

HADOOP INSTALLATION STEP-BY-STEP

```
amigandhi@ubuntu:~$ ssh localhost
ssh: connect to host localhost port 22: Connection refused
amigandhi@ubuntu:~$ sudo apt-get update
[sudo] password for amigandhi:
Hit:1 http://us.archive.ubuntu.com/ubuntu bionic InRelease
Get:2 http://security.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]
Get:3 http://us.archive.ubuntu.com/ubuntu bionic-updates InRelease [88.7 kB]
Get:4 http://us.archive.ubuntu.com/ubuntu bionic-backports InRelease [74.6 kB]
Get:5 http://security.ubuntu.com/ubuntu bionic-security/universe i386 Packages [617 kB]
Get:6 http://us.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 Packages [1,054 kB]
Get:7 http://security.ubuntu.com/ubuntu bionic-security/universe amd64 Packages [649 kB]
Get:8 http://security.ubuntu.com/ubuntu bionic-security/universe amd64 DEP-11 Metadata [42.1 kB]
Get:9 http://security.ubuntu.com/ubuntu bionic-security/universe DEP-11 48x48 Icons [16.4 kB]
Get:10 http://security.ubuntu.com/ubuntu bionic-security/universe DEP-11 64x64 Icons [111 kB]
Get:11 http://security.ubuntu.com/ubuntu bionic-security/multiverse amd64 DEP-11 Metadata [2,464 B]
Get:12 http://security.ubuntu.com/ubuntu bionic-security/main i386 Packages [442 kB]
Get:13 http://security.ubuntu.com/ubuntu bionic-security/main amd64 Packages [651 kB]
Get:14 http://security.ubuntu.com/ubuntu bionic-security/main Translation-en [211 kB]
Get:15 http://security.ubuntu.com/ubuntu bionic-security/main amd64 DEP-11 Metadata [38.6 kB]
Get:16 http://security.ubuntu.com/ubuntu bionic-security/main DEP-11 48x48 Icons [17.6 kB]
Get:17 http://security.ubuntu.com/ubuntu bionic-security/main DEP-11 64x64 Icons [41.5 kB]
Get:18 http://us.archive.ubuntu.com/ubuntu bionic-updates/universe i386 Packages [1,010 kB]
Get:19 http://apt.postgresql.org/pub/repos/apt bionic-pgdg InRelease [46.3 kB]
Get:20 http://us.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 DEP-11 Metadata [264 kB]
Get:21 http://us.archive.ubuntu.com/ubuntu bionic-updates/universe DEP-11 48x48 Icons [194 kB]
Get:22 http://us.archive.ubuntu.com/ubuntu bionic-updates/universe DEP-11 64x64 Icons [438 kB]
Get:23 http://us.archive.ubuntu.com/ubuntu bionic-updates/multiverse amd64 DEP-11 Metadata [2,468 B]
Get:24 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 Packages [871 kB]
Get:25 http://us.archive.ubuntu.com/ubuntu bionic-updates/main i386 Packages [650 kB]
Get:26 http://apt.postgresql.org/pub/repos/apt bionic-pgdg/main amd64 Packages [179 kB]
Get:27 http://us.archive.ubuntu.com/ubuntu bionic-updates/main Translation-en [303 kB]
Get:28 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 DEP-11 Metadata [307 kB]
```

```
amigandhi@ubuntu:~$ sudo apt-get install openssh-server
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  ncurses-term openssh-sftp-server ssh-import-id
Suggested packages:
  molly-guard monkeysphere rssh ssh-askpass
The following NEW packages will be installed:
  ncurses-term openssh-server openssh-sftp-server ssh-import-id
0 upgraded, 4 newly installed, 0 to remove and 145 not upgraded.
Need to get 637 kB of archives.
After this operation, 5,316 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 ncurses-term all 6.1-1ubuntu1.18.04 [24
8 kB]
Get:2 http://security.ubuntu.com/ubuntu bionic-security/main amd64 openssh-sftp-server amd64 1:7.6p1-4ubunt
u0.3 [45.6 kB]
Get:3 http://security.ubuntu.com/ubuntu bionic-security/main amd64 openssh-server amd64 1:7.6p1-4ubuntu0.3
[333 kB]
Get:4 http://us.archive.ubuntu.com/ubuntu bionic-updates/main amd64 ssh-import-id all 5.7-0ubuntu1.1 [10.9
kB]
Fetched 637 kB in 0s (2,963 kB/s)
Preconfiguring packages ...
Selecting previously unselected package ncurses-term.
(Reading database ... 174804 files and directories currently installed.)
Preparing to unpack .../ncurses-term_6.1-1ubuntu1.18.04_all.deb ...
Unpacking ncurses-term (6.1-1ubuntu1.18.04) ...
```

```

amigandhi@ubuntu:~/.ssh$ ssh localhost
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ECDSA key fingerprint is SHA256:rSpB54KI1HNBMMti0PftqFoCky1MVBf1LAunqQgfl5w.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'localhost' (ECDSA) to the list of known hosts.
amigandhi@localhost's password:
Permission denied, please try again.
amigandhi@localhost's password:
Permission denied, please try again.
amigandhi@localhost's password:
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 5.3.0-40-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

 * Multipass 1.0 is out! Get Ubuntu VMs on demand on your Linux, Windows or
   Mac. Supports cloud-init for fast, local, cloud devops simulation.

   https://multipass.run/

 * Latest Kubernetes 1.18 beta is now available for your laptop, NUC, cloud
   instance or Raspberry Pi, with automatic updates to the final GA release.

   sudo snap install mikrok8s --channel=1.18/beta --classic

 * Canonical Livepatch is available for installation.
   - Reduce system reboots and improve kernel security. Activate at:

