Serverless with Docker

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Chief Technologist

dockercon 16

@normalfaults @boozallen

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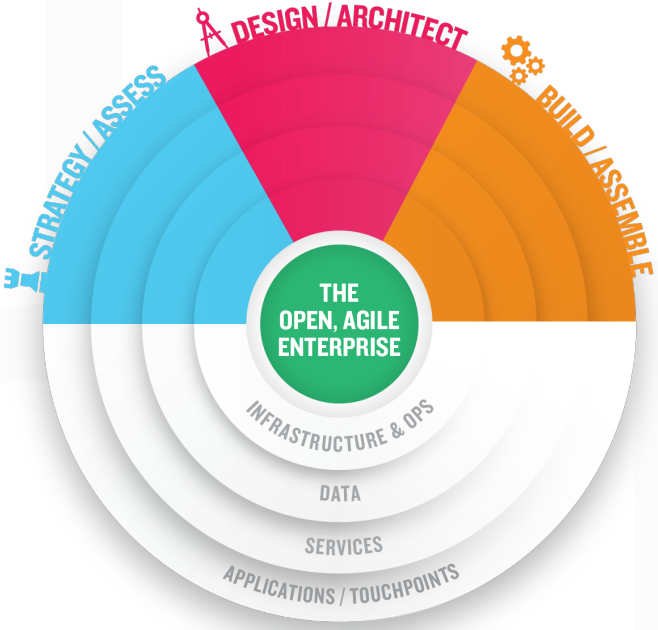
100 YEARS

Premium Information Technology Consulting

- **Premier Docker Partner**
- **Our client was the FIRST Docker Customer!**
- **Solving challenging client problems with Open Solutions**
- **Check out our booth G29 for more info!**



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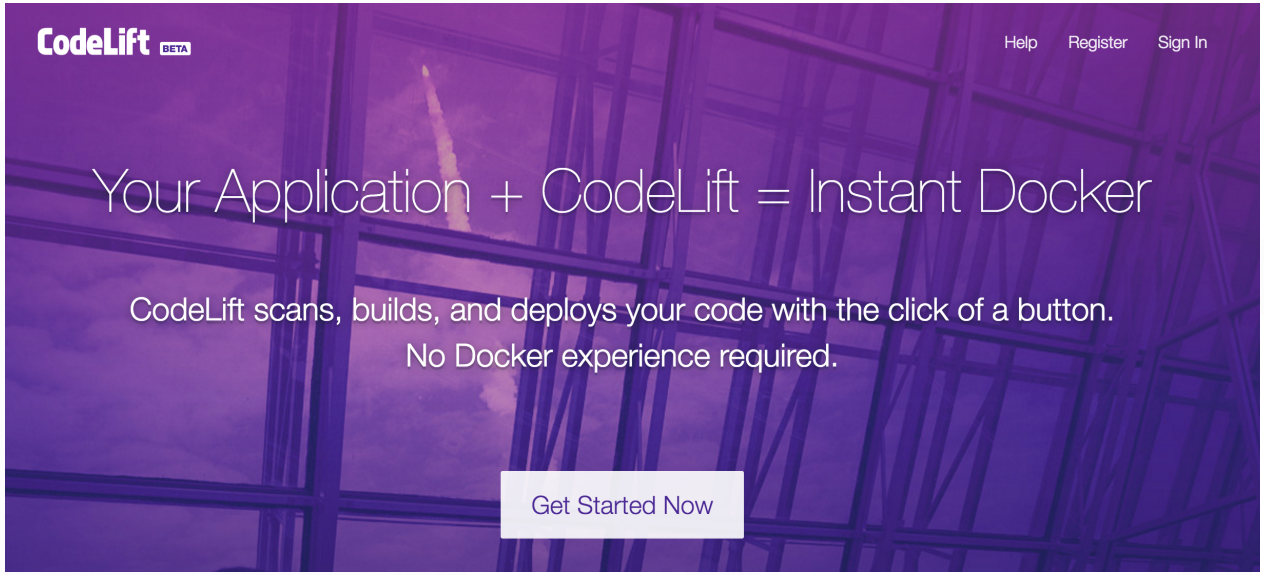
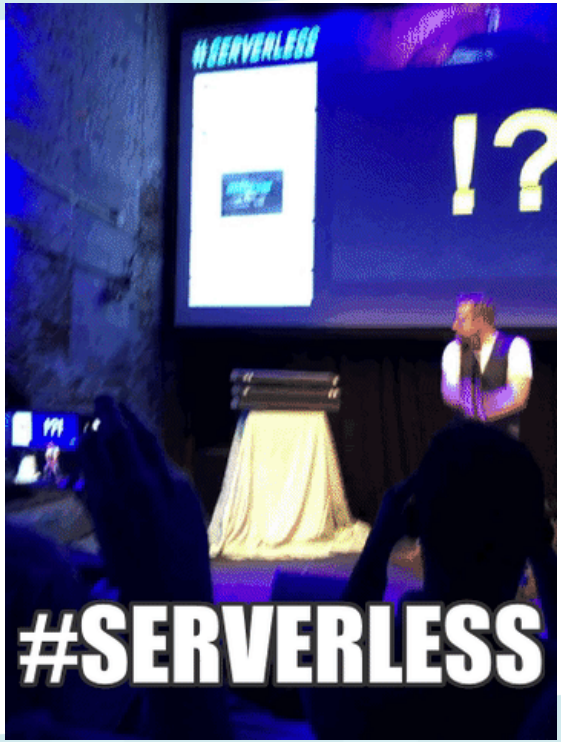
CodeLift.io


