



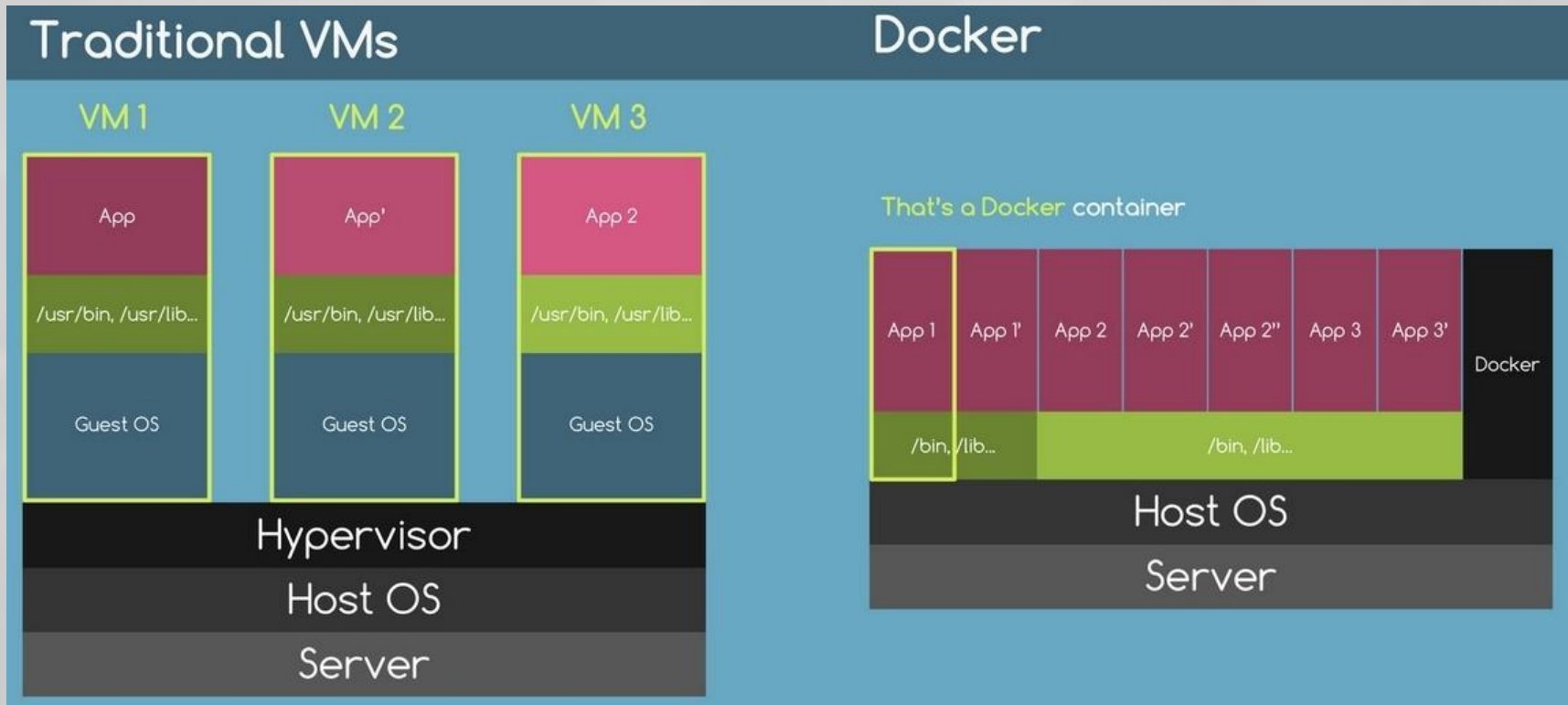
docker

Marc Douchement, Antoine Cabot

What is docker ?

« Docker is an open-source engine to easily create lightweight, portable, self-sufficient containers from any application. The same container that a developer builds and test on a laptop can run at scale, in production, on VMs, OpenStack cluster, public clouds and more ! »

