



# AWS Lambda & API Gateway



CLARUSWAY  
WAY TO REINVENT YOURSELF

## Table of Contents



- ▶ Introduction to Serverless
- ▶ AWS Lambda
- ▶ API Gateway

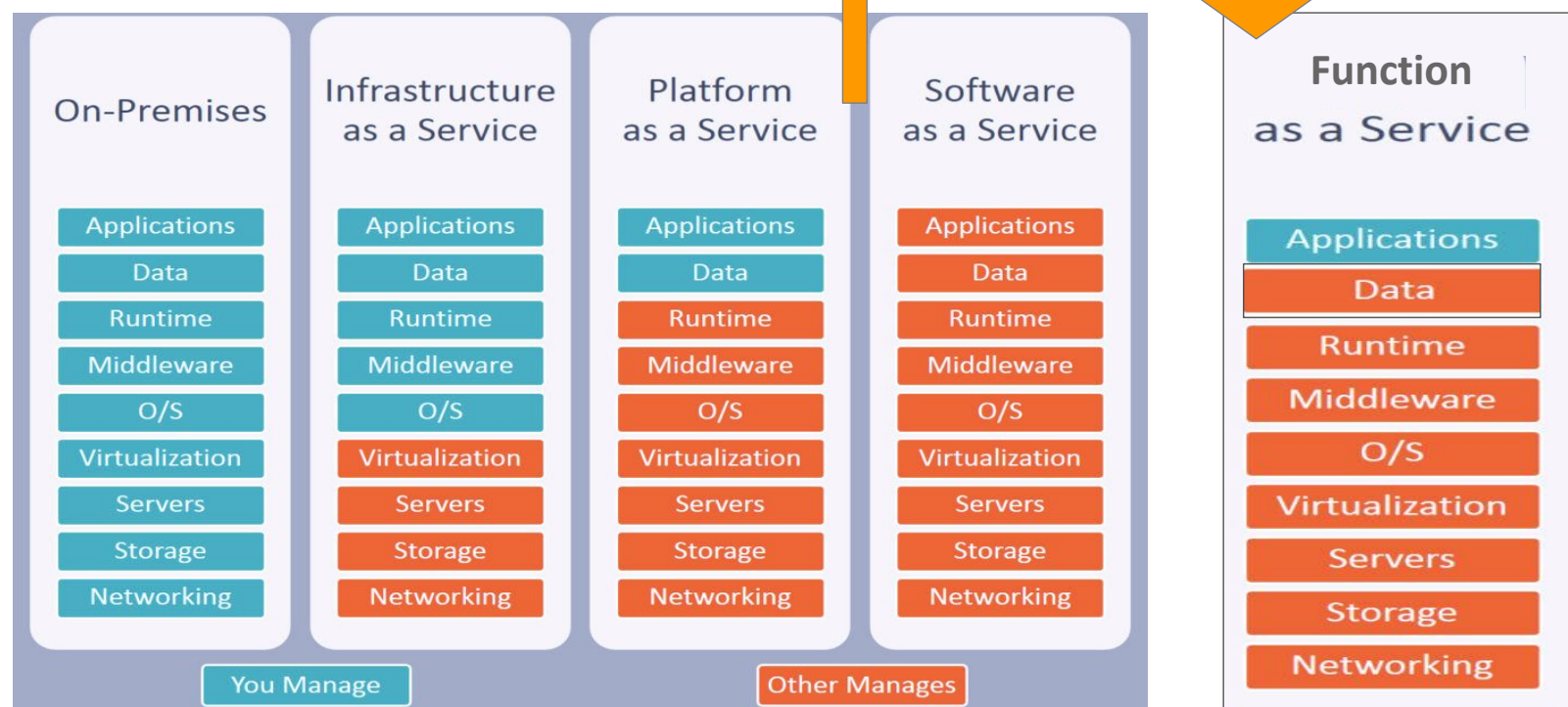


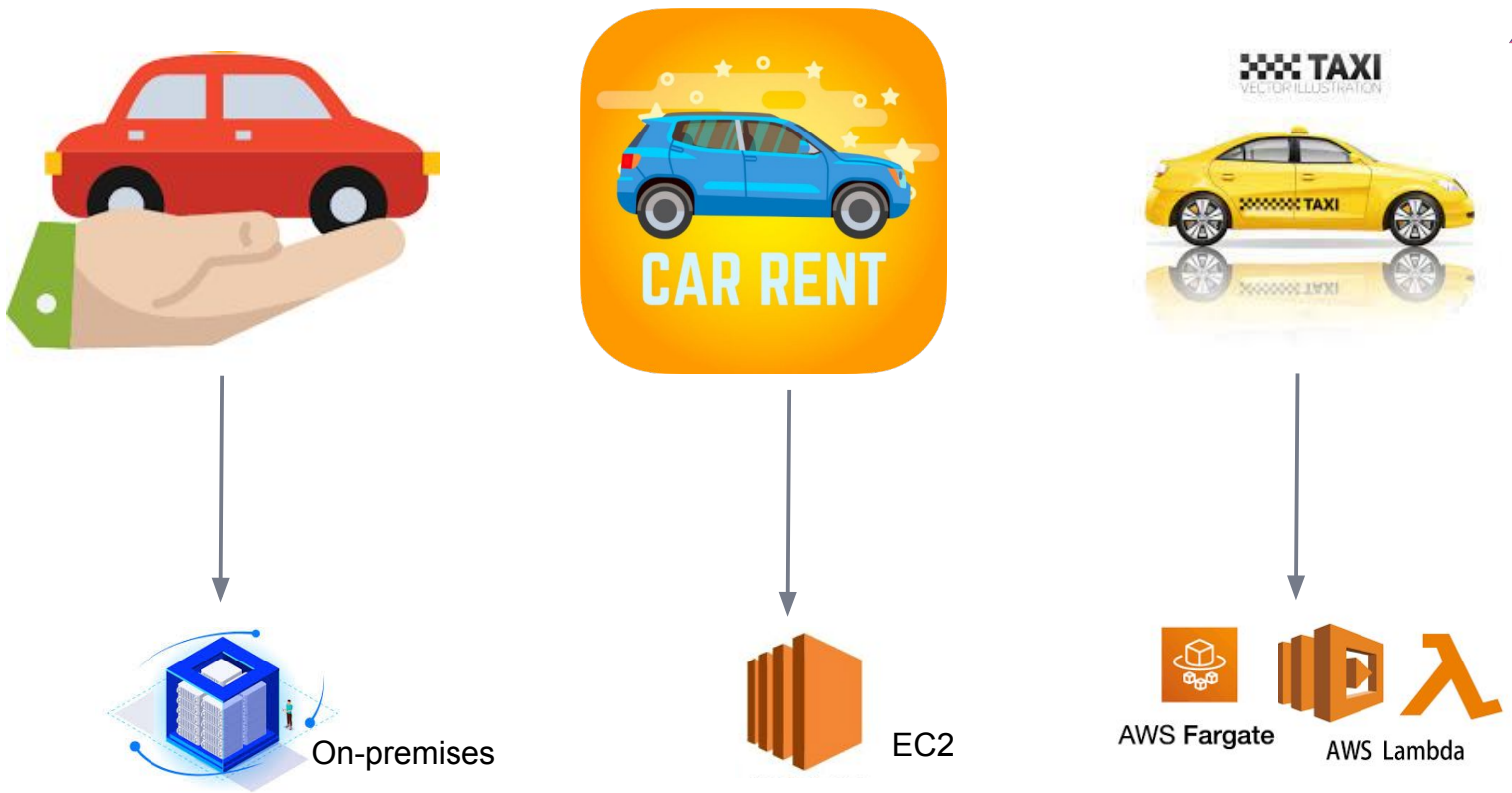
# 1 Introduction to Serverless

CLARUSWAY  
WAY TO REINVENT YOURSELF

## Introduction to Serverless

### What is Serverless?





## Introduction to Serverless Infrastructure

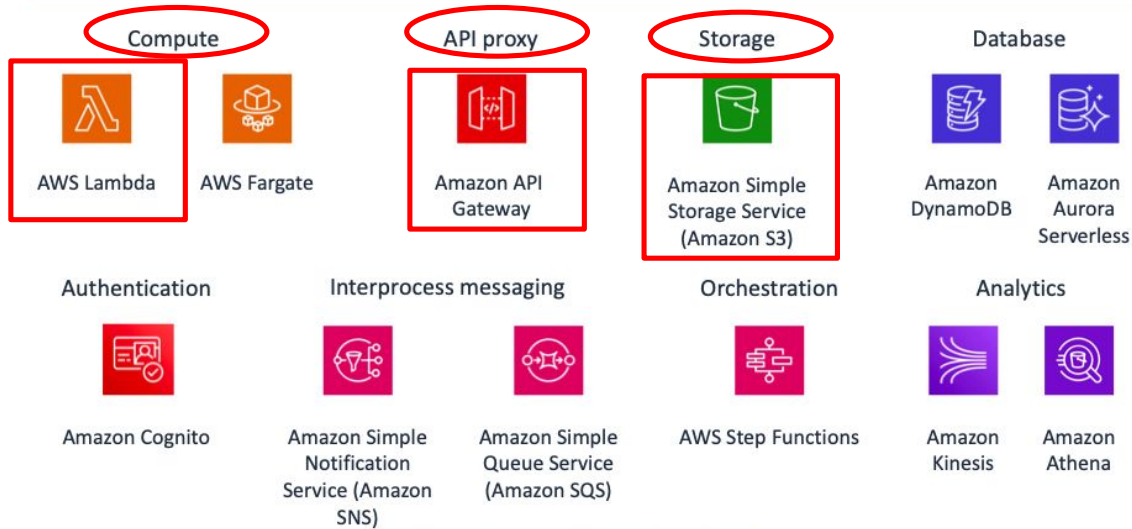
### What is Serverless Infrastructure and Why?



- Run applications **without servers**.
