

The logo for Red Hat Summit, featuring the words "RED HAT" in a smaller font above "SUMMIT" in a larger, bold font, both in white, set against a dark red background that is part of a larger speech bubble shape.

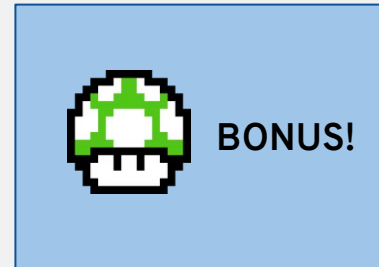
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Five OpenShift development environments in five minutes

Lightning Talk - Modern Java and DevOps

Jason Meyer
Team Lead - Cloud Success Architecture
Red Hat - Customer Experience & Engagement
May 2, 2017

Five quick ways to create OpenShift development environments





oc cluster up

OpenShift Container Platform & OpenShift Origin

The `oc cluster up` command creates a container and starts a local OpenShift cluster with all the basic infrastructure automatically configured: registry, router, image streams, and default templates. This containerized version of OpenShift executes locally utilizing a local docker daemon or Docker-Machine.

```
$ oc cluster up --use-existing-config \  
  --host-data-dir=/usr/data \  
  --metrics=true \  
  --image=registry.access.redhat.com/openshift3/ose \  
  --version=latest
```

https://github.com/openshift/origin/blob/master/docs/cluster_up_down.md

Vagrant All-in-one

OpenShift Origin



An all-in-one virtual machine is made available through the OpenShift community using Vagrant. This automatically downloads and executes a VirtualBox VM image containing all basic OpenShift infrastructure, initial users, and sample projects.

```
$ vagrant init openshift/origin-all-in-one  
$ vagrant up --provider=virtualbox
```

<https://www.vagrantup.com/>

<https://www.virtualbox.org/>

Minishift

OpenShift Origin



Minishift is a tool that runs OpenShift locally by launching a single-node OpenShift cluster inside a virtual machine using a driver, such as virtualbox, kvm, xhyve, Hyper-V. Minishift allows for customization parameters to be defined including, disk, cpu, and memory.

```
$ minishift start --cpus=2 --disk-size=20g --memory=2048
```

<https://www.openshift.org/minishift/>

fabric8-maven-plugin

OpenShift Origin



The fabric8-maven-plugin allows Java developers to use a single command to spin up an OpenShift or Kubernetes cluster. All dependencies are automatically downloaded and Minishift's generated VM is utilized in the background to host the OpenShift environment.

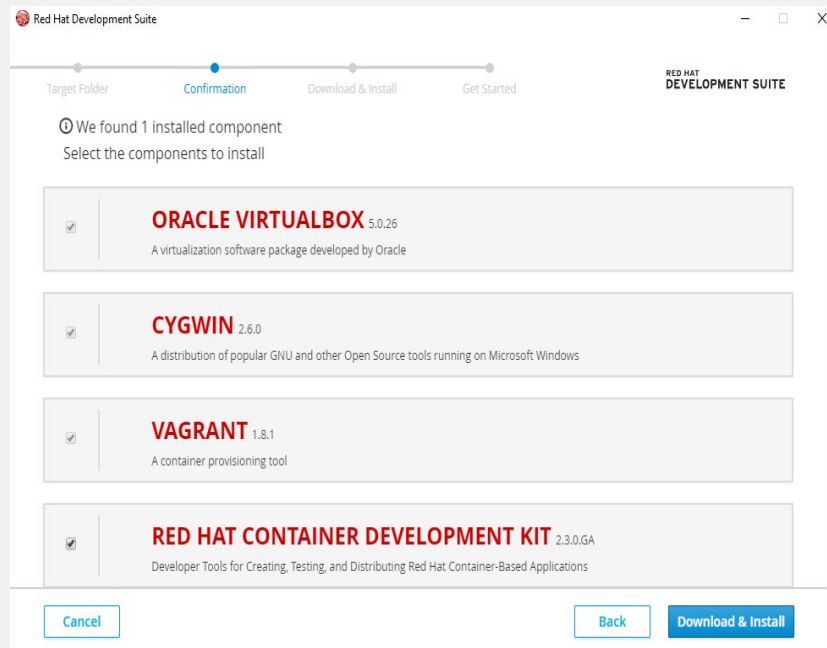
```
$ mvn io.fabric8:fabric8-maven-plugin:3.3.3:cluster-start -Dfabric8.cluster.kind=openshift
```

<https://maven.fabric8.io/>

Red Hat Development Suite

OpenShift Container Platform & OpenShift Origin

Currently available for Windows and macOS, Red Hat Development suite includes the best of Red Hat development tools, integrated together, in one easy to install bundle. Developers can locally create containerized solutions that are powered by OpenShift 3.x.



<https://developers.redhat.com/products/devsuite/overview/>




BONUS: OpenShift Online (NextGen) & OpenShift Interactive Learning Portal



OPENS SHIFT ONLINE
DEVELOPER PREVIEW

OPENS SHIFT ONLINE
by Red Hat

LOGIN WITH GITHUB 

OpenShift Online has been re-written from the ground up to enable you to rapidly deploy and manage applications and microservices based on Docker.

[Developer Preview FAQs](#)

<https://www.openshift.com/devpreview/>

RED HAT
OPENS SHIFT

Interactive Learning Portal

Our Interactive Learning Scenarios provide you with a pre-configured OpenShift instance, accessible from your browser without any downloads or configuration. Use it to experiment, learn OpenShift and see how we can help solve real-world problems.

Getting Started with OpenShift for Developers
START SCENARIO

Logging in to an OpenShift Cluster
START SCENARIO

Deploying Applications From Images
START SCENARIO

Using the CLI to Manage Resource Objects
START SCENARIO

<https://openshift.katacoda.com/>


DEMO & Final Thoughts

- oc cluster up
- Minishift

Kudos

 @rafabene

Benevides, Rafael. “Four creative ways to create an OpenShift/Kubernetes dev environment.” Oct. 11, 2016,
<https://developers.redhat.com/blog/2016/10/11/four-creative-ways-to-create-an-openshiftkubernetes-dev-environment/>

 @davsclaus

Ibsen, Claus. “Installing Kubernetes from Copenhagen Airport in one command (while having a drink).” Oct. 3, 2016,
<https://blog.fabric8.io/installing-kubernetes-from-copenhagen-airport-in-one-command-while-having-a-drink-5ff42d12e692>



THANK YOU



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