CodeLift BETA
Help
Register
Sign In
Your Application + CodeLift = Instant Docker
CodeLift scans, builds, and deploys your code with the click of a button.
No Docker experience required.
Get Started Now

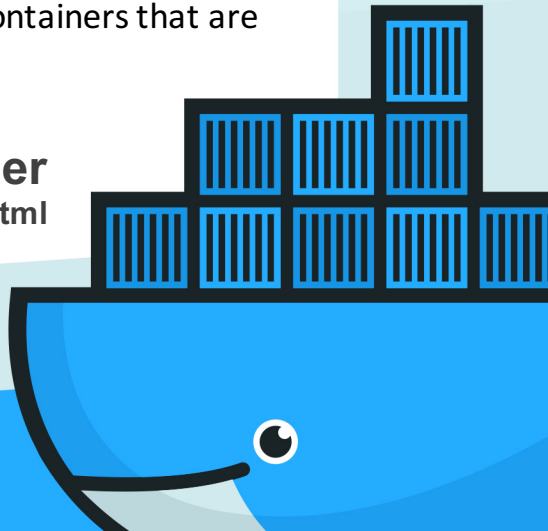

#SERVERLESS
!?
#SERVERLESS

“Serverless was first used to describe applications that significantly or fully depend on 3rd party applications / services (‘in the cloud’) to manage server-side logic and state. Backend-as-a-Service ”

“Applications where some amount of server-side logic is still written by the application developer but unlike traditional architectures is run in stateless compute containers that are event-triggered, ephemeral and fully managed by a 3rd party. Functions-as-a-service”

— Martin Fowler

http://martinfowler.com/articles/serverless.html



State of Serverless

It’s early days!

SERVERLESS

Serverless.com (Oct 2015)

It is,

- Open Source web framework written in node.js, for building complex AWS Lambda applications
- Supports python and node.js functions

But,

- Only supports AWS Lambda, AWS API Gateway

Bottom Line

- Basically makes using Lambda more structured and introduces microservices design

IronWorker

Iron.io

It is,

- Platform that delivers infrastructure agnostic workload management with three components: worker, event queue and kv Data Cache
- Supports any docker image as a worker (basically supports any language as the worker function)

But,

- Proprietary platform, risk of lock-in

Bottom Line

- Get a robust lambda like service on any cloud and infrastructure platform

Dockaless

iopipe.com

It is,

- **Open source toolkit to build and orchestrate event driven serverless applications**
- **Supports AWS Lambda, Docker, Google Cloud Functions**

