Sunil Shah

CONTAINERI{S|Z}ED CONTINUOUS DEPLOYMENT ON DC/OS

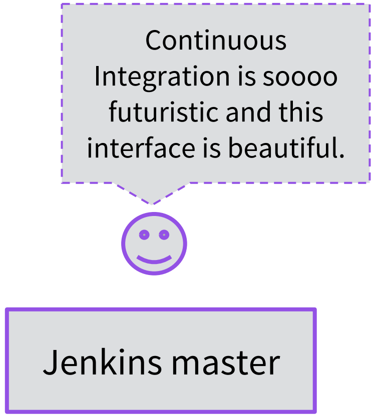
MESOSPHERE

JENKINS ON MESOS

(AND WHY YOU SHOULD PROBABLY BE RUNNING IT LIKE THIS)

Jenkins on Mesos

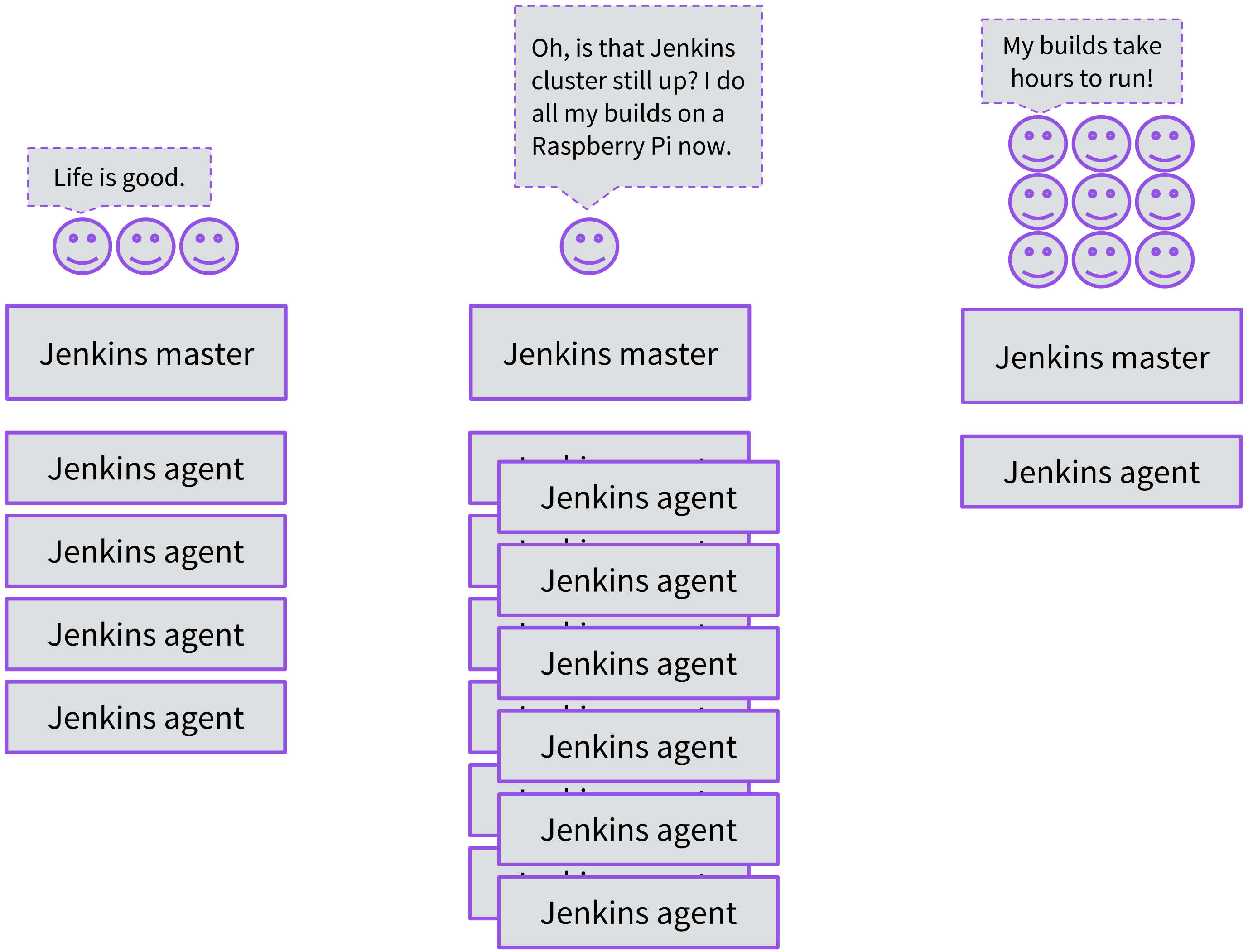
WHEN IT BEGAN



Continuous Integration is soooo futuristic and this interface is beautiful.

Jenkins on Mesos

