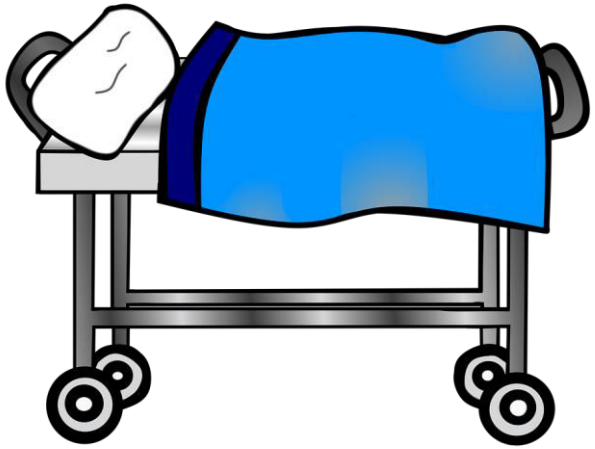
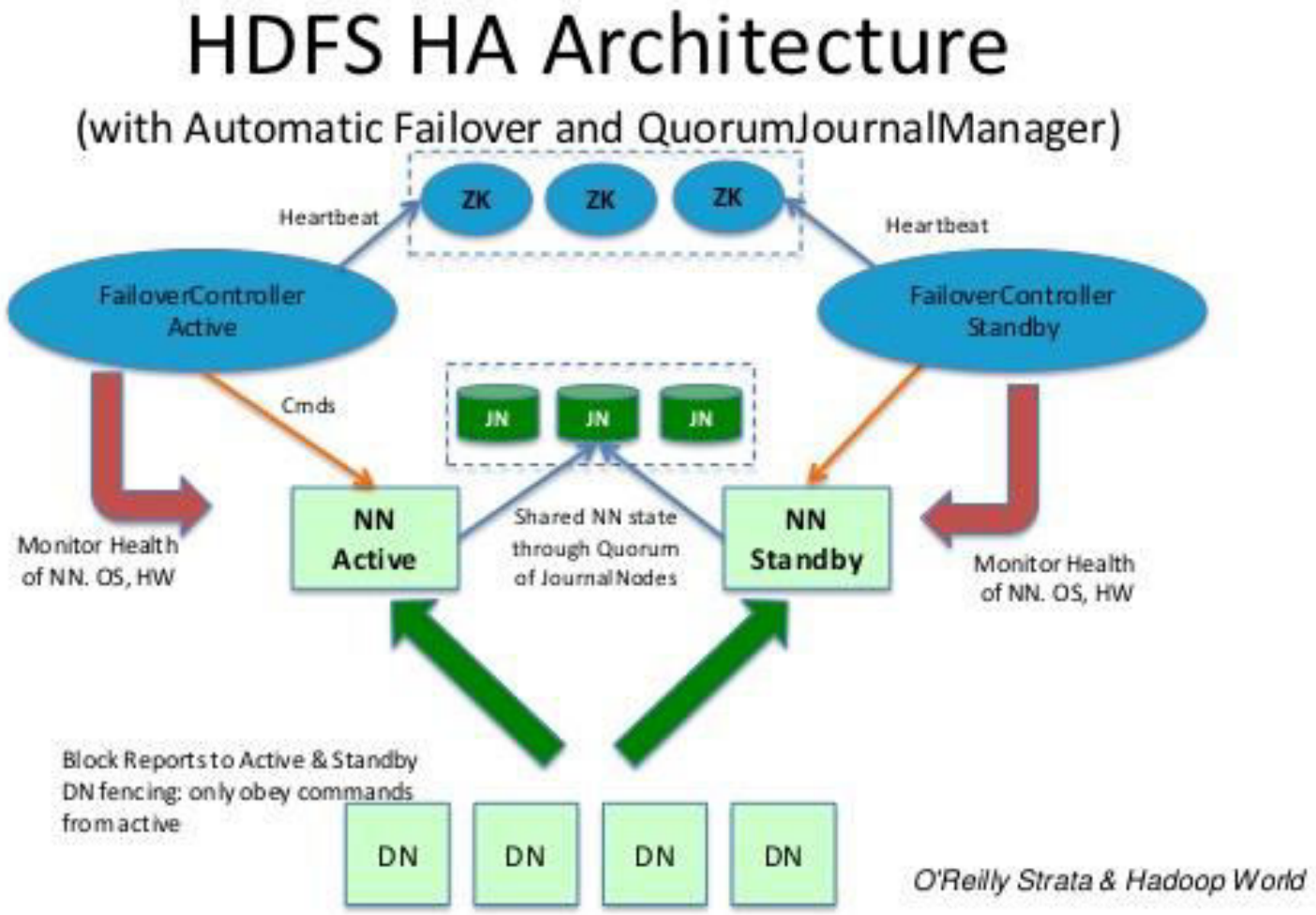