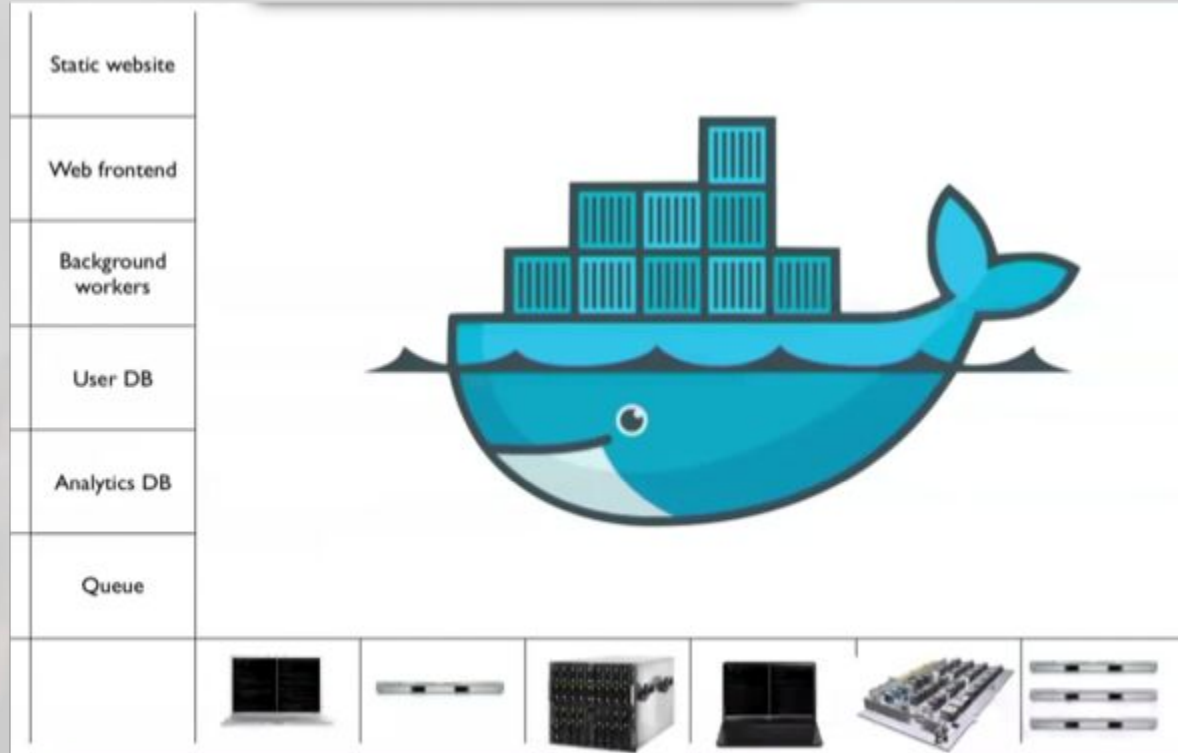
What is Docker ?



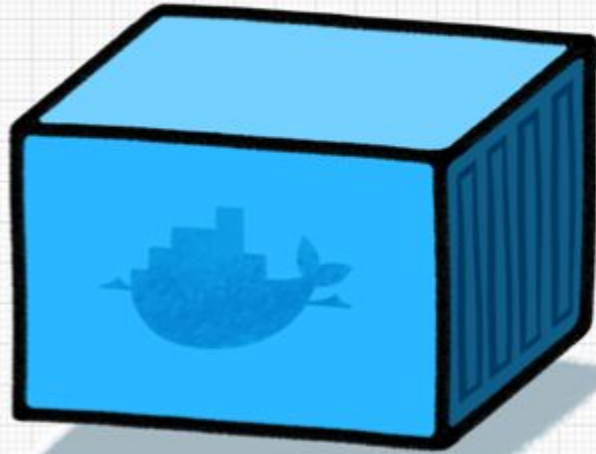
Why this name ?



Why this name ?



The real value of Docker is not technology



It's getting people to agree on something

Un peu d'histoire

- Dotcloud – PaaS platform launched in 2011 by Solomon Hykes & Sebastien Pahl (promo EPITECH 2006)
- Docker released as an open source project in march 2013
- Gluster CEO Ben Golub joins Docker as CEO
- PaaS platform sold to CloudControl in july 2014

Un projet Open Source

After a year on GitHub !

15 800 stars

11 098 commits

637 contributors

+100 meetup groups worldwide

Version 1.0 released for DockerCon in june

Version 1.2 released on august 22nd

Version 1.3 released last week

Un peu de technique ?

Technically: ~chroot on steroids

- A container is a set of processes running on top of a common kernel
- Isolated from the rest of the machine
- Using « namespaces » to have private views of the system (networks, PID tree, mountpoints...)
- And « cgroups » to have metered/limited/reserved resources

encore ?

From a distance, it looks like a VM !

- I can SSH into it
- I can have a root access in it
- I can install packages
- I have my own network interface
- I can tweak routing table
- I can mount filesystems
- ...

