

# HBase Installation



For online Hadoop training, send mail to [neeraj.ymca.2k6@gmail.com](mailto:neeraj.ymca.2k6@gmail.com)

# Agenda

- Download HBase from Apache website
- Untar the HBase tar.gz file
- Modify hbase-env.sh file
- Modify hbase-site.xml file
- Start Hadoop
- Verify that Hadoop is running
- Check safe mode status
- Start HBase
- Verify Hadoop & HBase processes
- Stop HBase


# Download HBase

<http://www.apache.org/dyn/closer.cgi/hbase/>



The screenshot shows a web browser window with the title "Apache Download Mirrors". The address bar displays the URL [www.apache.org/dyn/closer.cgi/hbase/](http://www.apache.org/dyn/closer.cgi/hbase/). The page content features the Apache Software Foundation logo (a feather) and the text "The Apache Software Foundation". Below this, it says "Apache Download Mirrors" and "We suggest the following mirror site for your download:". The recommended mirror URL, <http://apache.mirrors.lucidnetworks.net/hbase/>, is highlighted with a red border. Other mirror sites are listed below, including <http://mirror.nexcess.net/apache/hbase/>.

Apache Download Mirrors

 The Apache Software Foundation

*Apache Download Mirrors*

We suggest the following mirror site for your download:

<http://apache.mirrors.lucidnetworks.net/hbase/>

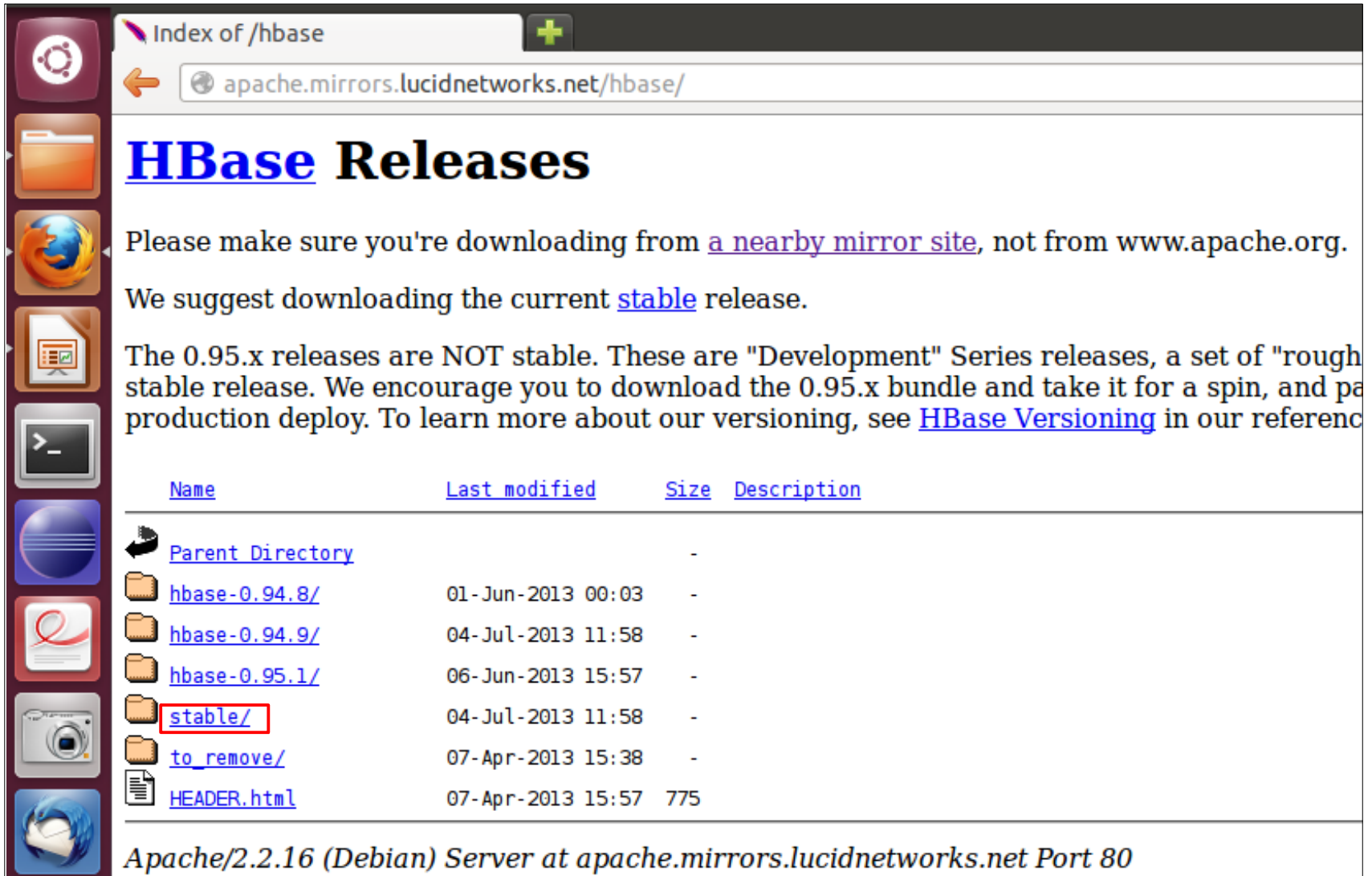
Other mirror sites are suggested below. Please use the backup mirrors only to c