IntelliPaat

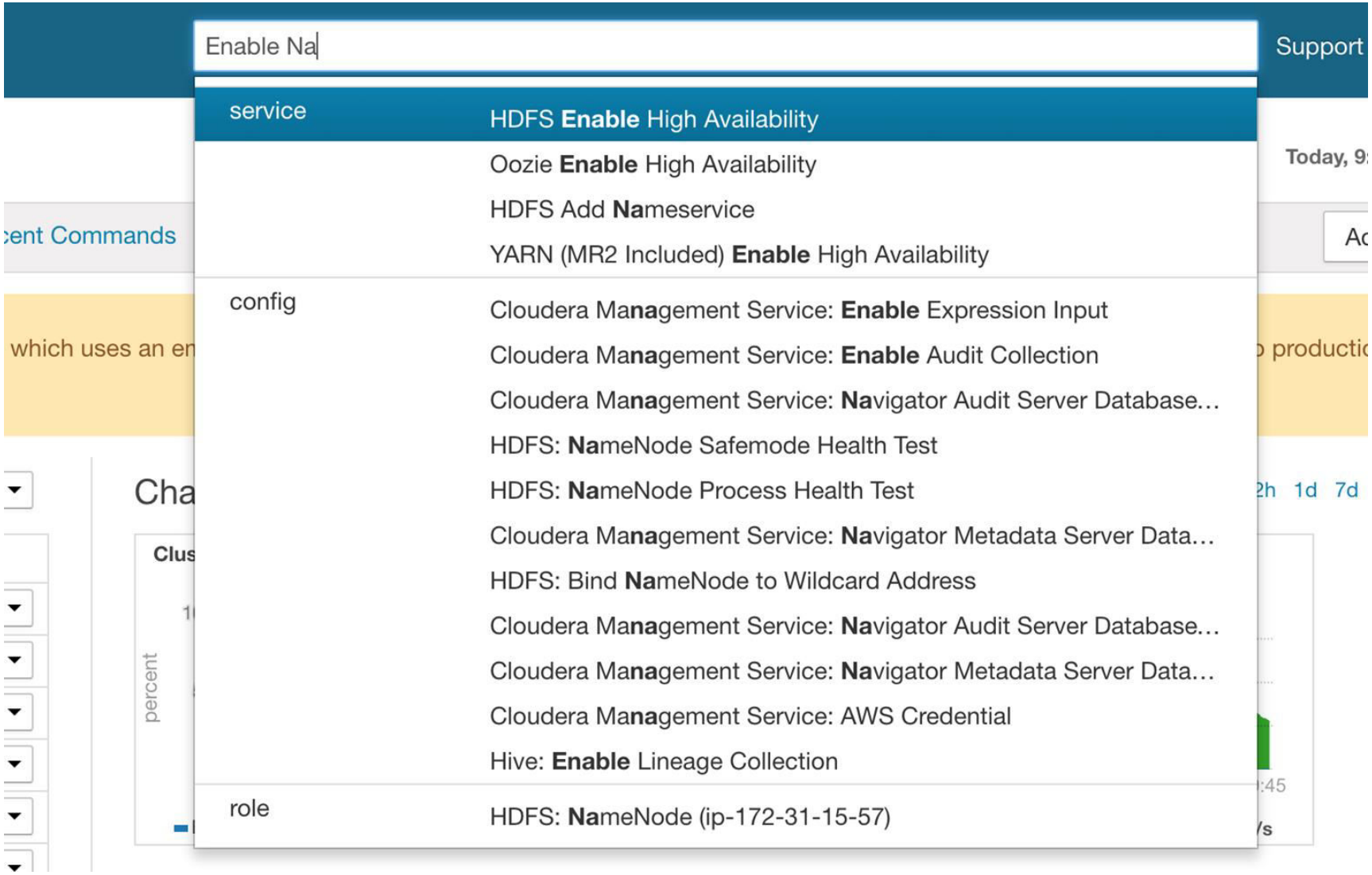


