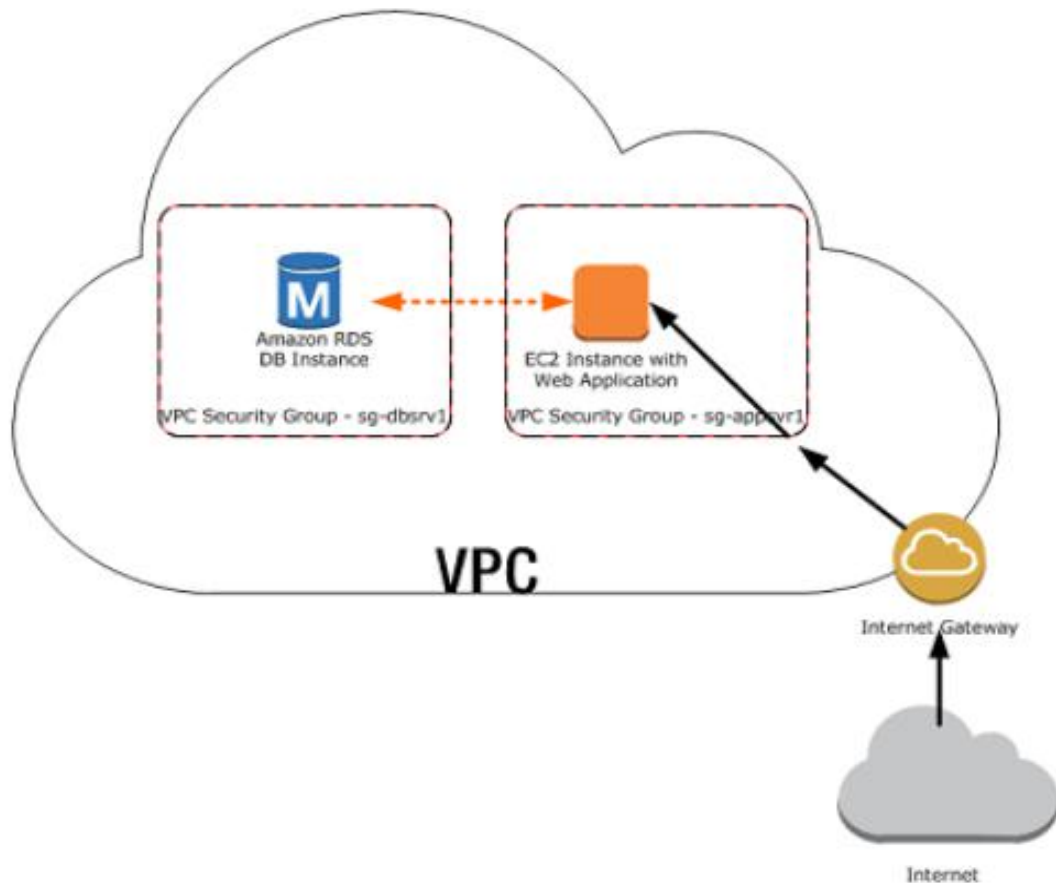




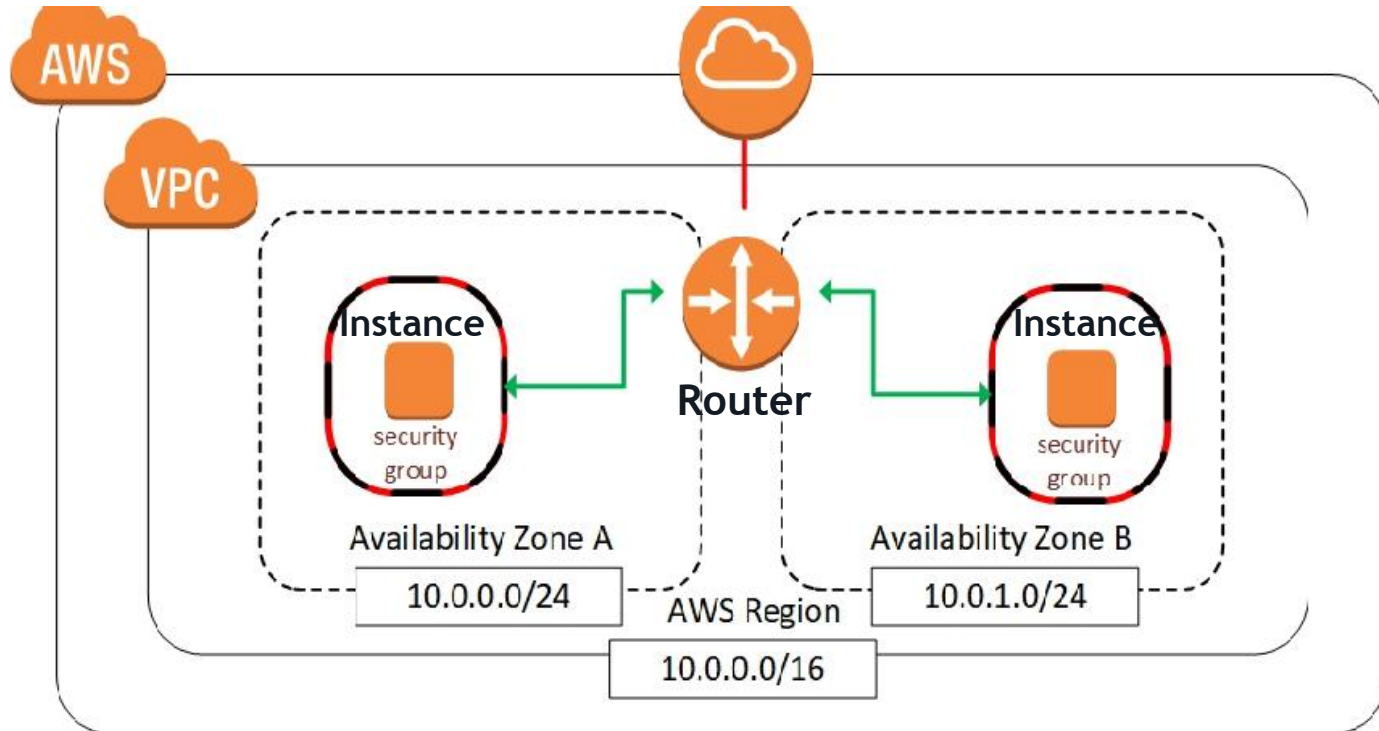
# **CLOUD COMPUTING WITH AWS**

## **Virtual Private Cloud**

# Virtual Private Cloud (VPC)



# Security Group





# **CLOUD COMPUTING WITH AWS**

## **DATABASE SERVICE**

# Database Service

“

Menyediakan database relasional dan non-relasional

”



Amazon DynamoDB



Amazon RDS



AWS  
ElastiCache



**amazon**  
REDSHIFT

# Perbedaan Layanan DB di Cloud & On-Premise

DATABASE ON-PREMISE	DATABASE CLOUD IN AWS
bertanggungjawab penuh untuk upgrade dan backup database	tersedia layanan upgrade, backup, dan failover