**HTTP**

<http://apache.mirrors.lucidnetworks.net/hbase/>

<http://mirror.nexcess.net/apache/hbase/>

# Select stable version



Index of /hbase








← apache.mirrors.lucidnetworks.net/hbase/

## HBase Releases

Please make sure you're downloading from [a nearby mirror site](#), not from [www.apache.org](http://www.apache.org).

We suggest downloading the current [stable](#) release.

The 0.95.x releases are NOT stable. These are "Development" Series releases, a set of "rough stable release. We encourage you to download the 0.95.x bundle and take it for a spin, and pa production deploy. To learn more about our versioning, see [HBase Versioning](#) in our reference

<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
 <a href="#">Parent Directory</a>		-	
 <a href="#">hbase-0.94.8/</a>	01-Jun-2013 00:03	-	
 <a href="#">hbase-0.94.9/</a>	04-Jul-2013 11:58	-	
 <a href="#">hbase-0.95.1/</a>	06-Jun-2013 15:57	-	
 <a href="#">stable/</a>	04-Jul-2013 11:58	-	
 <a href="#">to_remove/</a>	07-Apr-2013 15:38	-	
 <a href="#">HEADER.html</a>	07-Apr-2013 15:57	775	

Apache/2.2.16 (Debian) Server at apache.mirrors.lucidnetworks.net Port 80

# Download the tar file



The screenshot shows a web browser window with the address bar displaying `apache.mirrors.lucidnetworks.net/hbase/stable/`. The page title is "Index of /hbase/stable". Below the title is a table with columns: Name, Last modified, Size, and Description. The table lists three items: "Parent Directory" (a directory icon), "hbase-0.94.9-security.tar.gz" (a tar file icon), and "hbase-0.94.9.tar.gz" (a tar file icon). The file "hbase-0.94.9.tar.gz" is highlighted with a red rectangle. Below the table, the text "Apache/2.2.16 (Debian) Server at apache.mirrors.lucidnetworks.net Port 80" is displayed.

