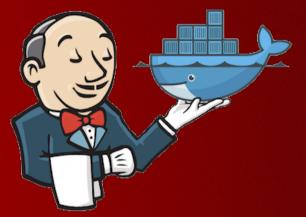
## Jenkins with Docker

Presenter

Alex Braverman RHEVM QE Infrasructure, Red Hat 26<sup>th</sup> August, 2014

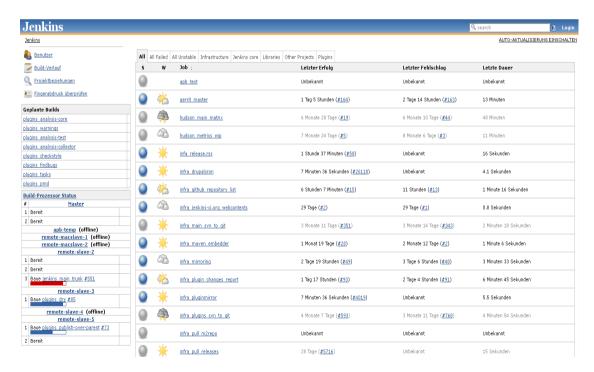






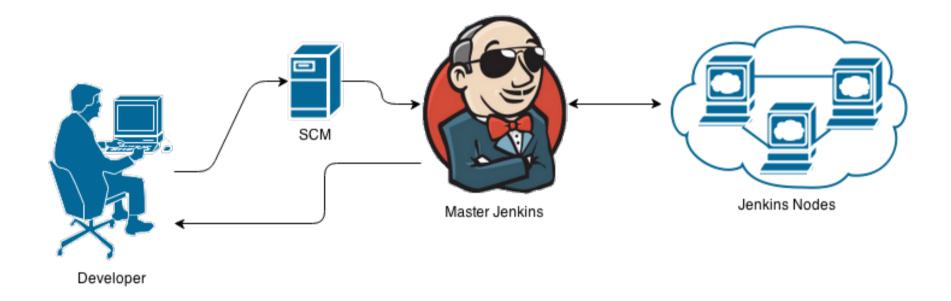
# Jenkins Continues Integration

- Open Source
- Building/testing software projects continuously
- Monitoring executions of externally-run jobs
- Server-Client
- Plugins

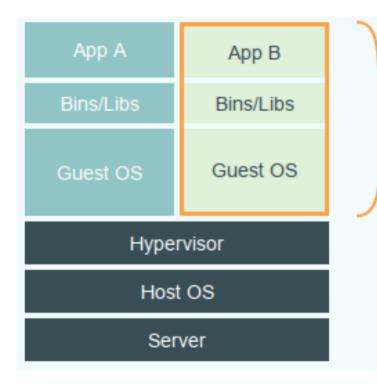




#### **Jenkins Architecture**



#### **Old Jenkins Nodes – Full Virtualization**

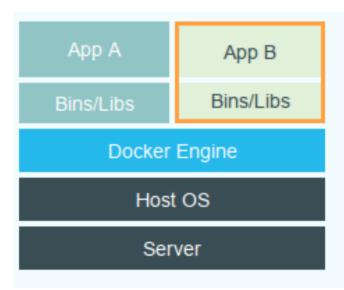


#### Virtual Machines

Each virtualized application includes not only the application - which may be only 10s of MB - and the necessary binaries and libraries, but also an entire guest operating system - which may weigh 10s of GB.







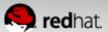
#### Docker

The Docker Engine container comprises just the application and its dependencies. It runs as an isolated process in userspace on the host operating system, sharing the kernel with other containers. Thus, it enjoys the resource isolation and allocation benefits of VMs but is much more portable and efficient.