Lightweight, fast, disposable virtual environment

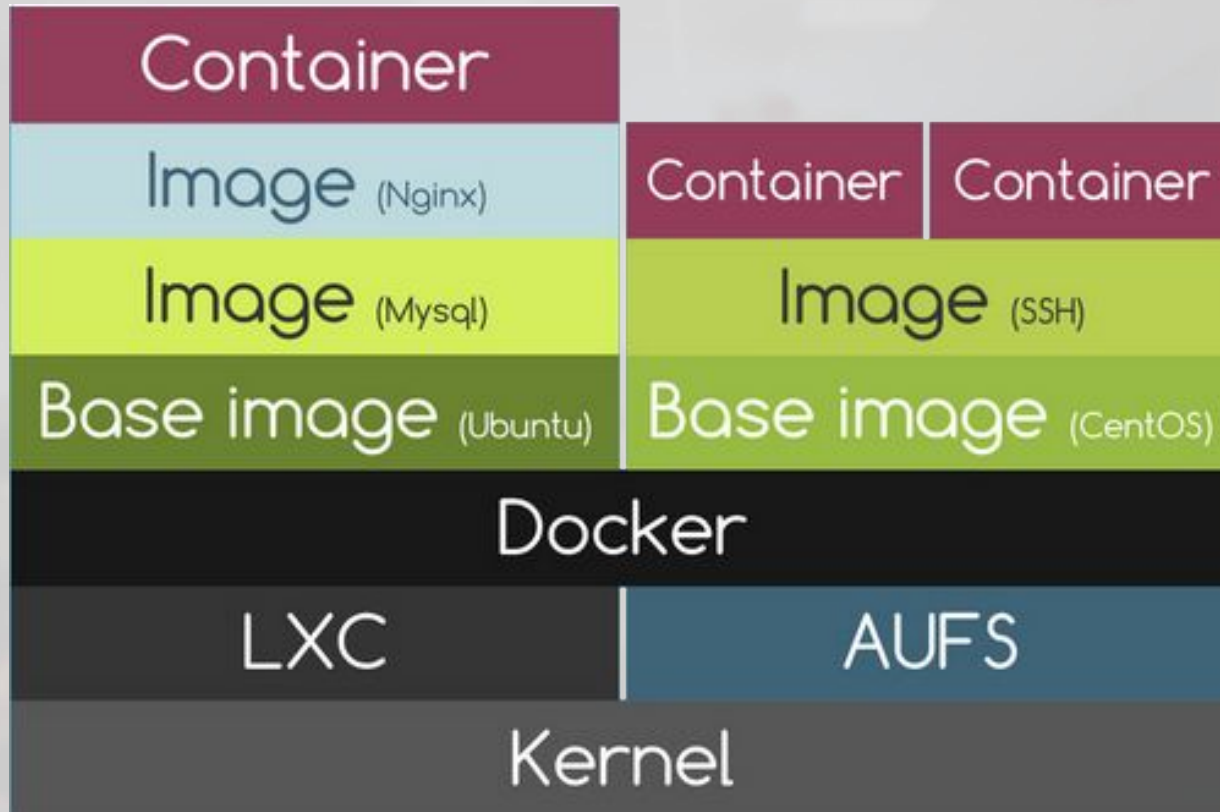
- Boot in milliseconds
- Just a few MB of disk/memory usage
- Bare metal performances is possible

The new way to build, ship, deploy and run your apps!