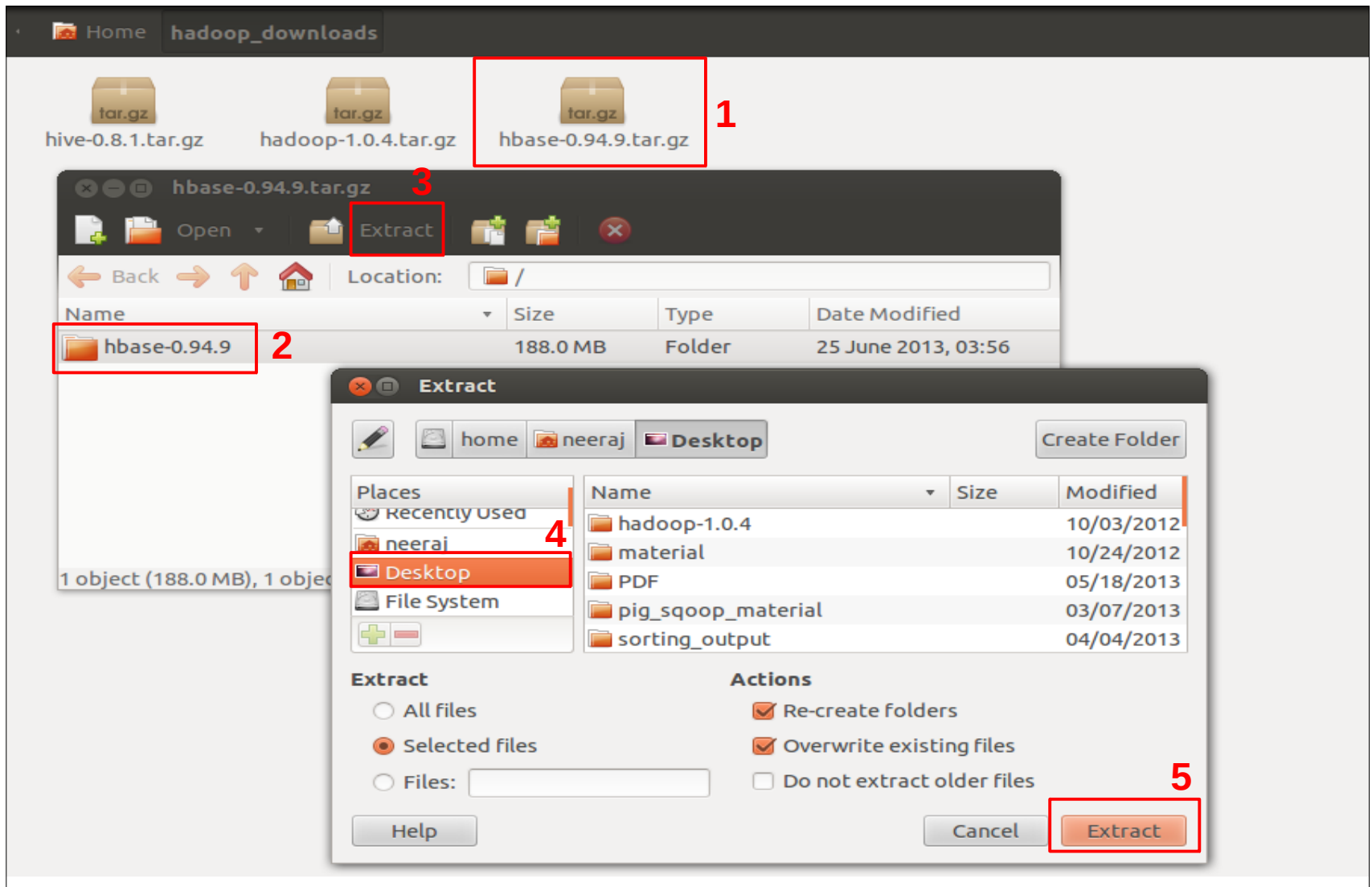
<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
 <a href="#">Parent Directory</a>		-	
 <a href="#">hbase-0.94.9-security.tar.gz</a>	24-Jun-2013 17:10	55M	
 <a href="#">hbase-0.94.9.tar.gz</a>	24-Jun-2013 17:53	55M	