```

NOTE: Download latest version of Hadoop(3.2.1) from below link –

<https://archive.apache.org/dist/hadoop/common/>

```

amigandhi@ubuntu:~$ cat ~/.ssh/id_rsa.pub >> ~/.ssh/authorized_keys
amigandhi@ubuntu:~$
amigandhi@ubuntu:~$
amigandhi@ubuntu:~$
amigandhi@ubuntu:~$ cd Downloads/
amigandhi@ubuntu:~/Downloads$ ls
dev  hadoop-3.2.1  hadoop-3.2.1.tar.gz  prod
amigandhi@ubuntu:~/Downloads$ sudo mv hadoop-3.2.1 /usr/local/bin/
[sudo] password for amigandhi:
amigandhi@ubuntu:~/Downloads$ cd /usr/local/bin
amigandhi@ubuntu:/usr/local/bin$ ls
aws  aws_completer  hadoop-3.2.1
amigandhi@ubuntu:/usr/local/bin$ sudo mkdir hadoop-tmp
amigandhi@ubuntu:/usr/local/bin$ ls
aws  aws_completer  hadoop-3.2.1  hadoop-tmp
amigandhi@ubuntu:/usr/local/bin$ cd hadoop-
hadoop-3.2.1/ hadoop-tmp/
amigandhi@ubuntu:/usr/local/bin$ cd hadoop-3.2.1/
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1$ ls
bin  include  libexec  NOTICE.txt  sbin
etc  lib      LICENSE.txt  README.txt  share
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1$
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1$
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1$ cd etc/hadoop/
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/etc/hadoop$ ls
capacity-scheduler.xml      kms-log4j.properties
configuration.xml           kms-site.xml
container-executor.cfg      log4j.properties
core-site.xml               mapred-env.cmd
hadoop-env.cmd              mapred-env.sh
hadoop-env.sh               mapred-queues.xml.template

```

NOTE: Look at the link below for supported Java version for your Hadoop (Hadoop 3.2.1 is compatible with java 7 and 8 only!)