THE OLD WORLD



Life is good.

Jenkins master

Jenkins agent

Jenkins agent

Jenkins agent

Jenkins agent

Oh, is that Jenkins cluster still up? I do all my builds on a Raspberry Pi now.

Jenkins master

Jenkins agent

Jenkins agent

Jenkins agent

Jenkins agent

Jenkins agent

Jenkins agent

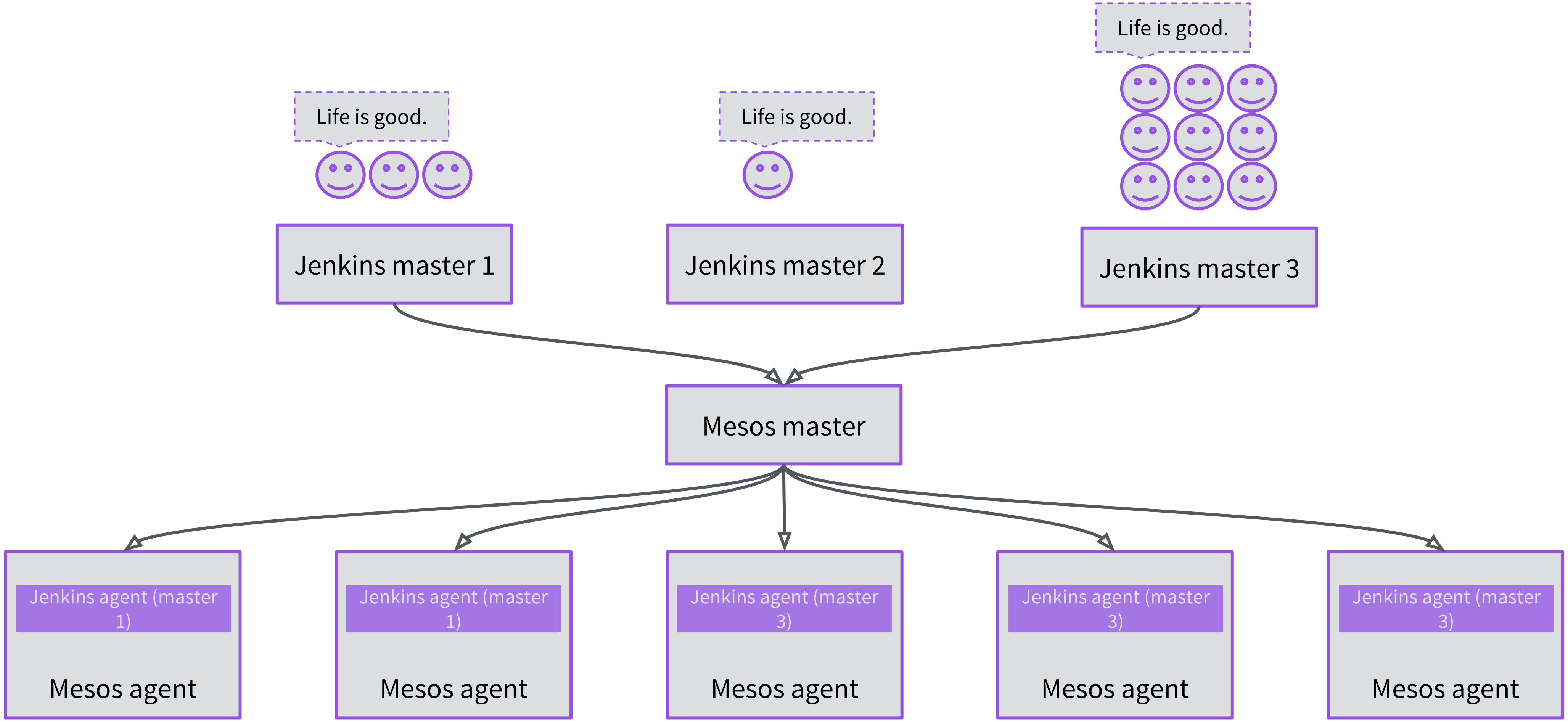
My builds take hours to run!