Apache/2.2.16 (Debian) Server at apache.mirrors.lucidnetworks.net Port 80

# Save the tar file



# Untar the tar.gz file



# Modify hbase-env.sh file

Add the following lines to HBASE\_HOME/conf/hbase-env.sh

```
export JAVA_HOME=/usr
```

```
export HBASE_HOME=/home/neeraj/local_cluster_home/hbase-0.94.9
```

```
export HBASE_CLASSPATH=/home/neeraj/local_cluster_home/hadoop-1.2.1/conf
```



# Modify hbase-site.xml file

Add the following in hbase-site.xml file [ Standalone mode ]

```
<configuration>
```

```
  <property>
```

```
    <name>hbase.cluster.distributed</name>
```

```
    <value>>false</value>
```

```
  </property>
```

```
  <property>
```

```
    <name>hbase.rootdir</name>
```

```
    <value>/home/neeraj/local_cluster_home/hbase_data</value>
```

```
  </property>
```

```
</configuration>
```

# Modify hbase-site.xml file

Add the following in hbase-site.xml file [ Distributed mode ]

```
<configuration>
```

```
  <property>  
    <name>hbase.cluster.distributed</name>  
    <value>true</value>  
  </property>
```

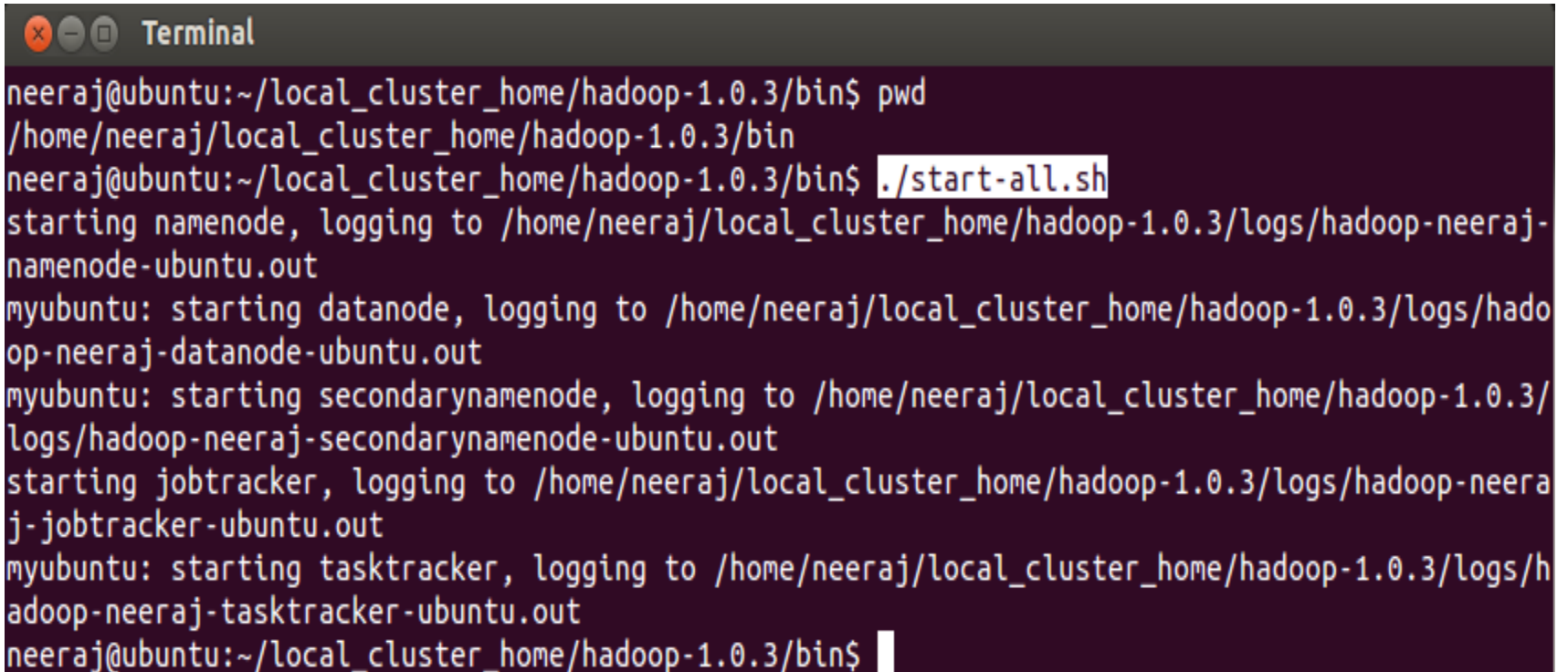
```
  <property>  
    <name>hbase.rootdir</name>  
    <value>hdfs://master:9000/hbase</value>  
  </property>
```

```
  <property>  
    <name>dfs.replication</name>  
    <value>2</value>  
  </property>
```

```
</configuration>
```