bertanggungjawab penuh untuk keamanan database	tersedia infrastruktur keamanan tingkat tinggi menggunakan certification
mengontrol keseluruhan bagian yaitu, OS, server, dan database	dikelola oleh mesin dan dapat di automatisasi
replikasi bersifat mahal dan rumit, serta membutuhkan banyak teknik	tersedia layanan failover

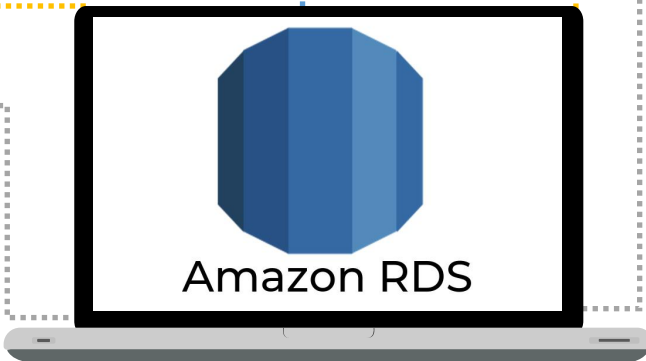
# Amazon RDS

- Automated backup
- Replica
- Manual snapshot
- Cross-region snapshot
- Migration

- Aurora
- PostgreSQL
- MySQL
- MariaDB

- No cost to get started
- Pay only for what you consume

- Simple
- Fast to deploy & scale
- Predictable performance





**CLOUD  
COMPUTING**

**Thank You**