


AWS Serverless



WHAT IF I TOLD YOU

THERE'S NO SERVER

memegenerator.net

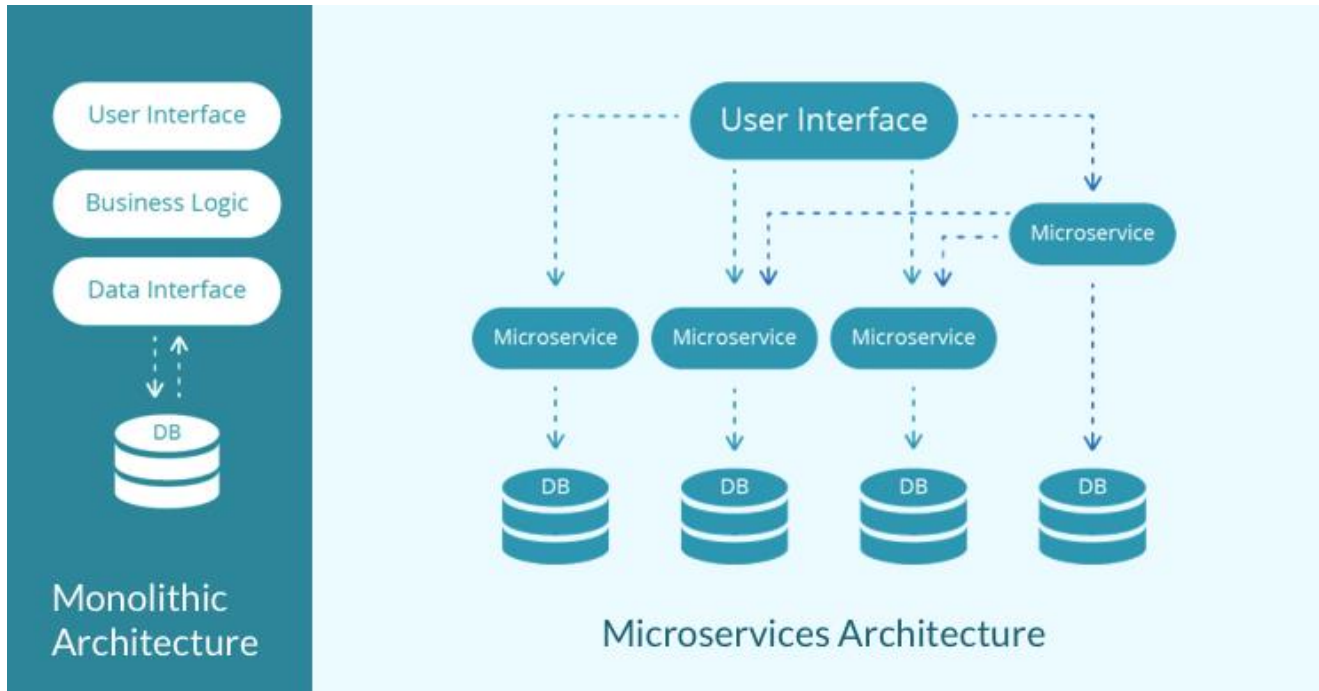
The background features a large white circle on a black field. To the left, a grey circle overlaps the white one. To the right, several thin white concentric circles are visible, partially overlapping the white circle and the black background.

Microservices & Serverless

Microservices - also known as the Microservice architecture –

is an architectural style that structures an application as a collection of services that are

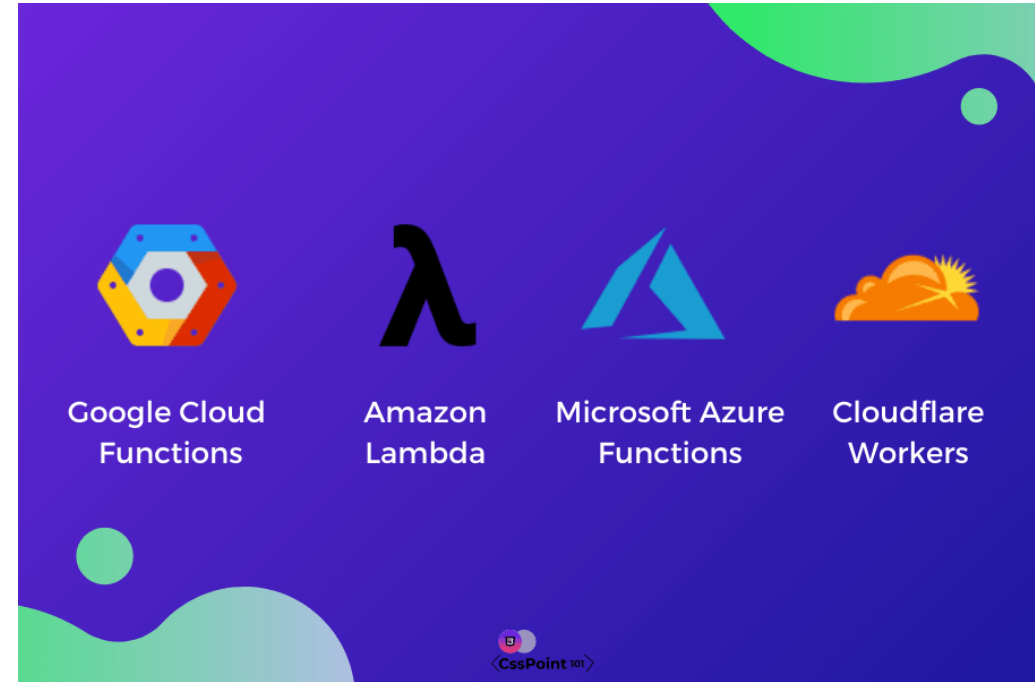
- *Highly maintainable and testable*
- *Loosely coupled*
- *Independently deployable*
- *Organized around business capabilities*
- *The microservice architecture enables the rapid, frequent and reliable delivery of large, complex applications.*
- *It also enables an organization to evolve its technology stack*



