



Painless Serverless Function Development In Kubernetes



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Hey everyone!

- Co-founder of Okteto.
- Former architect @ Atlassian, Software Engineer @ Azure.
- @rberrelleza in most places.



**The Serverless Development
Experience is Broken.**

**The typical development
workflow looks like this:**

Write your function code locally.

Package the function.

Deploy your function.

Wait a few minutes.

Start end to end validation...

And you find an integration bug!



**Add a bunch of println
statements.**

Package the function.

Deploy your function.

Wait a few minutes. Again.



Success!
We know what went wrong.

Write your function code locally.

Package the function.



This is terrible.

THINK!



*is there a better
way to do it ?*

nt Efficiency starts with your ability

**What if we just run everything
locally?**

**Lambda and Netlify have pretty
good local simulators.**

yay!



But what if you need a database?

Or a queue?

Or a notification service?



**Do you really want to replicate
every single part of your function
locally?**



**THERE IS
A BETTER,
FAIRER
WAY.**



**How about we take the best of
both approaches...**

**... and develop our functions
directly where they are going to
be running?**





**With OpenFaas and Okteto you
can do exactly that!**

OpenFaaS

- Created by Alex Ellis, maintained by OpenFaaS Ltd.
- Write functions in any language.
- Runs on any Kubernetes instance.
- Ease of use through UI portal and one-click install.



Okteto

- Created by Pablo, Ramiro and Ramon.
- Deploy remote development environments directly in Kubernetes.
- Develop in the cluster, while keeping as much of the local experience as you want.





**OpenFaaS and Okteto together
let you iterate on your function
as fast as you can type.**

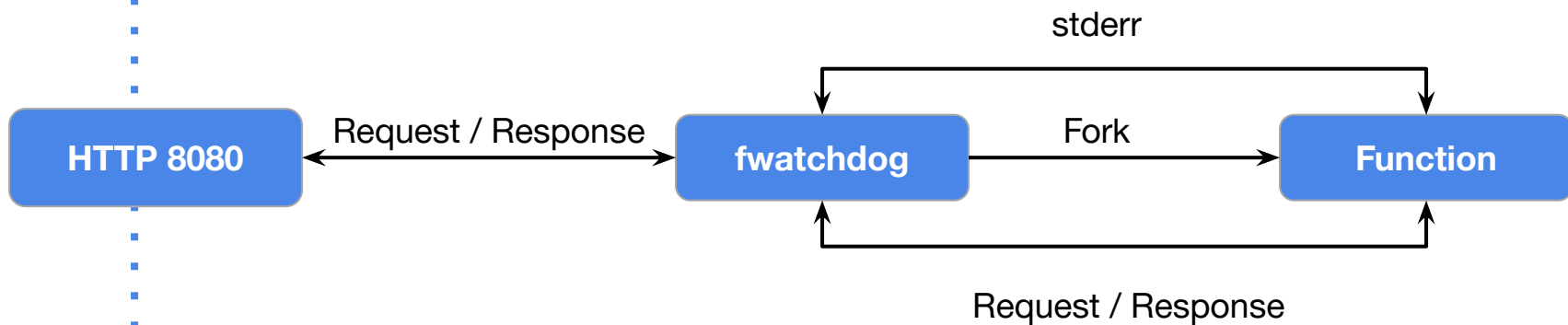


Demo time!

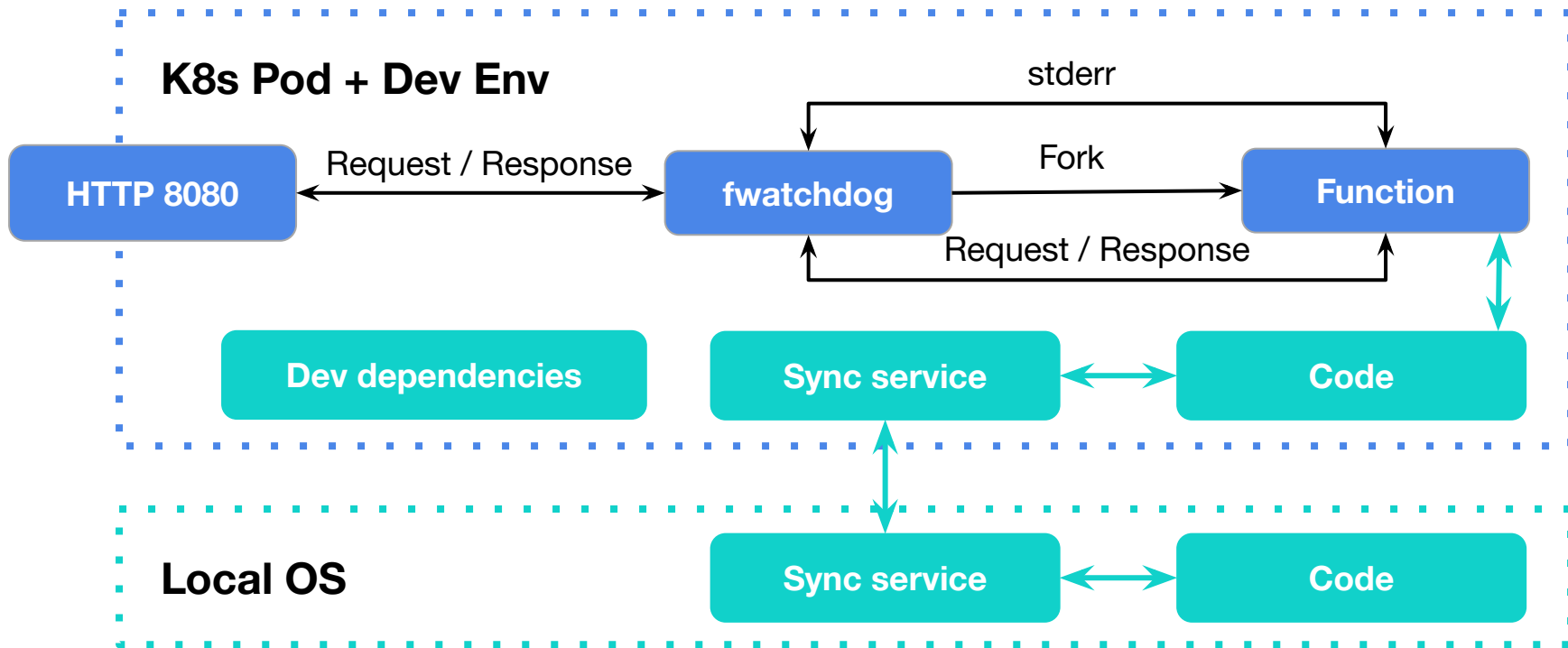
How does it work?

okteto + OPENFAAS

K8s Pod



okteto + OPENFAAS





But that's not all. Having a development environment like this lets us leverage all our existing toolkit.

Incremental builds.

Hot reloaders.

Debuggers!



Demo time!

Developing functions in the same environment as they are going to run lets us go way faster.

**You are not waiting on builds and
deploys.**

**You can leverage the entire
platform as well as your stack's
toolkit.**

**And you're fully integrated from
the very beginning.**

Q&A

Links!

- <https://github.com/openfaas/faas>
- <https://github.com/okteto/okteto>
- <https://github.com/rberrelleza/painless-serverless-development-with-kubernetes>
- <https://twitter.com/rberrelleza>



Thank you!



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