

Bigtop Provisioner User Guide

Getting Started

Clone the BigTop source code

\$ git clone <https://github.com/apache/bigtop.git>

To deploy a cluster with the latest Bigtop 1.2.0 (docker based):

- git checkout origin/branch-1.2
- ./gradlew -Pconfig=config_ubuntu_xenial.yaml -Pnum_instances=1 docker-provisioner (to deploy to Ubuntu 16.04)
- ./gradlew -Pconfig=config_debian8.yaml -Pnum_instances=1 docker-provisioner (to deploy to Debian 8)
- ./gradlew -Pconfig=config_centos6.yaml -Pnum_instances=1 docker-provisioner (to deploy to CentOS 6)
- ./gradlew -Pconfig=config_centos7.yaml -Pnum_instances=1 docker-provisioner (to deploy to CentOS 7)
- ./gradlew docker-provisioner-destroy (to remove the containers)

To deploy a cluster with the latest Bigtop 1.1.0 (docker based):

- git checkout origin/branch-1.1
- ./gradlew -Pconfig=vagrantconfig_ubuntu.yaml -Pnum_instances=1 docker-provisioner (to deploy to Ubuntu 14.04)
- ./gradlew -Pconfig=vagrantconfig_debian.yaml -Pnum_instances=1 docker-provisioner (to deploy to Debian 8)
- ./gradlew -Pconfig=vagrantconfig.yaml -Pnum_instances=1 docker-provisioner (to deploy to CentOS 6)
- ./gradlew docker-provisioner-destroy (to remove the containers)

For Bigtop 1.0.0:

To create a VM based BigTop Hadoop cluster:

```
$ cd bigtop/bigtop-deploy/vm/vagrant-puppet-vm
```

```
$ vim vagrantconfig.yaml
```

```
# Update the repo to be:
```

```
CentOS 6: http://bigtop-repos.s3.amazonaws.com/releases/1.0.0/centos/6/x86\_64
```

```
Debian 8: http://bigtop-repos.s3.amazonaws.com/releases/1.0.0/debian/8/x86\_64
```

```
And update the component you'd like to deploy, for example:
```

```
components: [hadoop, yarn, ignite-hadoop] (effective values)
```

```
$ vagrant up
```

```
# If using CentOS 7, you might need to disable firewall on each of the machines
```

```
$ vagrant ssh <machine_name, e.g. bigtop1>
```

```
$ sudo systemctl disable firewalld
```

```
$ sudo systemctl stop firewalld
```

```
DONE!
```

To create a Docker based BigTop Hadoop cluster:

```
$ cd bigtop/bigtop-deploy/vm/vagrant-puppet-docker
```

```
$ vim vagrantconfig.yaml
```

```
# Update docker image file to point to one of:
```

```
bigtop/deploy:centos-6
```

```
bigtop/deploy:debian-8
```

```
# Update the repo to be:
```

```
CentOS 6: http://bigtop-repos.s3.amazonaws.com/releases/1.0.0/centos/6/x86\_64
```

Debian 8: http://bigtop-repos.s3.amazonaws.com/releases/1.0.0/debian/8/x86_64

And update the component you'd like to deploy, for example:

components: [hadoop, yarn, ignite-hadoop] ([effective values](#))

```
$ ./docker-hadoop.sh --create 3
```

DONE!

Destroy clusters:

destroy VM cluster:

```
$ vagrant destroy -f
```

destroy Docker cluster:

```
$ ./docker-hadoop.sh --destroy
```

Demo video

Enable Port Forwarding