Jenkins master

Jenkins agent

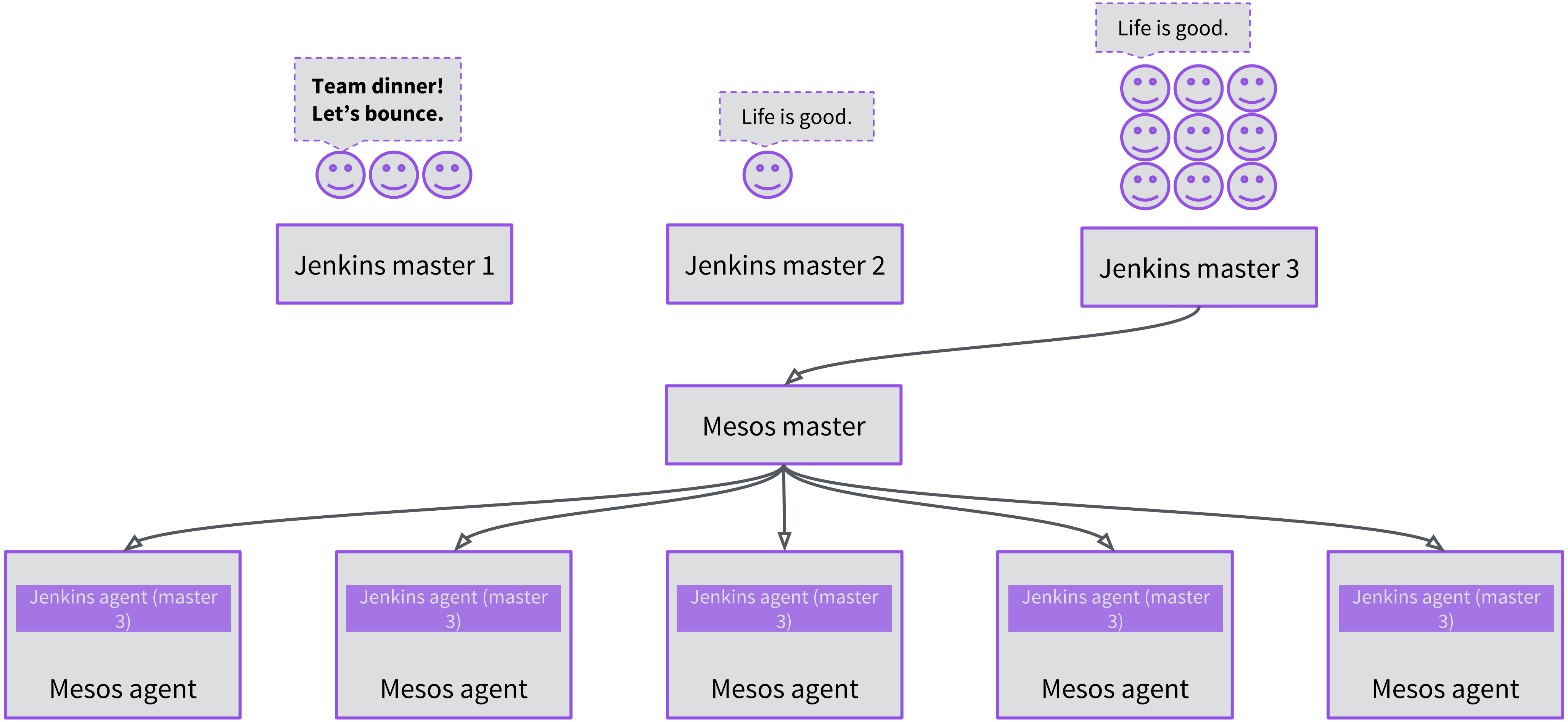
Jenkins on Mesos

JUST USE WHAT YOU NEED, WHEN YOU NEED IT AND SHARE THE ~~LOVE~~ RESOURCES



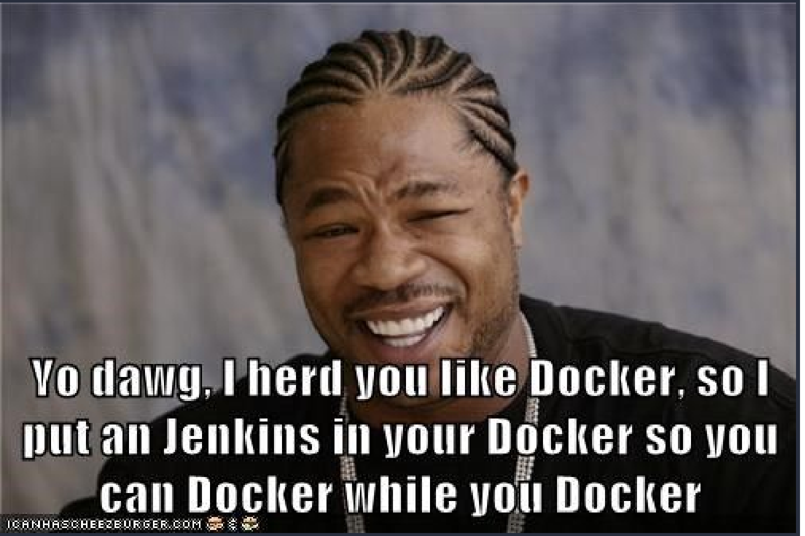
Jenkins on Mesos

JUST USE WHAT YOU NEED, WHEN YOU NEED IT AND SHARE THE ~~LOVE~~ RESOURCES



Jenkins on Mesos

BUILDING DOCKER IN DOCKER: ONE WEIRD TRICK


Yo dawg, I herd you like Docker, so I put an Jenkins in your Docker so you can Docker while you Docker
ICANHASCHEEZBURGER.COM

This brave new world of containers running in containers has a bit of a whale and whale egg* problem.

We run everything inside a container to make it easy to bundle dependencies and to isolate it from other processes.