- **Eliminate infrastructure management**
- Cost effective

# Introduction to Serverless Infrastructure

## AWS serverless portfolio



## 2 AWS Lambda

# AWS Lambda

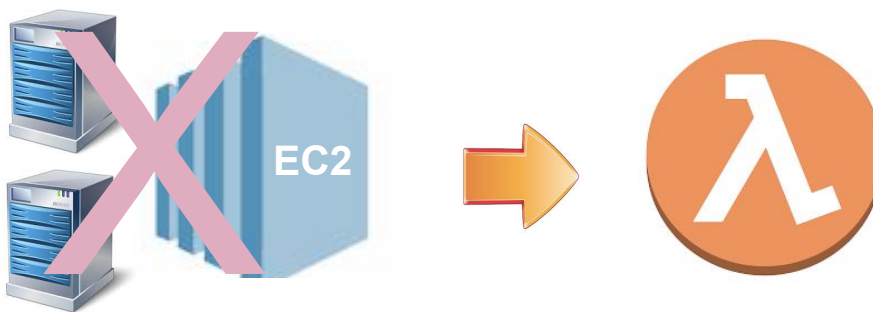
## What is Lambda?



- AWS Lambda is the first FaaS service among the global public cloud products.
- It is a serverless compute service that runs your code in response to programmed events.

# AWS Lambda

## What is Lambda?



- AWS Lambda lets you run code without provisioning or managing servers
- Instead of launching an EC2 instance to run your code on it, you can just deploy your code in Lambda services and you can get the same result.

# AWS Lambda

## How Lambda function works?



# AWS Lambda

## Exactly pay as you go



You will be charged as long as your instance is running even if your code runs or not.

You will be only charged when the functions that you deployed are run.

# AWS Lambda

## Lambda codes



Go



Lambda supports Java, Go, PowerShell, Node.js, C#, Python, and Ruby code.

