

WHAT IS IT WE WANT IN CONTAINERS ANYWAYS?

Vincent Batts [@vbatts](#)

bit.ly/vbatts-containers-anyways
bit.ly/252kBnL

```
$> finger $(whoami)
```

```
Login: vbatts
```

```
Directory: /home/vbatts
```

```
Such mail.
```

```
Plan:
```

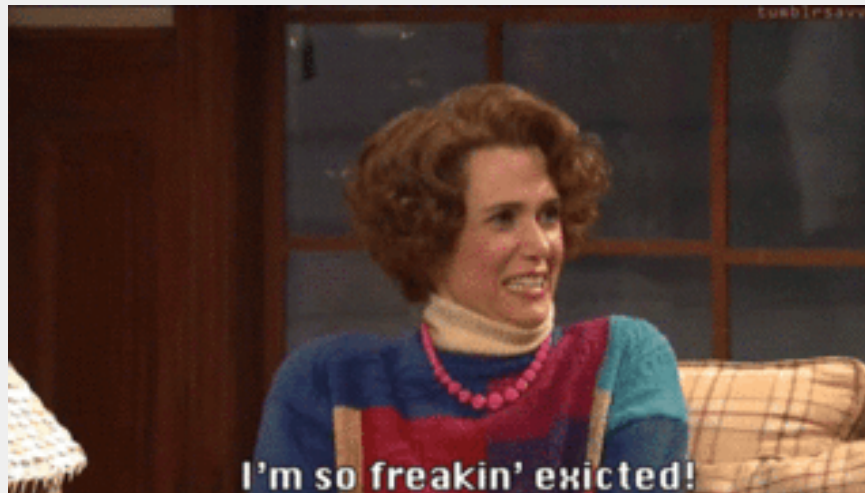
```
OHMAN
```

```
$> id -Gn
```

```
devel opencontainers docker appc redhat golang slackware
```

```
Name: Vincent Batts
```

```
Shell: /bin/bash
```



OPENSIFT
origin



SO, WHY, CONTAINERS?

Single Application

Full System

But Not a VM

Except Maybe a VM

Pods of applications

Labels of services

Non-root

Desktop Applications

OMG AND CATS

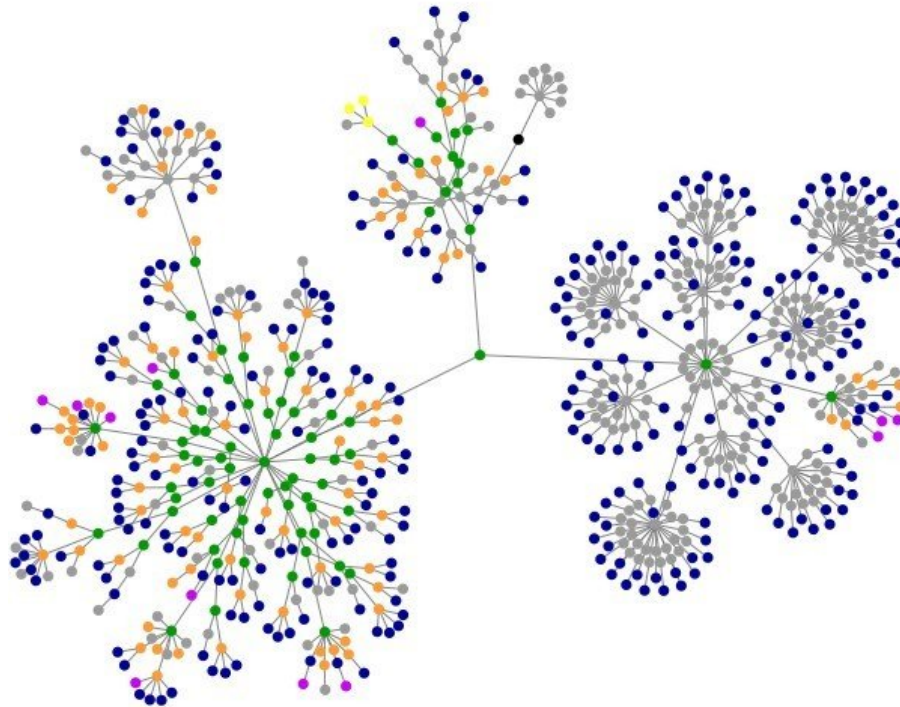


<https://www.flickr.com/photos/27549668@N03/>

But wait,
What does "container" mean to you?



But wait,
What does "container" mean to you?



USE-CASE

Reproducibility



USE-CASE

Ephemeral Environments



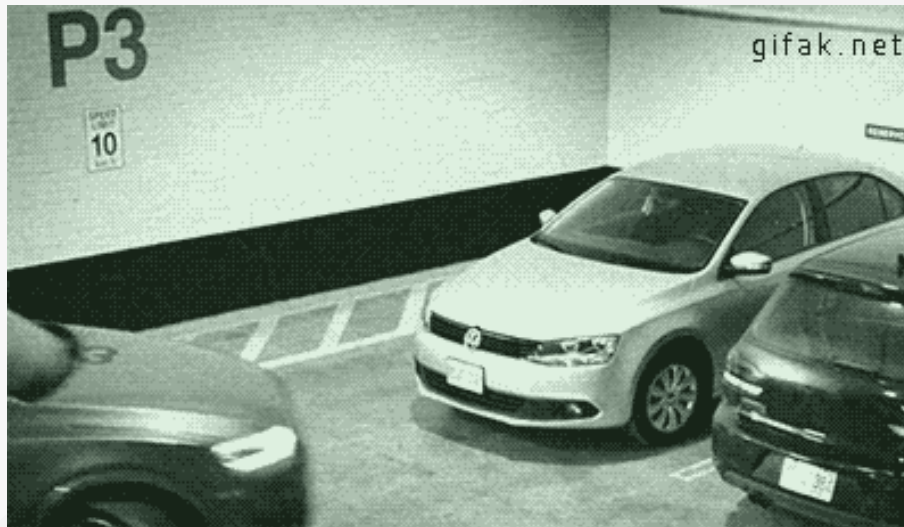
USE-CASE

Freedom from host restrictions



USE-CASE

Easy delivery



USE-CASE

Integrate to existing process



USE-CASE

Controls and knobs



BUILD

Dockerfile

Source to Image (github.com/OpenShift/source-to-image)

appc/acbuild (github.com/appc/acbuild)

Your own Makefiles?

SHARING

registry (i.e. docker-registry, dockyard)

Host it yourself (i.e. tarballs on an http server)

Share recipes!

TOOLS

LXC / LXD

Imctfy

Docker

systemd-nspawn

runC

bubblewrap

TECH

- Namespaces
- Resource Controls
- Security and Isolation

SYSTEMD

systemd directives

Security Slides (CoreOS Fest2016)

SHELL

unshare(1)

mount(8) shared subtrees

chroot(1)

procfs, sysfs, tmpfs

cgroup filesystem (not for the faint of heart)

STANDARDS!

Standard

/ˈstændəd/

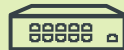
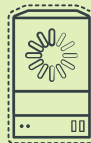
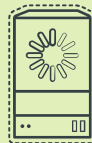
noun

something used as a measure, norm, or model in comparative evaluations

STANDARDS!

Areas to Standardize:

- Packaging
- Runtime
- Networking
- Cloud



Call to Action!

Define your use-cases **first**

Get involved in the conversations

Ensure your container integration touchpoint stay generic,
to avoid lock-in to a particular platform.

PoC tooling for your integration



VINCENT BATTS

@VBATTS | VBATTS@REDHAT.COM

THANKS!

