DOCKER, VAGRANT AND KUBERNETES WALK INTO AN ECLIPSE’D BAR

Demo

Max Rydahl Andersen
Red Hat

EclipseCon NA 2016, Washington
March 8th, 2016
DOCKER

“Docker allows you to package an application with all of its dependencies into a standardized unit for software development.”

- docker.com
DOCKER
Advantages

Lightweight
Fast
Portable
  ● The whole stack in one container, works everywhere
Security
  ● Each app in its own sandbox
No installation of apps - just get the image and run
FROM wildfly
ADD standalone.xml
RUN yum install jdk-9
CMD start.sh

DOCKER PARTS

Dockerfile

FROM wildfly
ADD standalone.xml
RUN yum install jdk-9
CMD start.sh

Image

Registry

Container

Daemon
DOCKER AND ECLIPSE

Docker Tools part of Linux Tools (but works on OS X and Windows too)
Connect to your existing Docker daemon on any host
Value on top of CLI
Can be reused by other plugins
DEMO
DOCKER DEMO

Connect to Docker
Search & Pull images
Dockerfile
Build
Start/stop containers
Linking containers
Vagrant
Vagrant

Machine(s) defined in a VagrantFile
Put into your project or externally
Can do “anything”
Basic needs are easy start/stop
Vagrant Tooling
DEMO

The State of Docker and Vagrant Tooling in Eclipse

- 17:00 Grand Ballroom C
Kubernetes/OpenShift
Kubernetes / OpenShift 3

- Kubernetes uses Docker containers and provides higher level management
- Red Hat's Platform-as-a-Service (Paas) build as a layered system exposing underlying Docker and Kubernetes
- Adds source code management, builds, deployment, promotion of images, application management, team and user tracking on top of it
- Runs on-premise, Amazon EC2, Google Cloud Platform and Azure
- Ops <3
....how does this affect developers and development?
Demo

Create projects
Docker containers in OpenShift
Docker Tooling in Eclipse
  ● Everything you can do from CLI and more

Red Hat Container Development Toolkit + CDK Tooling in Eclipse
  ● Start/stop
  ● Automatically connect to Docker and OpenShift from Eclipse

OpenShift 3 in Eclipse
Docker Server Adapters
- Run java apps in isolated containers directly from Eclipse
  - “Che” style runtimes
More Incremental deployment
  - docker rsync
  - maven kubernetes sync
“OpenShift-in-a-box” - Red Hat Container Development Kit
  - Vagrant driven setup that gives you docker and openshift locally
  - Use cli or IDE’s especially Eclipse smoothly

In short: anything that makes the distance from idea to refresh shorter
QUESTIONS?

Eclipse Linux Tools
tools.jboss.org
eclipse.org/linuxtools
https://github.com/mmalina/wildfly-db-docker
developers.redhat.com
www.openshift.org
THANK YOU

manderse@redhat.com
@maxandersen
about.me/maxandersen