

# OpenFaaS

Functions as a Service



OPENFAAS

# Serverless Functions Made Simple

# Serverless

Serverless processing allows you to create builds and run applications and services **without having to manage any servers**. Serverless applications do not require provisioning, scaling or server management. They can adapt to almost any type of back-end application or service; all the operations necessary for the execution and **scalability** of the application will be managed **automatically**.

# Advantages

## **Cost**

Only the necessary resources are used, the capacity will be optimized based on the units needed.

## **Scalability**

Application resources will be recalibrated automatically.

## **No Server Management**

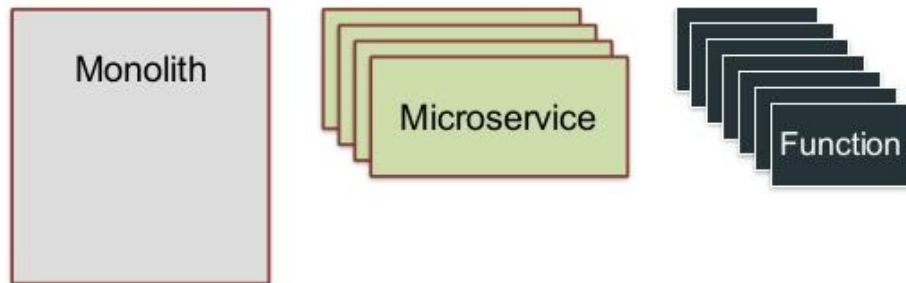
It is not necessary to allocate or manage servers.

# Functions as a Service

Function-as-a-Service (FaaS) offers the possibility to implement what is essentially a single function.

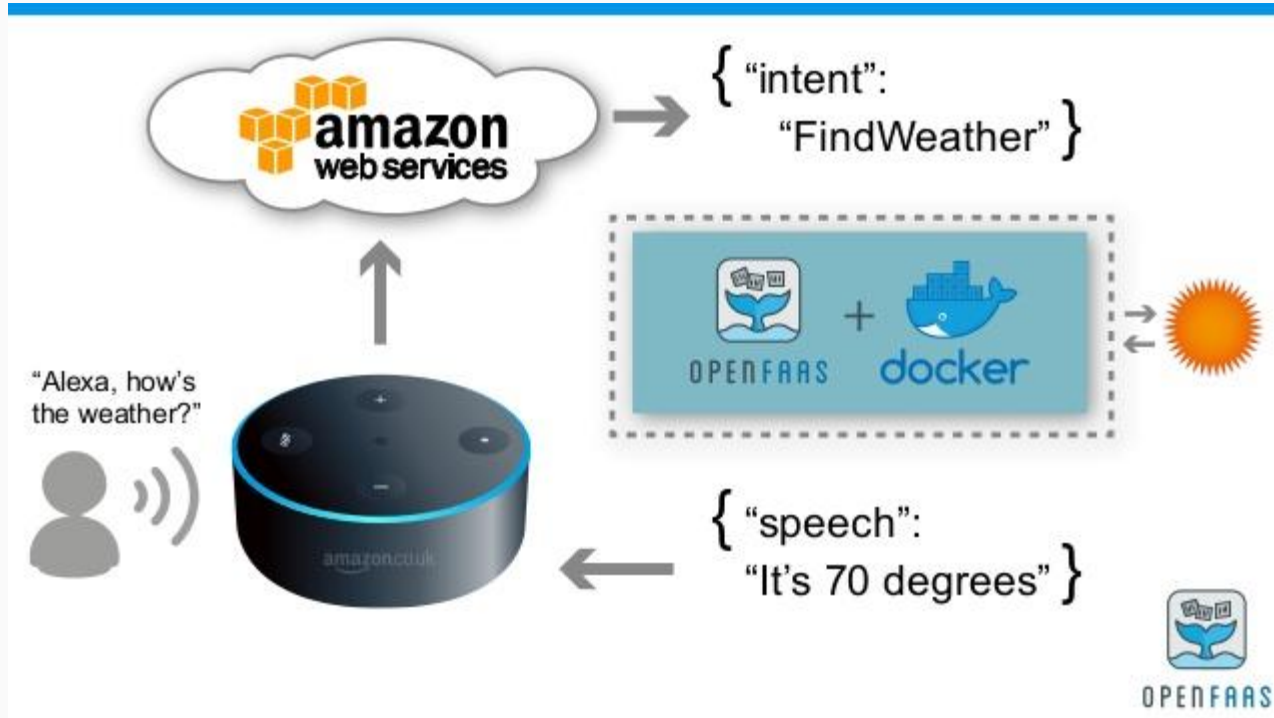
Complete server **abstraction** from the developer.

## What is Serverless?



Serverless evolution

# How OpenFaaS works



# OpenFaaS Structure

OpenFaaS (Functions as a Service) is a framework for building serverless functions with Docker and Kubernetes which has first class support for metrics. Any process can be packaged as a function enabling you to consume a range of web events without repetitive boiler-plate coding.

## Functions as a Service

API Gateway

Function Watchdog



Prometheus



Swarm



Kubernetes



docker

# Demo Time

Some example functions

FaaS Gateway

NEW FUNCTION

func\_wordcount

**func\_markdown**

func\_nodeinfo

func\_hubstats

func\_echoit

func\_decodebase64

func\_webhookstash

func\_markdown

Replicas1Invocation count40

Imagealexellis2/faas-markdownrender:latest@sha256:c1b0245042afe172c693f725100c6e8a5078a9%

Invoke function

INVOKE

☒ Text

☐ JSON

Request body

Invoke functions with 'curl' or use the web portal - this will give the count of public repos on the Docker hub for a user.

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# curl -X POST -d "alexellis2" -v http://localhost:8080/function/func\_hubstats

\*\*\*

Response status

200

Response body

<p>Invoke functions with <code>curl</code> or use the web portal - this will give the count of public repos on the Docker hub for a user.</p>

<pre><code># curl -X POST -d "&#34;alexellis2&#34; -v



# Thank You!



**GitHub Project**

<https://github.com/jacopo1395/openfaas>



**LinkedIn**

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