

Hack FaaS

Leveraging Docker and OpenFaaS for fun and offensive (security) profit.



@_devalias #hackFaaS

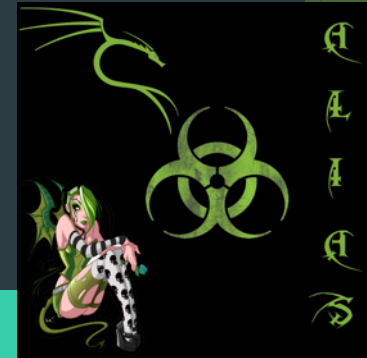


Who am I?

- ▶ Glenn 'dealias' Grant
 - ▶ <http://dealias.net/>
 - ▶ https://twitter.com/_dealias
 - ▶ <https://github.com/0xdealias>
 - ▶ <https://www.linkedin.com/in/glenn-dealias-grant/>
- ▶ Penetration Tester @ TSS
- ▶ Polyglot Developer
- ▶ And a few other things..
 - ▶ Biohacker, Bulletproof Coach, Snowboarder, Scuba, Skydiver..



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What is Docker?

- ▶ <https://www.docker.com/>
- ▶ Container: Lightweight 'virtualisation', shared kernel
- ▶ Data is layered, layers are shared
 - ▶ Alpine Linux base image < 5mb!
- ▶ **DevOps:** Clusters, deployment, static environments..
- ▶ **Me:** Toolkit on every box with no more system clutter!
 - ▶ `docker run --rm devalias/gobuster -h`

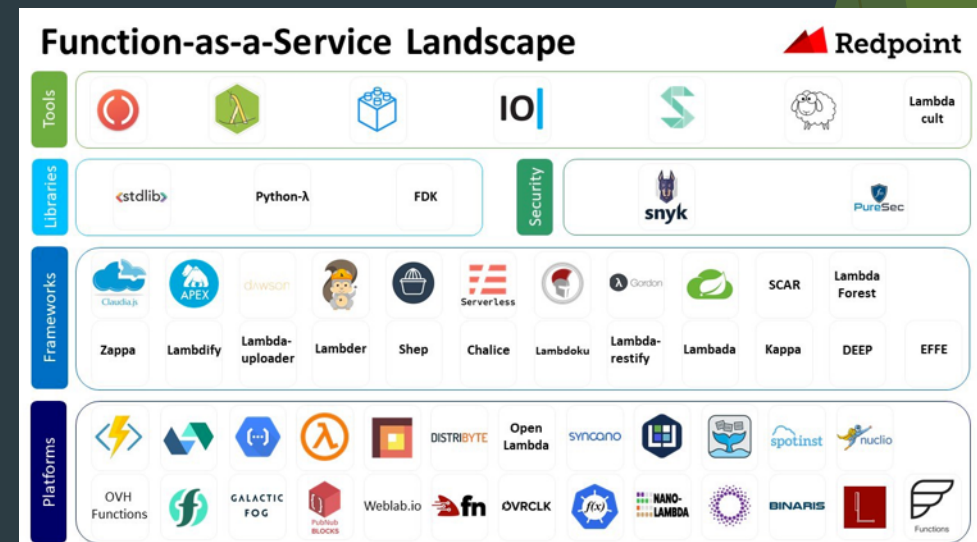


A FaaS intro to Serverless

- ▶ Still uses servers, they're just #InTheCloud™ (and somebody else's problem)
- ▶ While we're ditching servers, let's drop the frameworks too!
 - ▶ Function as a Service (FaaS)
- ▶ Decompose applications into individual functions and microservices



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OpenFaaS

- ▶ <https://www.openfaas.com/>
 - ▶ “Serverless Functions Made Simple”
- ▶ Run ‘cloud functions’ locally, with the full power of Docker
 - ▶ `faas-cli build -f https://hakt.us/funcs.yml`
 - ▶ `faas-cli deploy -f https://hakt.us/funcs.yml`
 - ▶ `echo "Hack" | faas-cli invoke TheGibson > /root/.workspace/.garbage`



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Workshop

- ▶ “I’m too young to die” (Easy Mode, recommended)
 - ▶ We’ll use the free online ‘Play with Docker’ environment
 - ▶ <https://github.com/Oxdevalias/hack-FaaSter>
- ▶ “Hey, not too rough” (Medium Mode)
 - ▶ Install Docker (Community Edition) locally, then play along
 - ▶ Mac should be straightforward, Windows is more of a challenge because Hyper-V
- ▶ “Nightmare” (Hard Mode)
 - ▶ I don’t need no instructions! I’ll do it myself!
 - ▶ Docker, OpenFaaS, OpenFaaS CLI.. You’re on your own now.



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Upcoming Talks

- ▶ CSides Canberra
 - ▶ “Gophers, whales and.. clouds? Oh my!” v0.2-alpha
 - ▶ Friday, November 17, 2017 (~6pm)
 - ▶ <http://www.bsidesau.com.au/csides.html>
- ▶ BSides Wellington
 - ▶ “Gophers, whales and.. clouds? Oh my!”
 - ▶ Thursday, November 23, 2017 (3:30pm - 4:00pm)
 - ▶ <http://bit.ly/BSidesWLG-devalias>



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Resources

- ▶ Docker

- ▶ <https://www.docker.com/>

- ▶ OpenFaaS

- ▶ <https://www.openfaas.com/>

- ▶ <https://github.com/openfaas/faas>

- ▶ <https://github.com/openfaas/faas-cli>

- ▶ Community Functions: <https://github.com/faas-and-furious>

- ▶ Blogs & Talks:

- <https://github.com/openfaas/faas/blob/master/community.md>



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