<https://cwiki.apache.org/confluence/display/HADOOP/Hadoop+Java+Versions>

```
amigandhi@ubuntu:~$ sudo apt install openjdk-8-jdk openjdk-8-jre
[sudo] password for amigandhi:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  fonts-dejavu-extra libatk-wrapper-java libatk-wrapper-java-jni libgif7
  libice-dev libpthread-stubs0-dev libsm-dev libx11-dev libx11-doc libxau-dev
  libxcb1-dev libxdmcp-dev libxt-dev openjdk-8-jdk-headless
  openjdk-8-jre-headless x11proto-core-dev x11proto-dev xorg-sgml-doctools
  xtrans-dev
Suggested packages:
  libice-doc libsm-doc libxcb-doc libxt-doc openjdk-8-demo openjdk-8-source
  visualvm icedtea-8-plugin fonts-ipafont-gothic fonts-ipafont-mincho
  fonts-wqy-microhei fonts-wqy-zenhei
The following NEW packages will be installed:
  fonts-dejavu-extra libatk-wrapper-java libatk-wrapper-java-jni libgif7
  libice-dev libpthread-stubs0-dev libsm-dev libx11-dev libx11-doc libxau-dev
  libxcb1-dev libxdmcp-dev libxt-dev openjdk-8-jdk openjdk-8-jdk-headless
  openjdk-8-jre openjdk-8-jre-headless x11proto-core-dev x11proto-dev
  xorg-sgml-doctools xtrans-dev
0 upgraded, 21 newly installed, 0 to remove and 145 not upgraded.
Need to get 43.1 MB of archives.
After this operation, 167 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us.archive.ubuntu.com/ubuntu bionic/main amd64 fonts-dejavu-extra all 2.37-1 [1,953 kB]
Get:2 http://security.ubuntu.com/ubuntu bionic-security/main amd64 libgif7 amd64 5.1.4-2ubuntu0.1 [30.9 kB]
Get:3 http://security.ubuntu.com/ubuntu bionic-security/universe amd64 openjdk-8-jre-headless amd64 8u242
```

NOTE: If you already have java installed with another version, please follow following commands –

Commands:

1. `sudo update-alternatives --config java`
 - Write the number of selection for java 8
2. `java -version`

```

amigandhi@ubuntu:~$ sudo update-alternatives --config java
There are 2 choices for the alternative java (providing /usr/bin/java).

  Selection    Path                                                    Priority    Status
  -----
0             /usr/lib/jvm/java-11-openjdk-amd64/bin/java            1111       auto mode
1             /usr/lib/jvm/java-11-openjdk-amd64/bin/java            1111       manual mode
* 2           /usr/lib/jvm/java-8-openjdk-amd64/jre/bin/java          1081       manual mode

Press <enter> to keep the current choice[*], or type selection number:
amigandhi@ubuntu:~$
amigandhi@ubuntu:~$ vi ~/.bash_profile
amigandhi@ubuntu:~$ nano ~/.bash_profile
amigandhi@ubuntu:~$ source ~/.bash_profile
amigandhi@ubuntu:~$ echo $JAVA_HOME
/usr/lib/jvm/java-8-openjdk-amd64/
amigandhi@ubuntu:~$
amigandhi@ubuntu:~$ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
amigandhi@ubuntu:~$ which java
/usr/bin/java
amigandhi@ubuntu:~$

```

NOTE: Refer to Hadoop docs link below to set up your Hadoop environment to run on single node in pseudo-distributed environment. You can also refer to screenshots below to set up configurations for your hadoop environment.

<http://hadoop.apache.org/docs/r2.7.3/hadoop-project-dist/hadoop-common/SingleCluster.html>

```

amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/etc/hadoop$ sudo nano hadoop-env.sh
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/etc/hadoop$

