

# **OpenFaaS**

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## Agenda

Motivation

Serverless Architecture

OpenFaaS

Installation

A Simple Web Application - ML FaaS

Conclusion

#### References



### Motivation

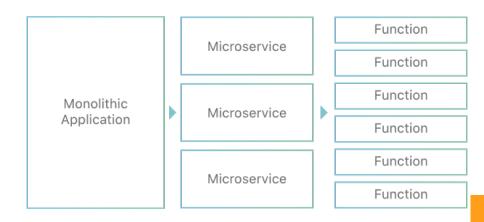
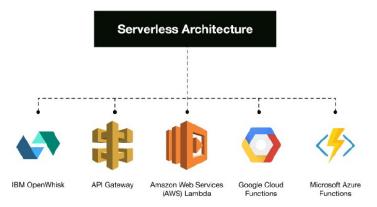


Figure: The Evolution [1]



## Serverless Architecture

- What is Serverless Architecture?
- Purpose
- Serverless Providers [2]



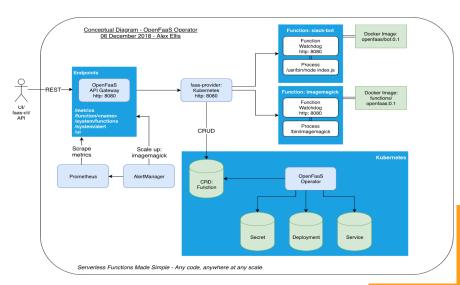


# What is OpenFaaS?

- An open-source Framework
- Serverless Functions, Made Simple!
- Anywhere | Any Code | Any Scale
- Start the Journey | Premium Subscription | OpenFaaS Pro [3]



# OpenFaaS Architecture [4]





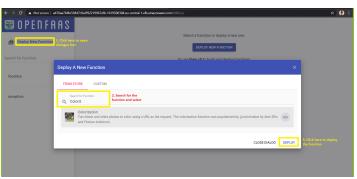
#### Installation

- Single-Node Kubernetes Cluster Minikube
- Multi-Node Kubernetes Cluster
  - Custom Based AWS
  - Using Managed Service AWS EKS



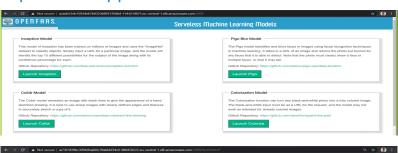
## **Functions**

- Life Cycle of Functions
  - Create
  - Build
  - Push
  - Deploy
  - Invoke
- OpenFaaS Store





## A Simple Web Application - ML FaaS







# Monitoring of Functions

#### Prometheus



#### Grafana





#### Conclusion

- Cutting-edge Framework for Serverless functions
- OpenFaaS can be integrated with any cloud-orchestration tool
- Productionized solutions with Kubernetes
- Communication through Gateway can be encrypted with Ingress component of Kubernetes
- Experiment before Use



### References



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