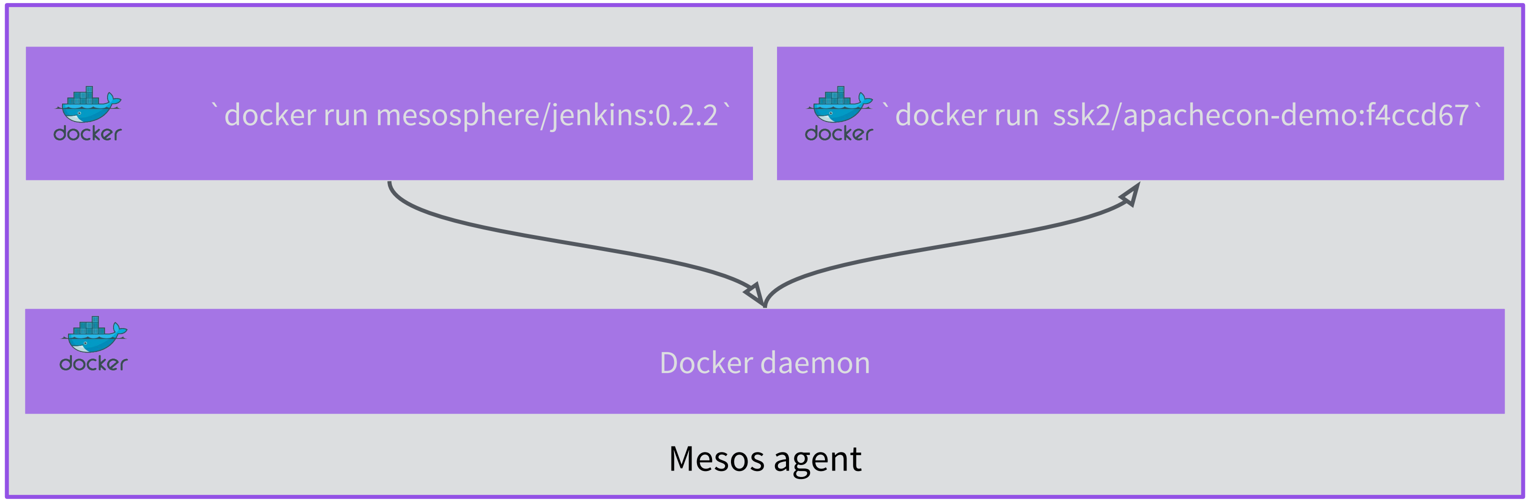
But when the thing that's running wants to build a container, what do you do?

*Yes, I know.

Jenkins on Mesos

BUILDING DOCKER IN DOCKER: ONE WEIRD TRICK

One recommended approach is to *bind mount* in the host system's Docker daemon.



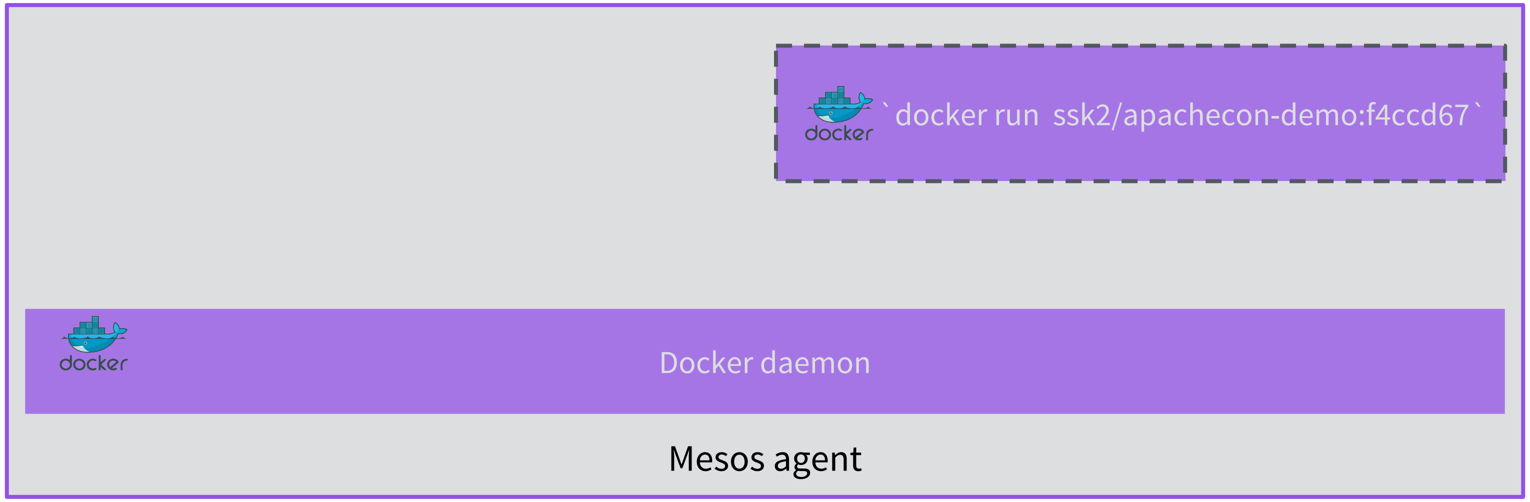
docker
`docker run mesosphere/jenkins:0.2.2`
docker
`docker run ssk2/apachecon-demo:f4ccd67`
docker
Docker daemon
Mesos agent