# Start Hadoop

`./start-all.sh`

A terminal window titled "Terminal" with standard Ubuntu window controls (close, minimize, maximize). The terminal shows a user named "neeraj" at a machine named "ubuntu" in the directory "~/local\_cluster\_home/hadoop-1.0.3/bin". The user runs "pwd" and then ". /start-all.sh". The script outputs messages for starting namenode, datanode, secondarynamenode, jobtracker, and tasktracker, each with its respective log file path. The terminal ends with a prompt for the user.

```
neeraj@ubuntu:~/local_cluster_home/hadoop-1.0.3/bin$ pwd
/home/neeraj/local_cluster_home/hadoop-1.0.3/bin
neeraj@ubuntu:~/local_cluster_home/hadoop-1.0.3/bin$ ./start-all.sh
starting namenode, logging to /home/neeraj/local_cluster_home/hadoop-1.0.3/logs/hadoop-neeraj-namenode-ubuntu.out
myubuntu: starting datanode, logging to /home/neeraj/local_cluster_home/hadoop-1.0.3/logs/hadoop-neeraj-datanode-ubuntu.out
myubuntu: starting secondarynamenode, logging to /home/neeraj/local_cluster_home/hadoop-1.0.3/logs/hadoop-neeraj-secondarynamenode-ubuntu.out
starting jobtracker, logging to /home/neeraj/local_cluster_home/hadoop-1.0.3/logs/hadoop-neeraj-jobtracker-ubuntu.out
myubuntu: starting tasktracker, logging to /home/neeraj/local_cluster_home/hadoop-1.0.3/logs/hadoop-neeraj-tasktracker-ubuntu.out
neeraj@ubuntu:~/local_cluster_home/hadoop-1.0.3/bin$
```

# Check Hadoop processes & Safemode

Make sure that safe mode is off before you start HBase

```
Terminal
neeraj@ubuntu:~/local_cluster_home/hadoop-1.2.1/bin$ pwd
/home/neeraj/local_cluster_home/hadoop-1.2.1/bin
neeraj@ubuntu:~/local_cluster_home/hadoop-1.2.1/bin$ jps
3915 TaskTracker
4178 Jps
3610 SecondaryNameNode
3399 DataNode
3159 NameNode
3701 JobTracker
neeraj@ubuntu:~/local_cluster_home/hadoop-1.2.1/bin$ ./hadoop dfsadmin -safemode get
Safe mode is OFF
neeraj@ubuntu:~/local_cluster_home/hadoop-1.2.1/bin$
```