```

```
GNU nano 2.9.3                                hadoop-env.sh                                Modified

# See the License for the specific language governing permissions and
# limitations under the License.

# Set Hadoop-specific environment variables here.

##
## THIS FILE ACTS AS THE MASTER FILE FOR ALL HADOOP PROJECTS.
## SETTINGS HERE WILL BE READ BY ALL HADOOP COMMANDS.  THEREFORE,
## ONE CAN USE THIS FILE TO SET YARN, HDFS, AND MAPREDUCE
## CONFIGURATION OPTIONS INSTEAD OF xxx-env.sh.
##
## Precedence rules:
##
## {yarn-env.sh|hdfs-env.sh} > hadoop-env.sh > hard-coded defaults
##
## {YARN_xyz|HDFS_xyz} > HADOOP_xyz > hard-coded defaults
##

# Many of the options here are built from the perspective that users
# may want to provide OVERWRITING values on the command line.
# For example:
#
# JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64/
#
# Therefore, the vast majority (BUT NOT ALL!) of these defaults
# are configured for substitution and not append.  If append
# is preferable, modify this file accordingly.

^G Get Help      ^O Write Out    ^W Where Is     ^K Cut Text     ^J Justify      ^C Cur Pos      M-U Undo
^X Exit          ^R Read File    ^_ Replace      ^U Uncut Text   ^T To Linter    ^_ Go To Line    M-E Redo
```

```
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/etc/hadoop$ sudo nano hadoop-env.sh
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/etc/hadoop$ sudo nano core-site.xml
```

```
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/etc/hadoop
File Edit View Search Terminal Help
GNU nano 2.9.3                                core-site.xml                                Modified

-->

<!-- Put site-specific property overrides in this file. -->

<configuration>
  <property>
    <name>fs.defaultFS</name>
    <value>hdfs://localhost:9000</value>
  </property>
  <property>
    <name>hadoop.tmp.dir</name>
    <value>/usr/local/bin/hadoop-tmp</value>
  </property>
</configuration>

^G Get Help      ^O Write Out    ^W Where Is     ^K Cut Text     ^J Justify      ^C Cur Pos      M-U Undo
^X Exit          ^R Read File    ^_ Replace      ^U Uncut Text   ^T To Spell     ^_ Go To Line    M-E Redo
```

```
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/etc/hadoop$ sudo nano hdfs-site.xml
```

```
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/etc/hadoop
File Edit View Search Terminal Help
GNU nano 2.9.3 hdfs-site.xml

<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
<!--
  Licensed under the Apache License, Version 2.0 (the "License");
  you may not use this file except in compliance with the License.
  You may obtain a copy of the License at

    http://www.apache.org/licenses/LICENSE-2.0

  Unless required by applicable law or agreed to in writing, software
  distributed under the License is distributed on an "AS IS" BASIS,
  WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
  See the License for the specific language governing permissions and
  limitations under the License. See accompanying LICENSE file.
-->

<!-- Put site-specific property overrides in this file. -->

<configuration>
  <property>
    <name>dfs.replication</name>
    <value>1</value>
  </property>
</configuration>
```

Read 24 lines 1

| | | | | | | |
|-------------|--------------|-------------|---------------|-------------|---------------|----------|
| ^G Get Help | ^O Write Out | ^W Where Is | ^K Cut Text | ^J Justify | ^C Cur Pos | M-U Undo |
| ^X Exit | ^R Read File | ^_ Replace | ^U Uncut Text | ^T To Spell | ^_ Go To Line | M-E Redo |

```
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/etc/hadoop$ sudo nano mapred-site.xml
```

```
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/etc/hadoop
File Edit View Search Terminal Help
GNU nano 2.9.3 mapred-site.xml Modified

<?xml version="1.0"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
<!--
  Licensed under the Apache License, Version 2.0 (the "License");
  you may not use this file except in compliance with the License.
  You may obtain a copy of the License at

    http://www.apache.org/licenses/LICENSE-2.0

  Unless required by applicable law or agreed to in writing, software
  distributed under the License is distributed on an "AS IS" BASIS,
  WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
  See the License for the specific language governing permissions and
  limitations under the License. See accompanying LICENSE file.
-->

<!-- Put site-specific property overrides in this file. -->

<configuration>
  <property>
    <name>mapreduce.framework.name</name>
    <value>yarn</value>
  </property>
</configuration>

^G Get Help  ^O Write Out  ^W Where Is  ^K Cut Text  ^J Justify   ^C Cur Pos   M-U Undo
^X Exit      ^R Read File  ^\ Replace   ^U Uncut Text ^T To Spell  ^_ Go To Line M-E Redo
```

```
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/etc/hadoop$ sudo nano yarn-site.xml
```

```
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/etc/hadoop
File Edit View Search Terminal Help
GNU nano 2.9.3 yarn-site.xml Modified

<?xml version="1.0"?>
<!--
  Licensed under the Apache License, Version 2.0 (the "License");
  you may not use this file except in compliance with the License.
  You may obtain a copy of the License at

    http://www.apache.org/licenses/LICENSE-2.0

  Unless required by applicable law or agreed to in writing, software
  distributed under the License is distributed on an "AS IS" BASIS,
  WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
  See the License for the specific language governing permissions and
  limitations under the License. See accompanying LICENSE file.
-->

<configuration>
  <property>
    <name>yarn.nodemanager.aux-services</name>
    <value>mapreduce_shuffle</value>
  </property>
</configuration>

^G Get Help  ^O Write Out  ^W Where Is  ^K Cut Text  ^J Justify   ^C Cur Pos   M-U Undo
^X Exit      ^R Read File  ^\ Replace   ^U Uncut Text ^T To Spell  ^_ Go To Line M-E Redo
```


