Five OpenShift development environments in five minutes

Lightning Talk - Modern Java and DevOps

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Five quick ways to create OpenShift development environments

- `oc cluster up`
- Vagrant All-in-one
- Minishift
- fabric8
- Red Hat Development Suite
- BONUS!
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](https://github.com/openshift/origin/blob/master/docs/cluster_up_down.md)
Vagrant All-in-one

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 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/
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.


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

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

https://openshift.katacoda.com/
DEMO & Final Thoughts

- oc cluster up
- Minishift
Kudos

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THANK YOU

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