How-To (for bigtop users)

As part of completion of BIGTOP-996, we have created a list of HOW-TOs for bigtop, which will be maintained over time. Please notify and open a JIRA if any of these become obsolete.

Create a Bare Metal Hadoop Cluster from the latest bigtop repositories

Follow the directions on How to install Bigtop 0.8.0 Hadoop on CentOS 6 with Puppet

Create a BigTop Hadoop VM cluster: hadoop cluster reproducible, easily destroyed/recreated, configurable hadoop sandbox cluster with vagrant/docker

See provisioner, and go into the README files underneath vagrant or docker.

Use the BigPetStore application to smoke test or demonstrate a hadoop deployment

See bigtop-bigpetstore, and follow the README file.

Run the smoke tests + API tests for Apache BigTop's hadoop distribution on HDFS

See the README.md file in the root of bigtop/. It has basic directions for maven based smoke tests. Also track the BIGTOP-1222 JIRA, which aims to improve these.

Run BigTop Ecosystem interoperability smoke tests (proper subset of the full bigtop smoke tests).

This is the BIGTOP-1222 JIRA which is underway. For now, you should run a subset of the bigtop maven tests, and

customize them by commenting out submodules as necessary from test-execution/pom.xml.

Add a package for my new hadoop ecosystem tool "XYZ" to bigtop.

This takes experience and understanding of RPM / deb packaging. See Bigtop Packaging.

Learn about Apache Hadoop using BigTop

This is the most exciting thing about bigtop - it is a great sandbox for learning how hadoop really works. For newcomers, here are 3 places where you can "dive into" bigtop to start learning about how the hadoop ecosystem really works.

- 1) You can start by playing with the bigpetstore app on your local machine, which can run a whole hadoop workflow for you, creating data that you can *visu* alize in the bigpetstore web app.
- 2) Once you "get it", you can move on to spinning up your own hadoop cluster using the *vagrant recipes*, or else, by directly grabbing a bigtop image from the *nightly builds on the jenkins server*.
- 3) Finally, as you get more advanced, you can see how bigtop pulls down source from various hadoop projects, packages it into rpms, installs those rpms, and coordinates their configuration/startup with puppet, by looking in **bigtop-deploy**/.