NOTE: Configuration is complete for Hadoop setup. Always format the namenode ONLY when you install Hadoop. Then, start your Hadoop. Please refer screenshots below –

```
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/etc/hadoop$ cd ../../
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1$ cd bin
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/bin$ ls -la
total 1040
drwxr-xr-x 2 amigandhi amigandhi 4096 Sep 10 12:51 .
drwxr-xr-x 9 amigandhi amigandhi 4096 Sep 10 12:51 ..
-rwxr-xr-x 1 amigandhi amigandhi 442480 Sep 10 12:33 container-executor
-rwxr-xr-x 1 amigandhi amigandhi 8707 Sep 10 11:57 hadoop
-rwxr-xr-x 1 amigandhi amigandhi 11265 Sep 10 11:57 hadoop.cmd
-rwxr-xr-x 1 amigandhi amigandhi 11274 Sep 10 12:01 hdfs
-rwxr-xr-x 1 amigandhi amigandhi 8081 Sep 10 12:01 hdfs.cmd
-rwxr-xr-x 1 amigandhi amigandhi 6237 Sep 10 12:36 mapred
-rwxr-xr-x 1 amigandhi amigandhi 6311 Sep 10 12:36 mapred.cmd
-rwxr-xr-x 1 amigandhi amigandhi 29184 Sep 10 12:33 oom-listener
-rwxr-xr-x 1 amigandhi amigandhi 484264 Sep 10 12:33 test-container-executor
-rwxr-xr-x 1 amigandhi amigandhi 12112 Sep 10 12:33 yarn
-rwxr-xr-x 1 amigandhi amigandhi 12840 Sep 10 12:33 yarn.cmd
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/bin$ ./hadoop namenode -format
```

```
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/bin
File Edit View Search Terminal Help
2020-02-29 21:23:52,821 INFO namenode.NameNode: Caching file names occurring more than 10 times
2020-02-29 21:23:52,825 INFO snapshot.SnapshotManager: Loaded config captureOpenFiles: false, skipCaptureAccessTimeOnlyChange: false, snapshotDiffAllowSnapRootDescendant: true, maxSnapshotLimit: 65536
2020-02-29 21:23:52,826 INFO snapshot.SnapshotManager: SkipList is disabled
2020-02-29 21:23:52,829 INFO util.GSet: Computing capacity for map cachedBlocks
2020-02-29 21:23:52,829 INFO util.GSet: VM type = 64-bit
2020-02-29 21:23:52,829 INFO util.GSet: 0.25% max memory 1.7 GB = 4.4 MB
2020-02-29 21:23:52,829 INFO util.GSet: capacity = 2^19 = 524288 entries
2020-02-29 21:23:52,836 INFO metrics.TopMetrics: NNTop conf: dfs.namenode.top.window.num.buckets = 10
2020-02-29 21:23:52,836 INFO metrics.TopMetrics: NNTop conf: dfs.namenode.top.num.users = 10
2020-02-29 21:23:52,836 INFO metrics.TopMetrics: NNTop conf: dfs.namenode.top.windows.minutes = 1,5,25
2020-02-29 21:23:52,839 INFO namenode.FSNamesystem: Retry cache on namenode is enabled
2020-02-29 21:23:52,839 INFO namenode.FSNamesystem: Retry cache will use 0.03 of total heap and retry cache entry expiry time is 600000 millis
2020-02-29 21:23:52,841 INFO util.GSet: Computing capacity for map NameNodeRetryCache
2020-02-29 21:23:52,841 INFO util.GSet: VM type = 64-bit
2020-02-29 21:23:52,841 INFO util.GSet: 0.029999999329447746% max memory 1.7 GB = 541.9 KB
2020-02-29 21:23:52,841 INFO util.GSet: capacity = 2^16 = 65536 entries
2020-02-29 21:23:52,860 INFO namenode.FSImage: Allocated new BlockPoolId: BP-947238340-127.0.1.1-1583029432855
2020-02-29 21:23:52,873 INFO common.Storage: Storage directory /usr/local/bin/hadoop-tmp/dfs/name has been successfully formatted.
2020-02-29 21:23:52,895 INFO namenode.FSImageFormatProtobuf: Saving image file /usr/local/bin/hadoop-tmp/dfs/name/current/fsimage.ckpt_00000000000000000000 using no compression
2020-02-29 21:23:52,963 INFO namenode.FSImageFormatProtobuf: Image file /usr/local/bin/hadoop-tmp/dfs/name/current/fsimage.ckpt_00000000000000000000 of size 404 bytes saved in 0 seconds
2020-02-29 21:23:52,973 INFO namenode.NNStorageRetentionManager: Going to retain 1 images with txid >= 0
2020-02-29 21:23:52,979 INFO namenode.FSImage: FSImageSaver clean checkpoint: txid=0 when meet shutdown.
2020-02-29 21:23:52,979 INFO namenode.NameNode: SHUTDOWN_MSG:
/*****
SHUTDOWN_MSG: Shutting down NameNode at ubuntu/127.0.1.1
*****/
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/bin$
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/bin$
```



```
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/sbin
File Edit View Search Terminal Help
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/bin$
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/bin$
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/bin$
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/bin$ cd ..
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1$ cd sbin
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/sbin$ ./start-all.sh
WARNING: Attempting to start all Apache Hadoop daemons as amigandhi in 10 seconds.
WARNING: This is not a recommended production deployment configuration.
WARNING: Use CTRL-C to abort.
Starting namenodes on [localhost]
Starting datanodes
Starting secondary namenodes [ubuntu]
ubuntu: Warning: Permanently added 'ubuntu' (ECDSA) to the list of known hosts.
Starting resourcemanager
Starting nodemanagers
```