Serverless is

where you don't have to think about:

- *Servers*
- *Being over/under capacity*
- *Deployments*
- *Scaling and fault tolerance*
- *OS or language updates*
- *Metrics and logging*



...but where you can easily

- *Bring your own code... even native libraries*
- *Run code in parallel*
- *Create backend, event handlers, and data processing systems*
- *Never pay for idle!*



AWS Lambda

AWS Lambda – Benefits

1

SERVERLESS



2

EVENT-DRIVEN SCALE

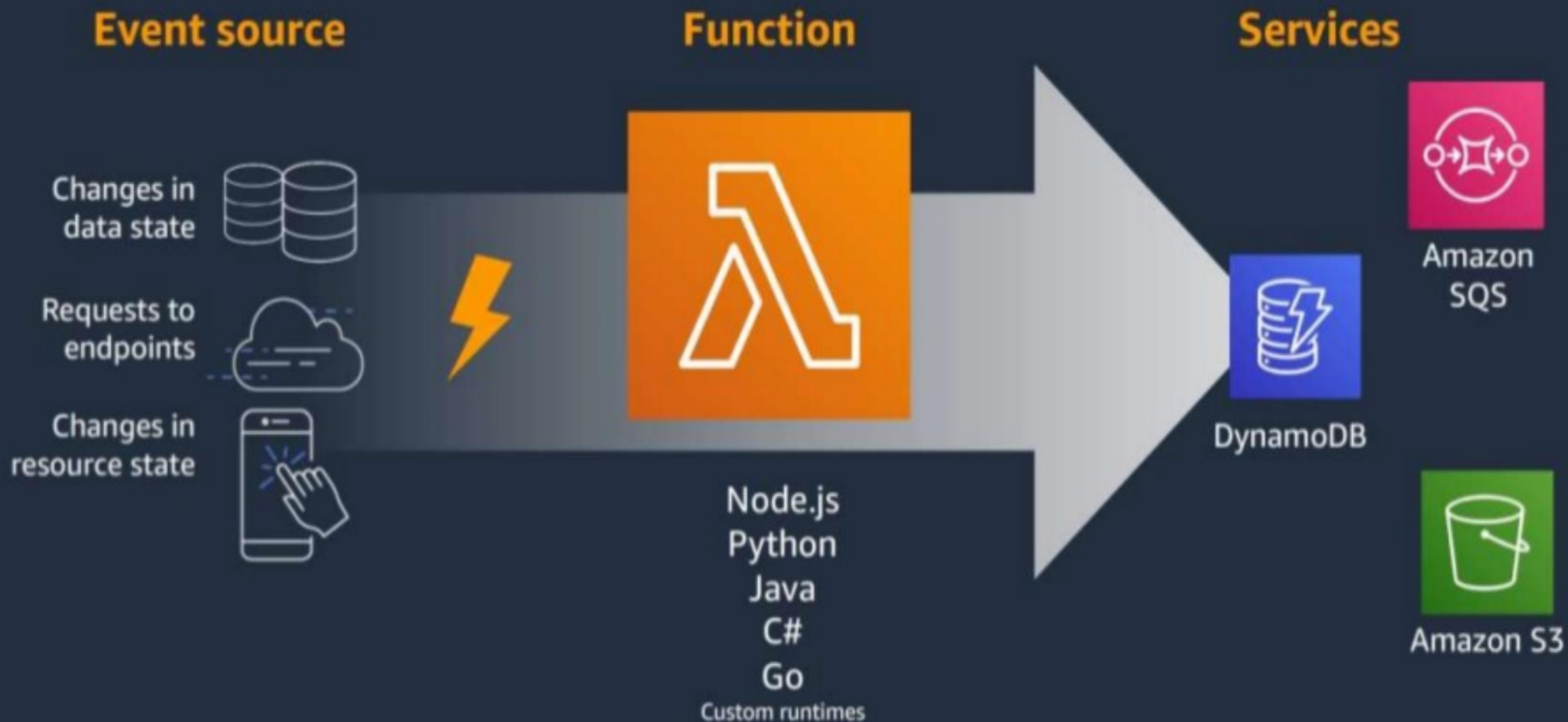


3

SUBSECOND BILLING



How AWS Lambda works?