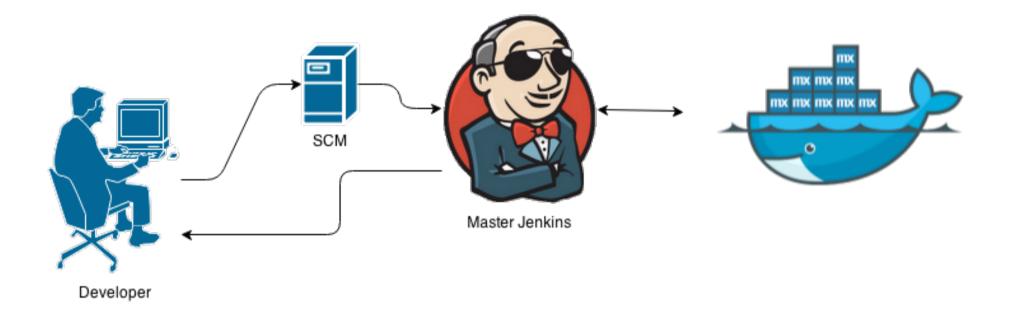


- any app
- any language
- any toolchain
- completely portable
- can run anywhere
- 13,000+ apps available

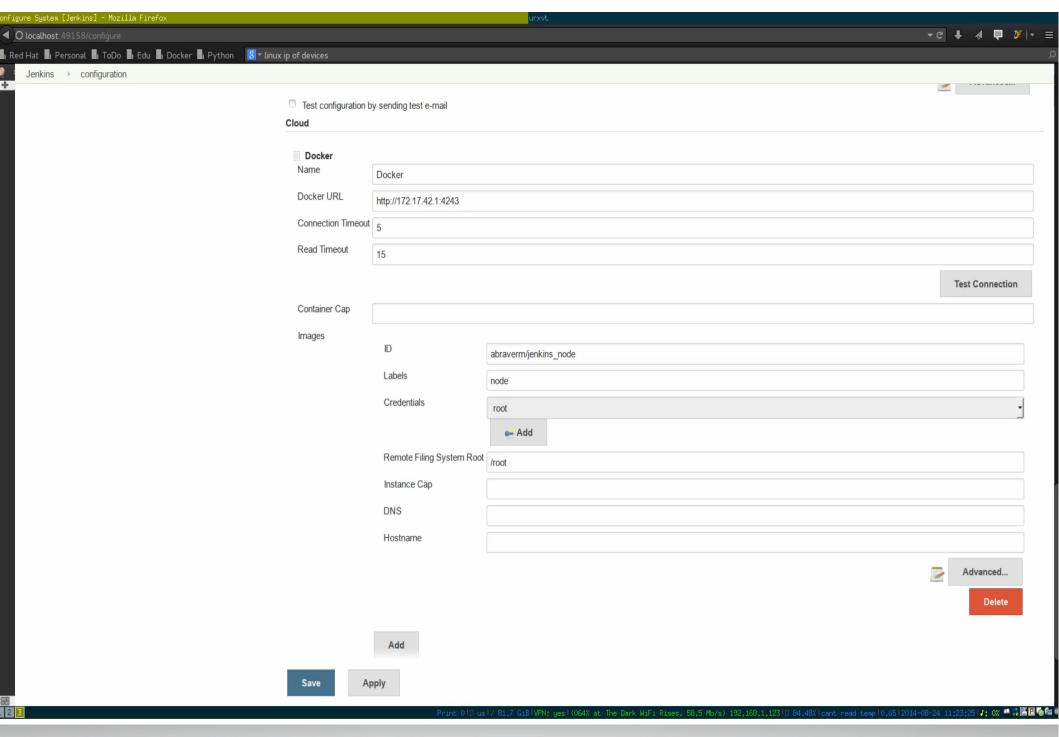
- Linux Containers
  - Shared kernel
  - Minimal resources
    - Memory
    - Cpu
    - Storage
  - Isolation
    - Network
    - security



#### **Jenkins with Docker**







#### **But WAIT.... There is MORE!**

- Dynamic scale
- "Sharing is Caring" share your bugs with developers like never before
- Run faster, stronger, better staged testing
- Save for later (or for others)



### How to get started

- \$ sudo yum install docker-io
- \$ sudo docker run -d -P abraverm/jenkins:master
- \$ sudo docker pull abraverm/jenkins:node
- Configure Host for tcp requiest (Docker Host)
- Add Host as to Jenkins and run jobs



