Optimize OpenShift 3 Deployments
on Red Hat Enterprise Linux 7 & Atomic:

OPENSHIFT FOR OPERATORS

redhat.slides.com/nhr/openshift-for-operators

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DEVELOPERS:
I can't hear you over how awesome my app is!


OPERATORS:
Developer Problem
My Problem

OPENSHIFT FOR OPERATORS

AGENDA

TECH OVERVIEW

What is OpenShift?

What is RHEL Atomic?

LAB OVERVIEW

A quick look at the lab environment

LABS

Learn how to *get* OpenShift running - and *keep* it running.

WRAP-UP

Where to continue your quest for learning

Don't forget to rate our lab!

TECHNOLOGY OVERVIEW

OVERVIEW: OPENSHIFT 3

The Next-Generation PaaS

OVERVIEW: OPENSHIFT 3

Components:

Container Host

Container API

Orchestration

Middleware & Services

Lifecycle, Project Mgt. User Experience

OVERVIEW: OPENSHIFT 3

What's Different?

v3 versus v2:

- New base OS: RHEL Atomic or RHEL 7+ versus RHEL 6
- New container model: docker versus gears
- New orchestration engine: Kubernetes versus broker
- New packaging model: docker images versus cartridges
- New routing tier: cluster-wide routing versus Node-based
- Better experience for developers and operators

OVERVIEW: RHEL ATOMIC

Run and orchestrate container-based apps at scale

What is Atomic?

- A variation of Red Hat Enterprise Linux 7
- Components:
  - systemd
  - Docker
  - SELinux
- Just enough OS for Containers
- OStree delivers yum + RPM as an *atomic* operation

RED HAT ATOMIC

LAB OVERVIEW

(Download the Lab Guide)

LAB OVERVIEW

What can I expect?

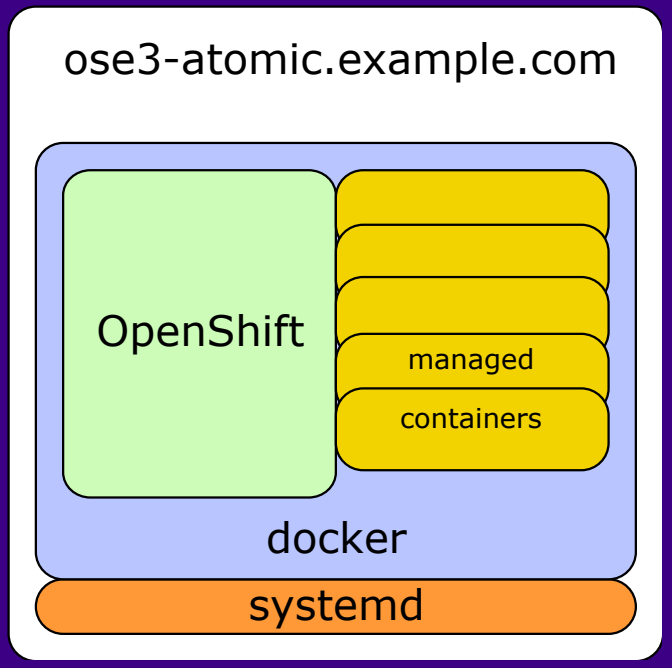
This lab is about learning how to get OpenShift running - and *keep* it running.

- "The POC": OpenShift v3 Test Drive on RHEL Atomic
- "The Rollout": Deploying OpenShift v3 Using Ansible
- "Maintenance Mode": Components, Apps and Users
- "Cluster Party Tricks": Node Maintenance

LAB ENVIRONMENT:

Test Driving OpenShift on RHEL Atomic

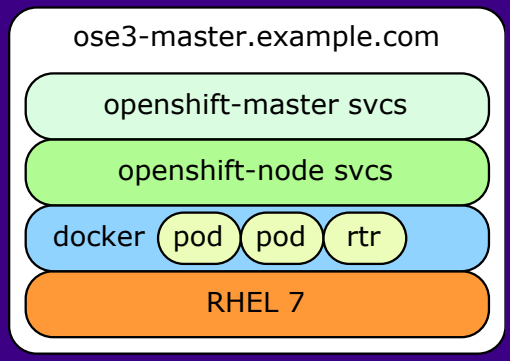
- ose3-atomic.example.com
- 192.168.133.10
- User / Password: **cloud-user** / **redhat**
- Start and interact with a completely containerized OpenShift instance
- Perform some basic CLI and web console tasks

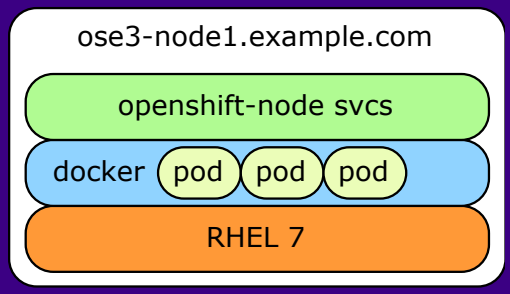


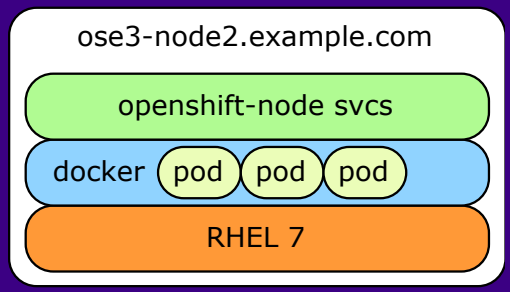
LAB ENVIRONMENT:

OpenShift v3 in 3-Host Cluster

- ose3-master.example.com
- ose3-node1.example.com
- ose3-node2.redhat.com
- User / Password: **root** / **redhat**
- Deploy and manage OpenShift 3 in a model production environment







LAB TIME!

REVIEW

- Overviews
  - OpenShift
  - RHEL Atomic
- Labs
  - "The POC"
  - "The Rollout"
  - "Maintenance Mode"
  - "Cluster Party Tricks"

TAKEAWAY?
TAKE IT WITH YOU:

```
$ docker pull openshift/origin
```

LOOKING FOR MORE?

Check out these resources in a web browser near you:

- OpenShift Blog: blog.openshift.com
- OpenShift Upstream: openshift.org
- Project Atomic: projectatomic.io

redhat.

THANK YOU!