Namenode HA

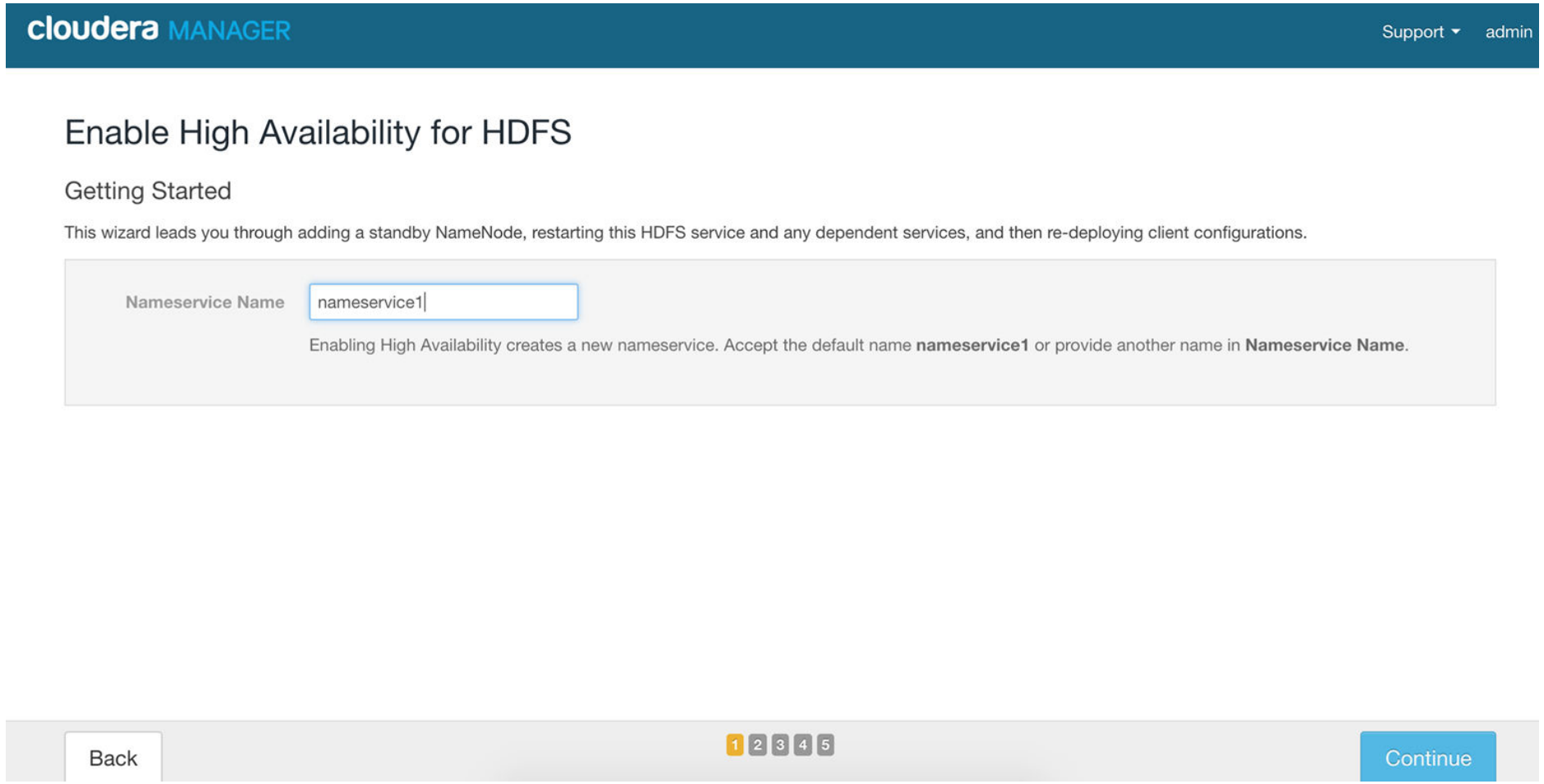