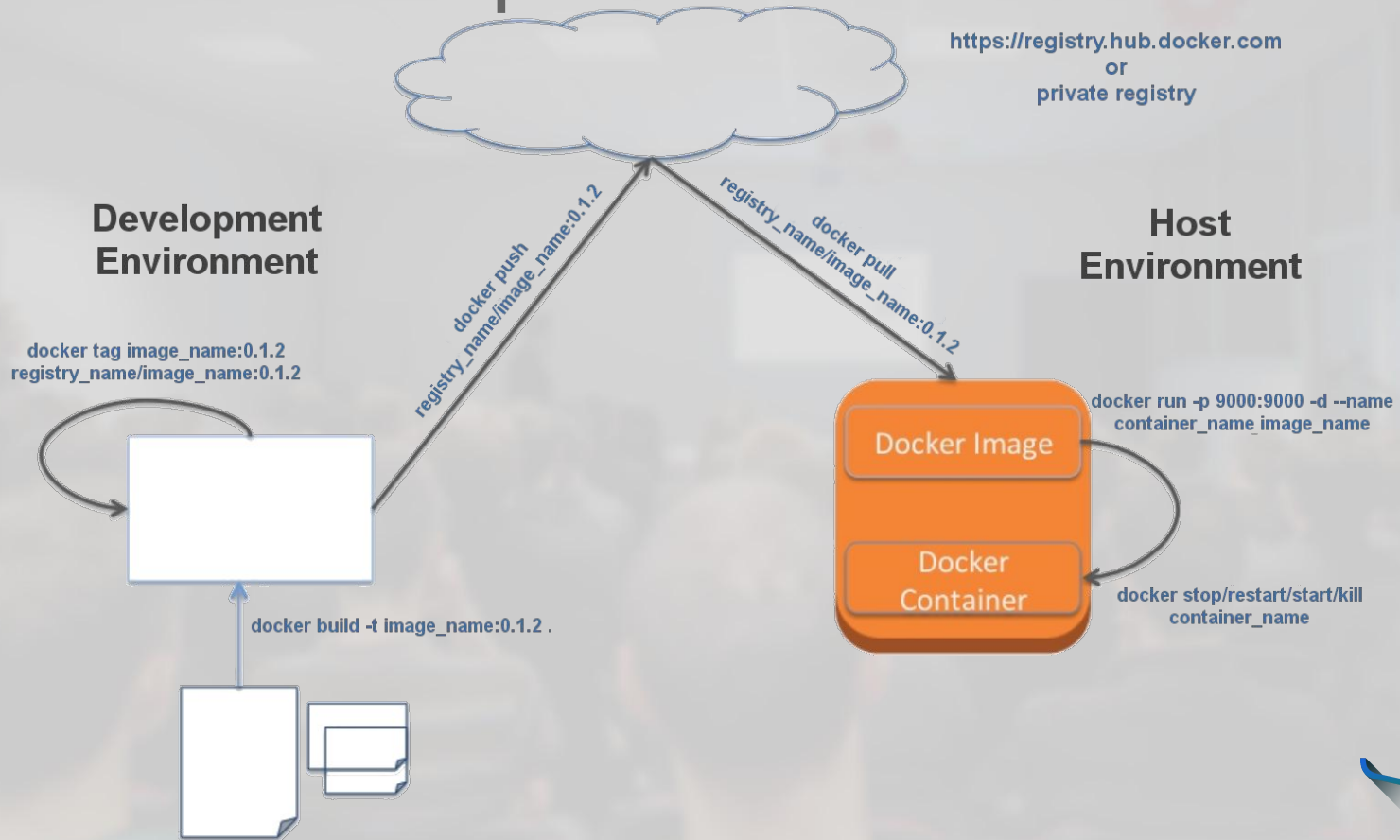
Pourquoi on en parle autant ?

- Containers have been around for decades
- Linux containers have been around for years
- Docker have « commoditized » LXC by adding
 - AUFS (AnotherUnionFS)
 - Client-Server architecture with an HTTP API
 - Registry

Les termes Docker



Workflow simple

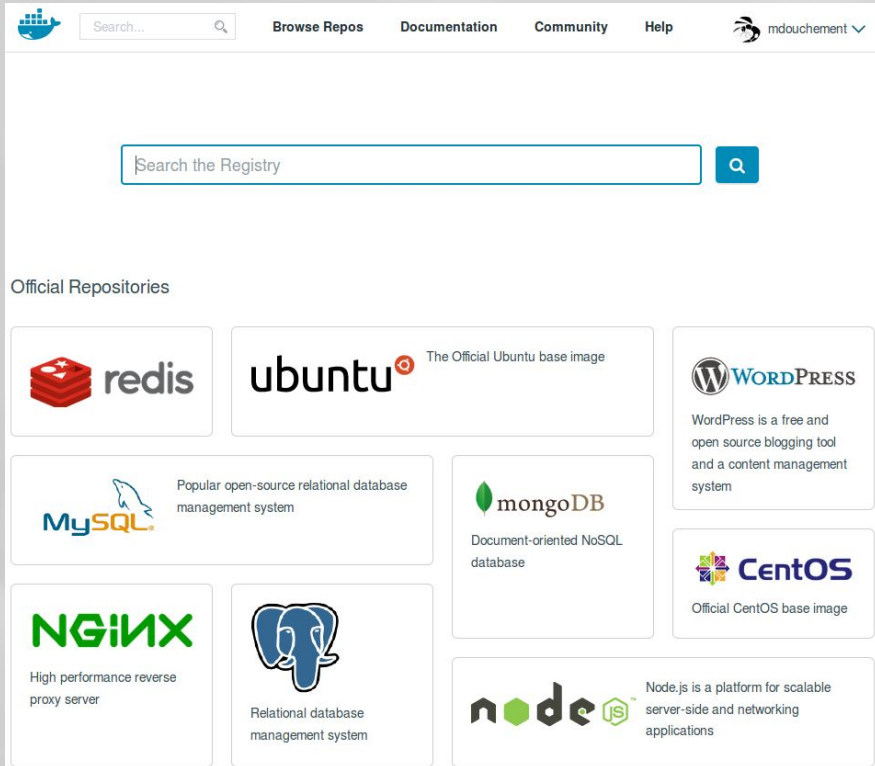


Démo time!