Jenkins on Mesos

BUILDING DOCKER IN DOCKER: ONE WEIRD TRICK

This doesn’t work for Mesos though! It doesn’t track containers that it doesn’t launch.

The sibling container becomes orphaned and runs forever.

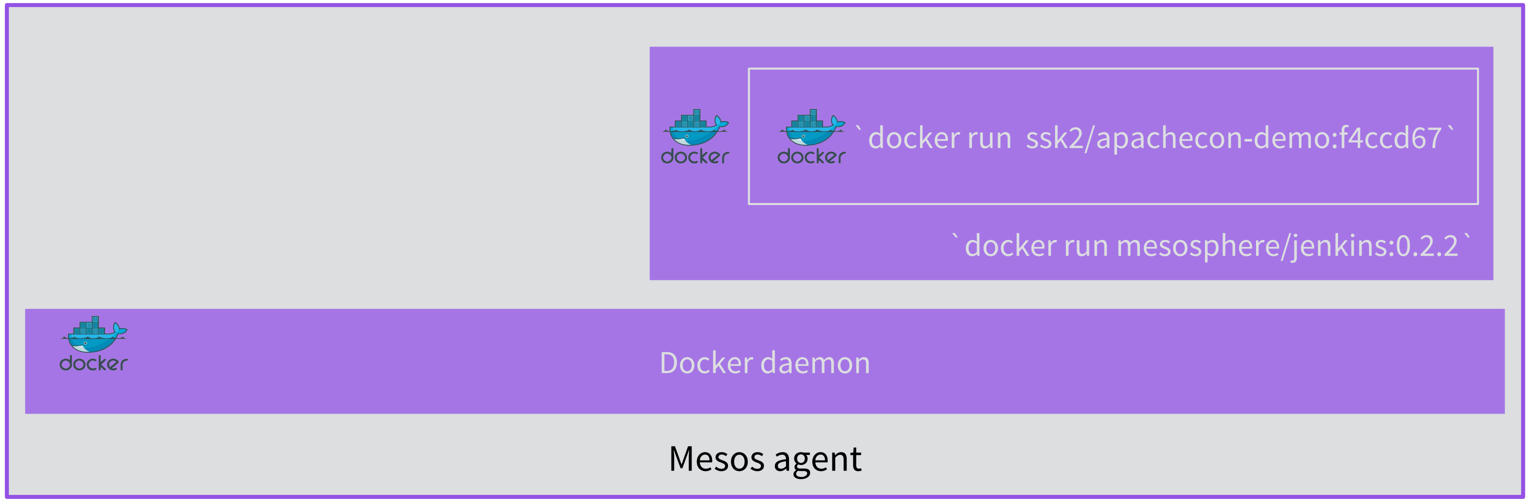


Jenkins on Mesos

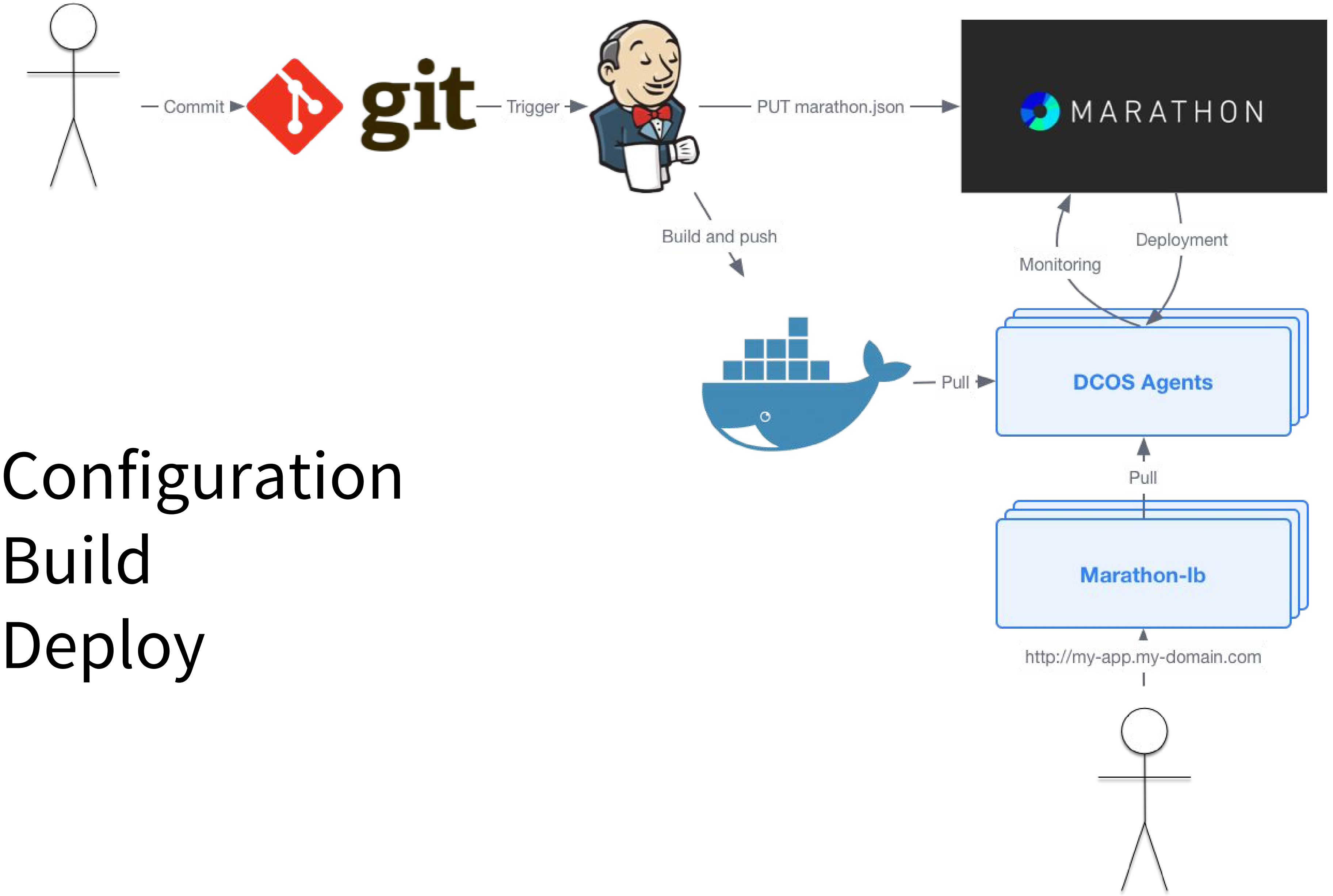
BUILDING DOCKER IN DOCKER: ONE WEIRD TRICK

Our solution is to use a customised Docker-in-Docker container.

This is a little slower but Mesos takes care of the resources!


docker
docker
`docker run  ssk2/apachecon-demo:f4ccd67`
`docker run mesosphere/jenkins:0.2.2`
docker
Docker daemon
Mesos agent

CONTINUOUS DEPLOYMENT



1. Configuration
2. Build
3. Deploy

THANK YOU!

Come and talk to us!

- Email me at sunil@mesosphere.io
- Slides will be up at http://mesosphere.github.io/presentations
- Check out https://dcos.io