But,

- **Still pretty new (alpha)**

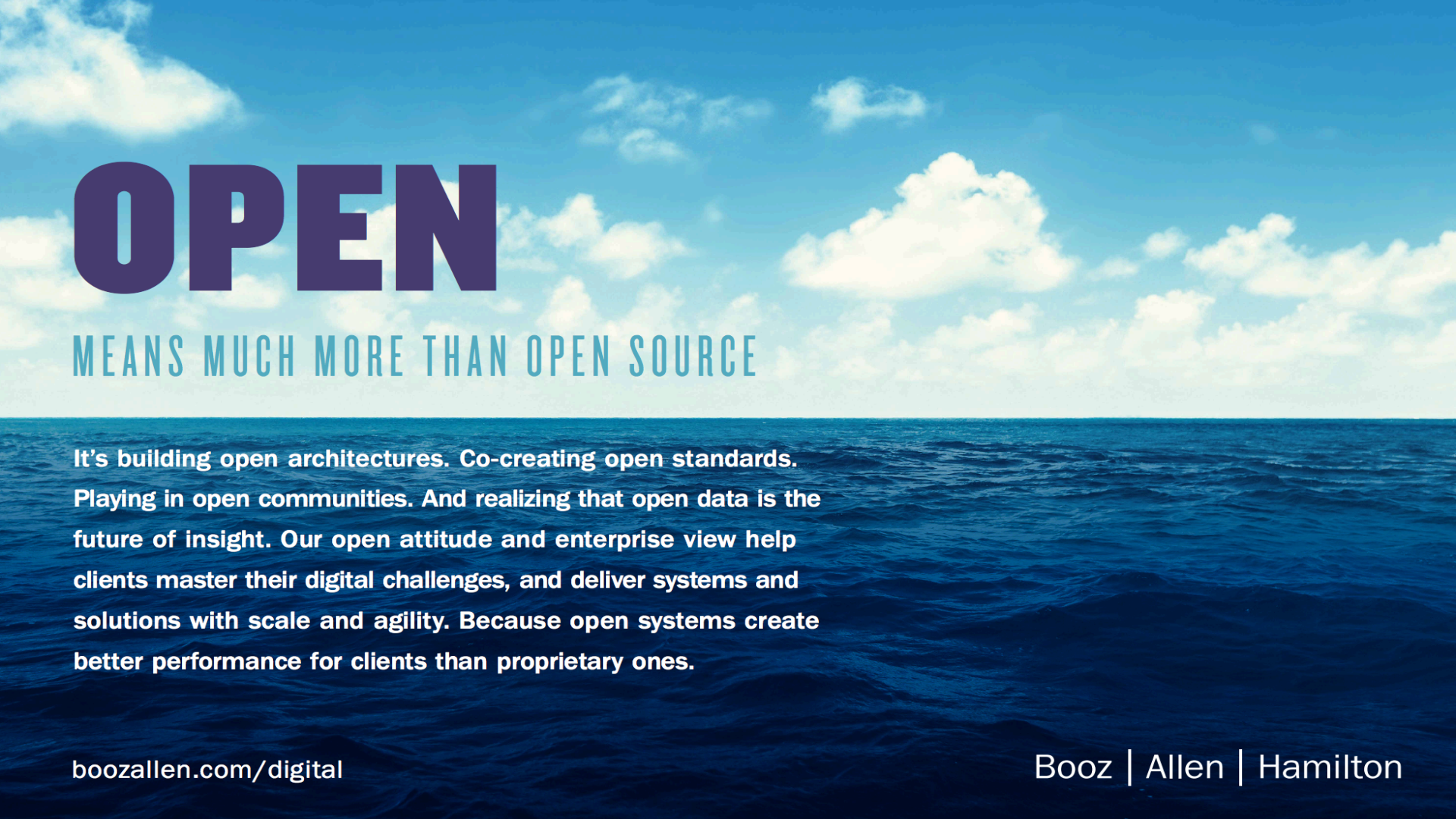
Bottom Line

- **Give it a go!**

Demo – Dockaless

```
var Dockaless = require("dockaless")
var dals = Dockaless({
    protocol: 'https',
    host: '127.0.0.1',
    port: process.env.DOCKER_PORT || 2375,
    ca: fs.readFileSync('ca.pem'),
    cert: fs.readFileSync('cert.pem'),
    key: fs.readFileSync('key.pem')
})
export.handler = dals.make_lambda("ubuntu", [ "whoami" ])
```

Wait can’t we just use Docker for serverless like this morning’s Demo?


OPEN
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Thank you!