Develop a hello_word web application and deploy it on port 8080

- Developer:
 - Develop the application
 - Build image
- DevOps
 - Deploy the image on port 8080

Docker Hub

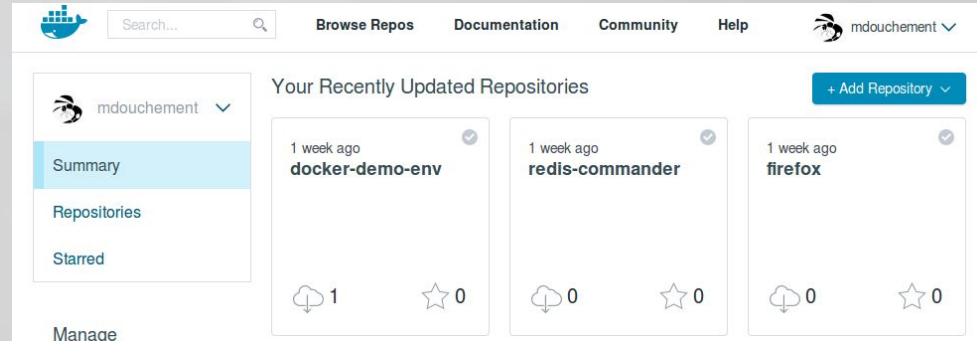


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Search the Registry

Official Repositories

- redis**
- ubuntu** ¹ The Official Ubuntu base image
- WORDPRESS**
WordPress is a free and open source blogging tool and a content management system
- MySQL**
Popular open-source relational database management system
- mongoDB**
Document-oriented NoSQL database
- CentOS**
Official CentOS base image
- NGINX**
High performance reverse proxy server
- Relational database management system**
- node.js**
Node.js is a platform for scalable server-side and networking applications

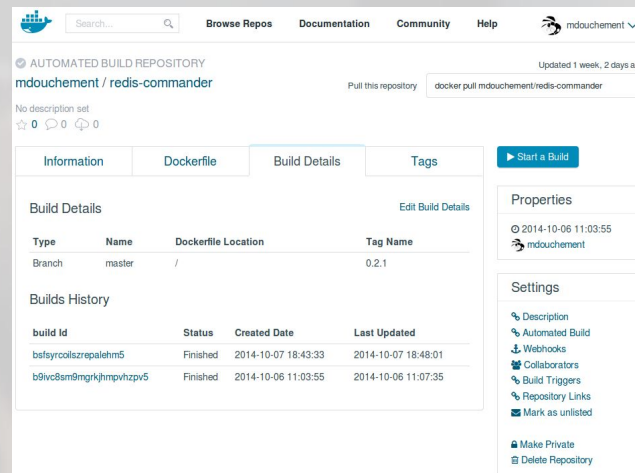


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Your Recently Updated Repositories [+ Add Repository ▾](#)

- 1 week ago **docker-demo-env** (1 pull, 0 stars)
- 1 week ago **redis-commander** (0 pulls, 0 stars)
- 1 week ago **firefox** (0 pulls, 0 stars)

Manage



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mdouchement / redis-commander Updated 1 week, 2 days ago

Pull this repository: `docker pull mdouchement/redis-commander`

Information | Dockerfile | **Build Details** | Tags

Build Details Edit Build Details

Type	Name	Dockerfile Location	Tag Name
Branch	master	/	0.2.1

Builds History

build id	Status	Created Date	Last Updated
b5fsyco0iszrepalehm5	Finished	2014-10-07 18:43:33	2014-10-07 18:48:01
b0lvc8sm9mgrkjhmpvhtzpv5	Finished	2014-10-06 11:03:55	2014-10-06 11:07:35

Properties

- 2014-10-06 11:03:55
- mdouchement

Settings

- Description
- Automated Build
- Webhooks
- Collaborators
- Build Triggers
- Repository Links
- Mark as unlisted
- Make Private
- Delete Repository

Des trucs en plus ?

<https://docs.docker.com/userguide/>

<https://github.com/GoogleCloudPlatform/kubernetes>

<http://www.projectatomic.io/>

<http://gaudi.io/>

<http://panamax.io/>

<https://mesosphere.io/>

<http://decking.io/>

<https://github.com/google/lmctfy>

<https://brooklyn.incubator.apache.org/>

<https://github.com/ClusterHQ/flocker>

<https://speakerdeck.com/slok/ship-it-with-docker>