CLARUSWAY  
WAY TO REINVENT YOURSELF

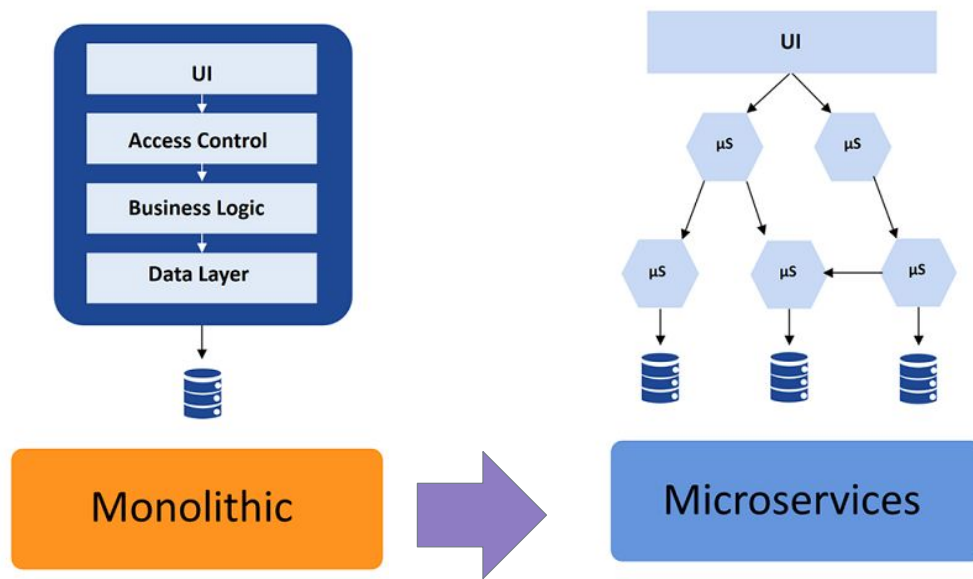
13

## 2 API Gateway

CLARUSWAY  
WAY TO REINVENT YOURSELF



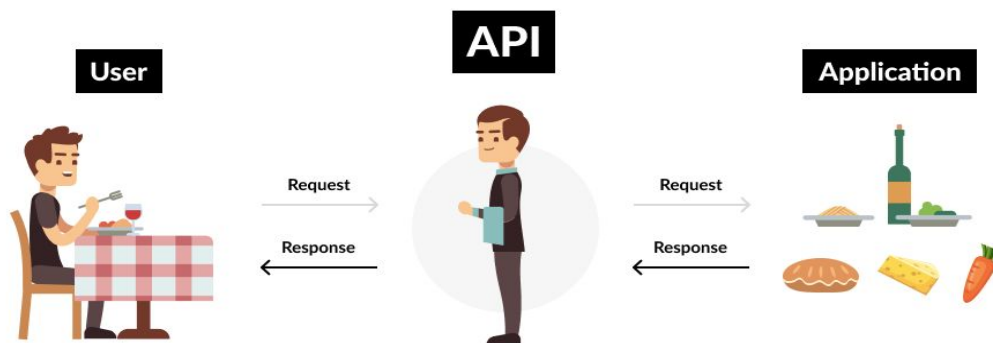
# API Gateway



CLARUSWAY  
WAY TO REINVENT YOURSELF

# API Gateway

## What is API?



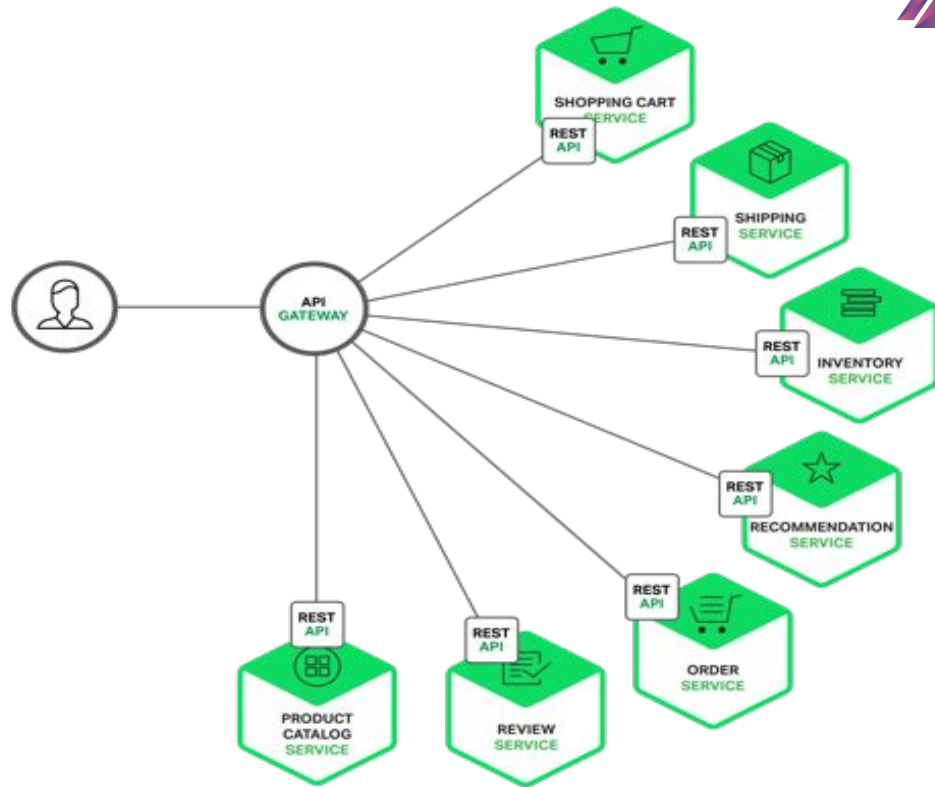
API stands for **Application Program Interface**. Basically, the API defines how device components can **communicate with each other**.