The Lambda functions have a few limits applied to them:

- **Cold Starts**
- **Execution time/run time.**
15 minutes runtime limit
- **Memory available to the function.**
The options for the amount of RAM available to the Lambda functions range from 128MB to 3,008MB with a 64MB step.
- **Code package size.**
The zipped Lambda code package should not exceed 50MB in size, and the unzipped version shouldn't be larger than 250MB.
- **Concurrency.** 1000 request soft limit

The background is black. A large white circle is centered on the slide. To the top-left of the white circle, there is a dark gray circle with a lighter gray circle inside it, both partially overlapping the white circle. To the bottom-right of the white circle, there are several concentric white circles of varying sizes, also partially overlapping the white circle.

**Lets create a
function**

AWS Management Console

AWS services

Find Services

You can enter names, keywords or acronyms.

 ×

- Lambda**
Run Code without Thinking about Servers
- Amazon Lex
Build Voice and Text Chatbots
- CodeBuild
Build and Test Code
- IoT 1-Click
Trigger AWS [Lambda](#) functions from simple devices

Launch a virtual machine

With EC2

2-3 minutes



Build a web app

With Elastic Beanstalk

6 minutes



Access resources on the go



Access the Management Console using the AWS Console Mobile App. [Learn more](#)

Explore AWS

CloudEndure Migration

Re-host a large number of machines to AWS without worrying about compatibility, performance disruption, or long cutover windows. [Get started](#)

EC2 Spot Instances

Run fault-tolerant workloads on Spot Instances and save up to 90% on compute. [Learn more](#)

Amazon RDS



Services ▾

Resource Groups ▾



wizard ▾

N. Virginia ▾

Support ▾

AWS Lambda



Dashboard

Applications

Functions

Layers

Lambda > Functions

Functions (5)



Actions ▾

Create function

🔍 Filter by tags and attributes or search by keyword



1



	Function name ▾	Description	Runtime ▾	Code size ▾	Last modified ▾
<input type="radio"/>	serverless-kendo-pomodoro-dev-postPomodoro		Node.js 8.10	3.5 kB	9 months ago
<input type="radio"/>	weather-forecast-dev-openweathermap		Node.js 8.10	7.4 MB	2 months ago
<input type="radio"/>	serverless-kendo-pomodoro-dev-getPomodoros		Node.js 8.10	3.5 kB	9 months ago
<input type="radio"/>	weather-forecast-dev-darksky		Node.js 8.10	7.4 MB	2 months ago
<input type="radio"/>	weather-forecast-dev-dest		Node.js 8.10	7.4 MB	2 months ago

Lambda Management Console

console.aws.amazon.com/lambda/home?region=us-east-1#/create/function

Incognito

Services

Resource Groups

wizard

N. Virginia

Support

Lambda > Functions > Create function

Create function

Choose one of the following options to create your function.

Author from scratch

Start with a simple Hello World example.

Use a blueprint

Build a Lambda application from sample code and configuration presets for common use cases.

Browse serverless app repository

Deploy a sample Lambda application from the AWS Serverless Application Repository.

Basic information

Function name

Enter a name that describes the purpose of your function.

sampleFunction

Use only letters, numbers, hyphens, or underscores with no spaces.

Runtime

Choose the language to use to write your function.

Node.js 10.x

Permissions

Lambda will create an execution role with permission to upload logs to Amazon CloudWatch Logs. You can configure and modify permissions further when you add triggers.

► Choose or create an execution role

Cancel

Create function

sampleFunction

Throttle Qualifiers Actions Select a test event Test Save

Function code Info

Code entry type

Edit code inline

Runtime

Node.js 10.x

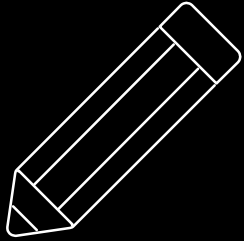
Handler Info

index.handler

```
File Edit Find View Go Tools Window
Environment
sampleFunction
index.js
1 exports.handler = async (event) => {
2   // TODO implement
3   const response = {
4     statusCode: 200,
5     body: JSON.stringify('Hello from Lambda!'),
6   };
7   return response;
8 };
9
```


To-Do

Lambda functions with API gateway/s3



Thank You!!