NOTE: To check if all your nodes are up, use command: 'jps'. Once you are down, gracefully shutdown Hadoop.

```
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/sbin$ jps
11328 Jps
10788 ResourceManager
10309 DataNode
10968 NodeManager
10106 NameNode
10555 SecondaryNameNode
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/sbin$ ./stop-all.sh
WARNING: Stopping all Apache Hadoop daemons as amigandhi in 10 seconds.
WARNING: Use CTRL-C to abort.
Stopping namenodes on [localhost]
Stopping datanodes
Stopping secondary namenodes [ubuntu]
Stopping nodemanagers
Stopping resourcemanager
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/sbin$ jps
12312 Jps
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/sbin$
```

NOTE: Every time to start and stop Hadoop, you need to be in /usr/local/bin/hadoop-3.2.1/sbin path only. Hence, its always a good practice to create alias in such conditions to start/stop hadoop from any location.

```
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/sbin$
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/sbin$
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/sbin$ nano ~/.bash_profile
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/sbin$
```

```
amigandhi@ubuntu: /usr/local/bin/hadoop-3.2.1/sbin
File Edit View Search Terminal Help
GNU nano 2.9.3 /home/amigandhi/.bash_profile

export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64/
alias hstart="/usr/local/bin/hadoop-3.2.1/sbin/start-all.sh"
alias hstop="/usr/local/bin/hadoop-3.2.1/sbin/stop-all.sh"

^G Get Help  ^O Write Out  ^W Where Is   ^K Cut Text   ^J Justify    ^C Cur Pos   M-U Undo
^X Exit      ^R Read File  ^\ Replace   ^U Uncut Text ^T To Spell   ^_ Go To Line  M-E Redo
```

```
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/sbin$
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/sbin$ source ~/.bash_profile
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/sbin$ hstart
WARNING: Attempting to start all Apache Hadoop daemons as amigandhi in 10 seconds.
WARNING: This is not a recommended production deployment configuration.
WARNING: Use CTRL-C to abort.
Starting namenodes on [localhost]
Starting datanodes
Starting secondary namenodes [ubuntu]
Starting resourcemanager
Starting nodemanagers
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/sbin$ hstop
WARNING: Stopping all Apache Hadoop daemons as amigandhi in 10 seconds.
WARNING: Use CTRL-C to abort.
Stopping namenodes on [localhost]
Stopping datanodes
Stopping secondary namenodes [ubuntu]
Stopping nodemanagers
Stopping resourcemanager
amigandhi@ubuntu:/usr/local/bin/hadoop-3.2.1/sbin$ jps
15116 Jps
```

THANK YOU!!