Fn(Oracle)

Fn logo from Oracle

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What is it?

- Open source serverless function developed by Oracle
- Apache 2.0
- Written in GO
- Same team who developed IronFunction

Motivation

We believe that an open container native cloud platform based on Docker and Kubernetes is the future. As such we want to ensure that anyone can write and deploy functions to any cloud provider so that customers have choice. That said, we intend to compete hard to make sure that our cloud infrastructure is the best platform to run those functions.

Motivation cont.

- Open Source serverless
- Local test/develop environment
- Cloud agnostic
- Support multiple languages
- Cross platform

How has it evolved?

- The rise of Docker
- Severless popularity
- Orchestration tools
- New use cases and platform are getting develop on top of serverless

Features

- One dependency: Docker
- GUI
- Load balancer
- Fn Flow
- Use with other orchestration tool
- Better Java support
- FDK for many popular languages
- Lambda code compatibility
- Add-ons/integration

Example Use Cases

- Test environment prior to pushing to other serverless platforms
- Setup own personal Faas
- Customize own version for production use
- Anywhere else you'd use serverless...

Advantages

- Open Source
- Currently really active(10 point releases per week)
- Cloud Agnostic (run local, on EC2, or anywhere else)
- Quick, easy setup
- Modification is allowed
- Good community support
- **Potentially free**

Disadvantages

- Not serverless in the conventional sense
  - Still requires setting up a server, installing Docker and Fn
- Relatively new, many features are still being worked on and risked of unmaintained
- Doesn't provide premium support for specific bugs
- Document may be missing some instruction
- Risk of backward incompatible/feature cut from new updates

Usability

- Very straightforward
- Github page has several quickstart tutorials
- Get an instance up and running in under 5 minutes (mostly install time)

Cost

- Unlike many other services, this is entirely dependent on you
- Example:
    - Running on personal hardware: free
    - Running on public cloud: resource charge by cloud provider

Alternatives

Iron function

OpenWhisk

And then… the other, mainstream serverless offerings

Conclusions

- Community driven project
- Great at flexibility of customization
- Free serverless platform
- Backed by Oracle
- Source code available
- Cross platforms: cloud and OS
- Greater space for researching/ improvement implement

Demo...