# API Gateway

## What is API Gateway?

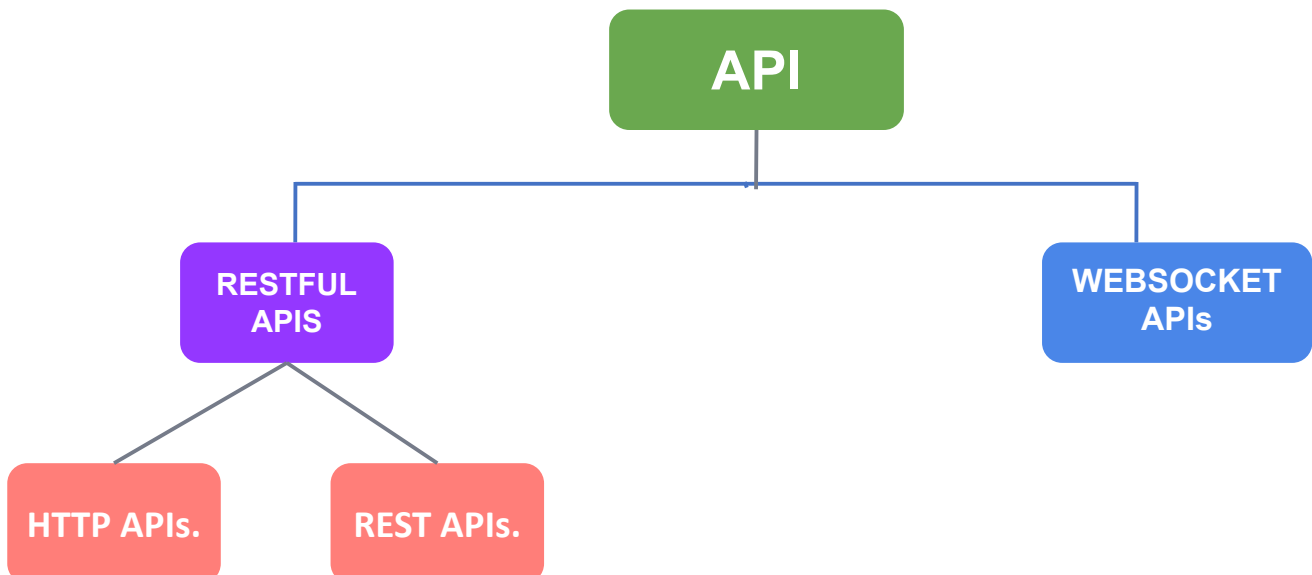
The API Gateway is responsible for routing, design, and interface transfer requests.



CLARUSWAY  
WAY TO REINVENT YOURSELF

# API Gateway

## API Gateway in AWS



CLARUSWAY  
WAY TO REINVENT YOURSELF



- REST (Representational State Transfer) is a service structure that enables easy and fast communication between client and server.
- REST runs on HTTP.
- JSON or XML type

# API Gateway

- Web services that use REST architecture are called **RESTful** services.

- GET,
- POST,
- PUT,
- DELETE



# AWS Lambda

## Lambda and API Gateway

- Alexa
- **API Gateway**
- CloudTrail
- CloudWatch Events
- CloudWatch Logs
- CloudFormation
- CloudFront
- CloudFront (Lambda@Edge)
- CodeCommit
- CodePipeline
- Cognito
- Config
- DynamoDB
- EC2
- ElastiCache
- Elastic Load Balancing
- EFS
- IoT
- IoT Events
- Kinesis Firehose
- Kinesis Streams
- Lex
- RDS
- S3
- S3 Batch
- SES
- SNS
- SQS
- Step Functions
- X-Ray



Although you can trigger Lambda function in different way, the most common trigger of the Lambda function is **API Gateway**

Thanks to Lambda and API Gateway combination you can create fully automated system.



## Let's get our hands dirty!



# THANKS!

**Any questions?**

