

STATE OF CONTAINER ECOSYSTEM

OCI POV

<http://bit.ly/2017-03-vb-containers>

Vincent Batts @vbatts

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

Login: vbatts

Name: Vincent Batts

Directory: /home/vbatts

Shell: /bin/bash

Such mail.

Plan:

OHMAN

```
$> id -Gn
```

devel opencontainers docker appc redhat golang slackware



CONTAINERS



(Cite: the internet)

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ECOSYSTEM

ECOSYSTEM



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ECOSYSTEM

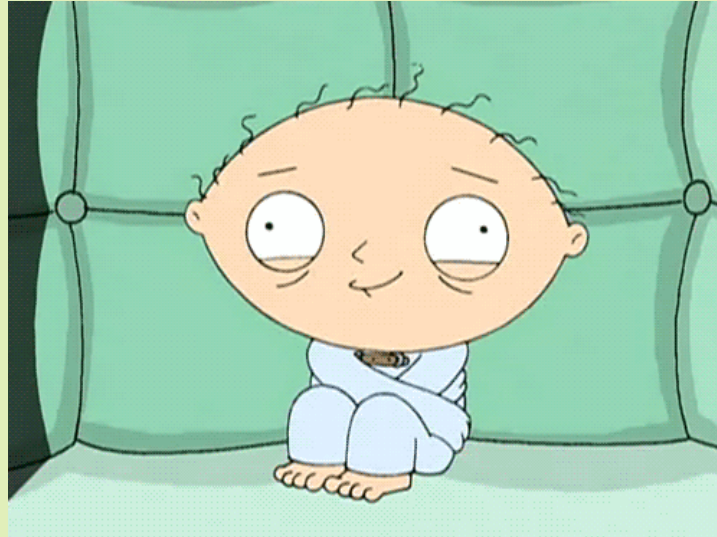


ECOSYSTEM

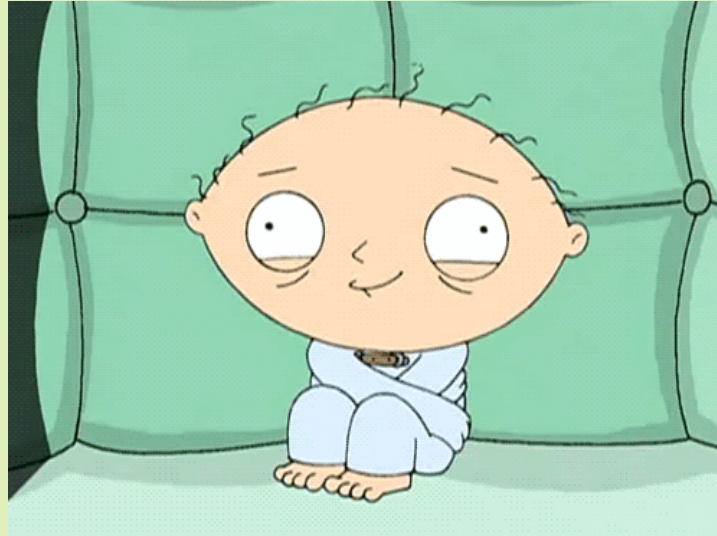


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ECOSYSTEM



ECOSYSTEM



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STANDARDS!

(Merriam-Webster)

STANDARDS!

Standard

/ˈstandəd/

noun

something established by authority, custom, or general consent as a model or example

(Merriam-Webster)

STANDARDS!



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STANDARDS!

Areas to Standardize:

STANDARDS!

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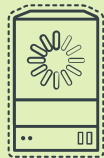
- Packaging



STANDARDS!

Areas to Standardize:

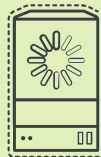
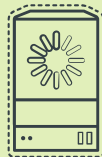
- Packaging
- Runtime



STANDARDS!

Areas to Standardize:

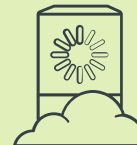
- Packaging
- Runtime
- Networking



STANDARDS!

Areas to Standardize:

- Packaging
- Runtime
- Networking
- Cloud



RUNTIME - SPECIFICATIONS

OpenContainer Runtime-Spec

(github.com/opencontainers/runtime-spec)

- June 2015
- Specification
- Several Implementations, with runc as flagship
- Currently v1.0.0-rc5

NETWORK

Container Networking Interface

(CNI - github.com/containernetworking/cni)

- December 2014
- Specification and Library
- Simple to integrate with a process based workflow
- Used by RKT, kubernetes, OpenShift, Kurma, Cloud Foundry, RancherOS, usable with runC, and more

PACKAGING - IMPLIED STANDARD

Docker Image

- Docker specific format
- Tight coupling with daemon version
- Signing requires Docker notary integration
- Image naming is Docker specific and bound to registries

PACKAGING - SPECIFICATION

OpenContainer Image-Spec

(github.com/opencontainers/image-spec)

- April 2016
- Originated from Docker-1.10 and Registry v2 format
- Content addressability
- Signable. Possibility to have naming and discovery.
- Currently releasing v1.0.0-rc5
- Gaining support from rkt, flatpak, skopeo, cri-o, docker, docker-registry and more

CLOUD

Cloud Native Computing Foundation
(<https://cncf.io>)

- Kubernetes orchestration
- Prometheus monitoring
- gRPC, CoreDNS, Linkerd, OpenTracing, Fluentd
- with containerd and rkt proposed

CLOUD



(Cite: the internet)

Call to Action!

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Get involved in the conversations

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Ensure your container integration touchpoints stay generic

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PoC tooling for your integration

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PoC tooling for your integration



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THANKS!