Build Image

download docker registory

```
git clone https://github.com/trex-group/Big-Data.git
```

```
cd Big-Data/01_Guide/environment/docker/Hadoop_Ubuntu_Bin

# rebuild images
$ ./build-image.sh base-dnsmasq
# $ ./build-image.sh hadoop-base
# $ ./build-image.sh hbase-base
```

Create Hadoop Container

```
$ ./start-hadoop-container.sh latest 3
# start master container...
# start slave1 container...
# start slave2 container...
```

detect nodes

```
$ cd ~

$ serf members
# master.test.com  172.17.0.2:7946  alive
# slave1.test.com  172.17.0.3:7946  alive
# slave2.test.com  172.17.0.4:7946  alive

$ ./configure-members.sh
```

start hadoop

```
$ cd ~
$ ./start-hadoop.sh
```

test

```
$ jps
$ hdfs dfsadmin -report
```

Create HBase Container

```
$ ./start-hbase-container.sh latest 3
# start master container...
# start slave1 container...
# start slave2 container...
```

detect nodes

```
$ cd ~

$ serf members
# master.test.com  172.17.0.2:7946  alive
# slave1.test.com  172.17.0.3:7946  alive
# slave2.test.com  172.17.0.4:7946  alive

$ ./configure-members.sh
```

start hadoop

```
$ cd ~
$ ./start-hadoop.sh
```

test

```
$ jps
$ hdfs dfsadmin -report
```

test hadoop

```
hadoop fs -ls /
hadoop fs -mkdir /input
hadoop fs -ls /

hadoop fs -put $HADOOP_HOME/LICENSE.txt /input
hadoop fs -put $HADOOP_HOME/NOTICE.txt /input
hadoop fs -put $HADOOP_HOME/README.txt /input
hadoop fs -ls /input

hadoop jar $HADOOP_HOME/share/hadoop/mapreduce/hadoop-mapreduce-examples-2.7
.3.jar wordcount /input /output

hadoop fs -ls /output
hadoop fs -cat /output/part-r-00000
```

start hbase shell

```
cd ~
./start-hbase.sh
```

test hbase shell

```
hbase(main):001:0> $ status
hbase(main):002:0> $ create 'album','label','image'
hbase(main):003:0> $ put 'album','label1','label:size','10'
hbase(main):004:0> $ put 'album','label1','label:color','255:255:255'
hbase(main):005:0> $ put 'album','label1','label:text','Family album'
hbase(main):006:0> $ put 'album','label1','image:name','holiday'
hbase(main):007:0> $ put 'album','label1','image:source','/tmp/pic1.jpg'
hbase(main):008:0> $ get 'album','label1'
```