# Start HBase

`./start-hbase.sh`

```
Terminal
File Edit View Search Terminal Help
neeraj@myubuntu:~/local_cluster_home/hbase-0.94.9/bin$ pwd
/home/neeraj/local_cluster_home/hbase-0.94.9/bin
neeraj@myubuntu:~/local_cluster_home/hbase-0.94.9/bin$ ./start-hbase.sh
localhost: starting zookeeper, logging to /home/neeraj/local_cluster_home/hbase-0.94.9/logs/hbase-neeraj-zookeeper-myubuntu.out
starting master, logging to /home/neeraj/local_cluster_home/hbase-0.94.9/logs/hbase-neeraj-master-myubuntu.out
myubuntu: starting regionserver, logging to /home/neeraj/local_cluster_home/hbase-0.94.9/logs/hbase-neeraj-regionserver-myubuntu.out
neeraj@myubuntu:~/local_cluster_home/hbase-0.94.9/bin$
```

# Verify Hadoop & HBase processes

jps

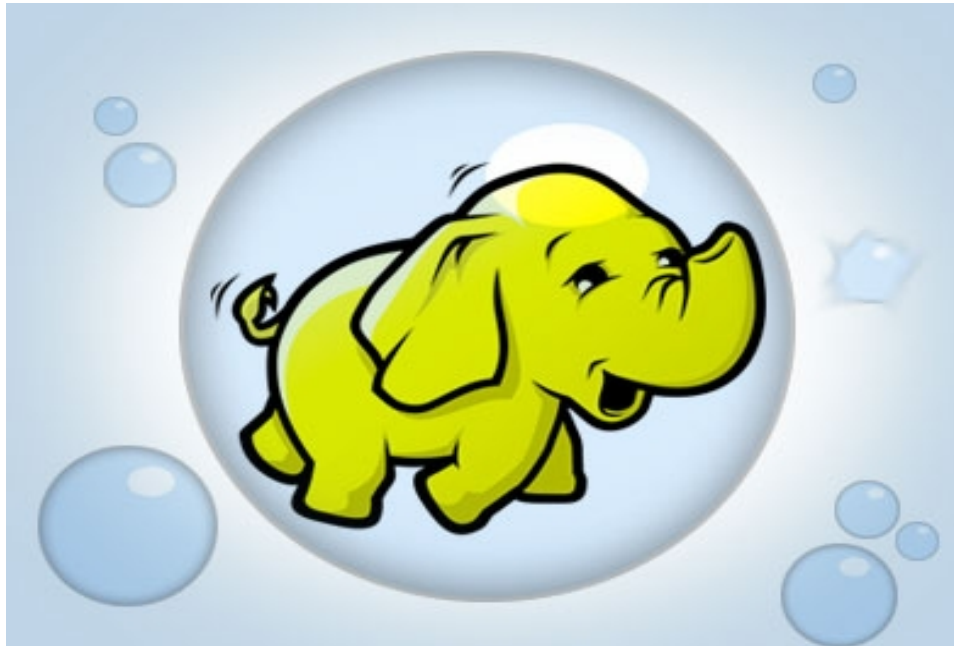
```
Terminal
neeraj@ubuntu:~/local_cluster_home/hbase-0.94.9/bin$ jps
13017 JobTracker
17789 Jps
12521 NameNode
13222 TaskTracker
12723 DataNode
17522 HRegionServer
17199 HQuorumPeer
12927 SecondaryNameNode
17274 HMaster
neeraj@ubuntu:~/local_cluster_home/hbase-0.94.9/bin$
```

# Stop HBase

`./stop-hbase.sh`

```
Terminal
File Edit View Search Terminal Help
neeraj@myubuntu:~/local_cluster_home/hbase-0.94.9/bin$ pwd
/home/neeraj/local_cluster_home/hbase-0.94.9/bin
neeraj@myubuntu:~/local_cluster_home/hbase-0.94.9/bin$ ./stop-hbase.sh
stopping hbase.....
localhost: stopping zookeeper.
neeraj@myubuntu:~/local_cluster_home/hbase-0.94.9/bin$ jps
11046 NameNode
11596 JobTracker
11263 DataNode
11830 TaskTracker
13486 Jps
11514 SecondaryNameNode
neeraj@myubuntu:~/local_cluster_home/hbase-0.94.9/bin$
```

# ...Thanks...



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