HA Architecture



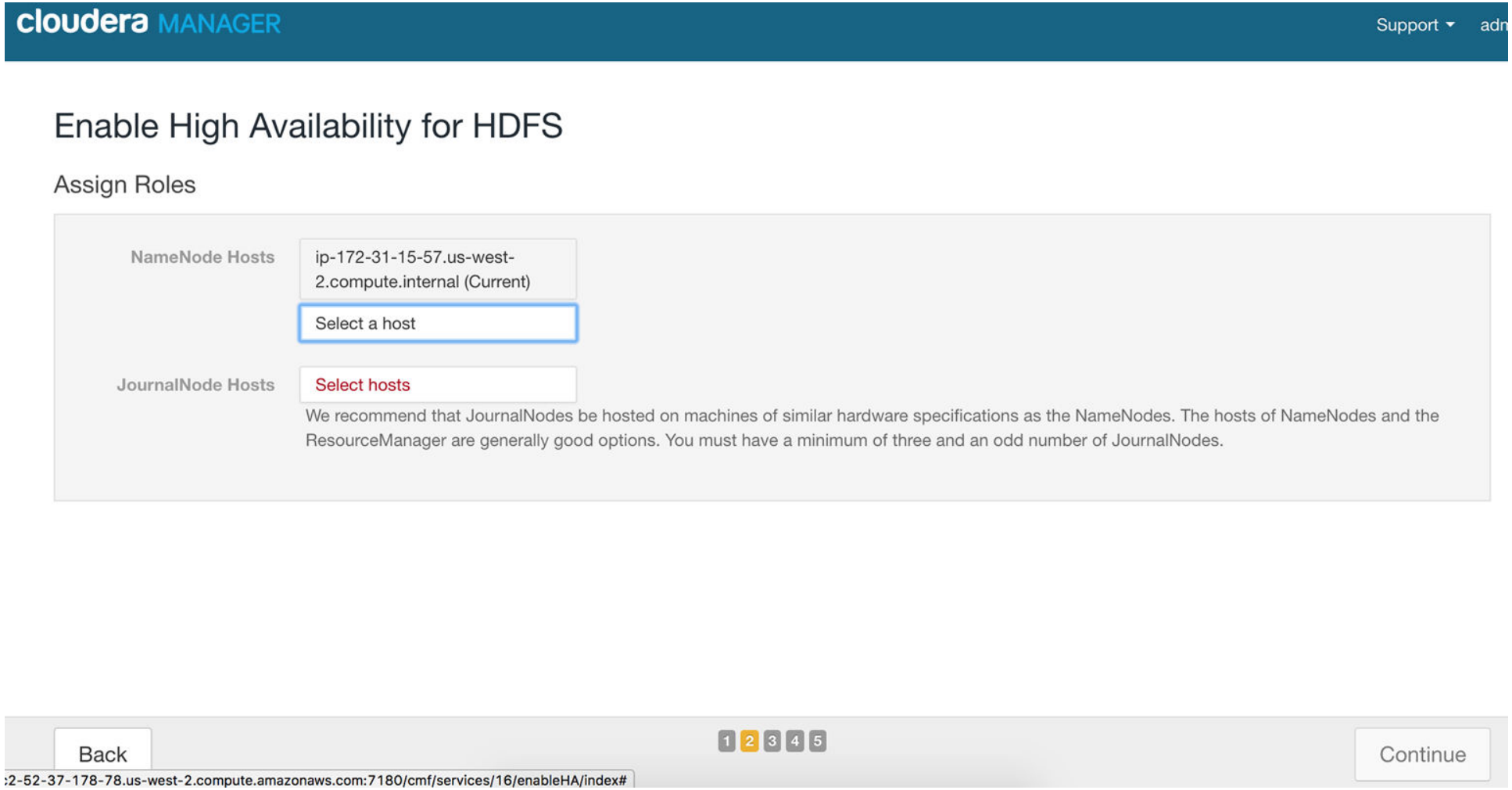
Enabling HA



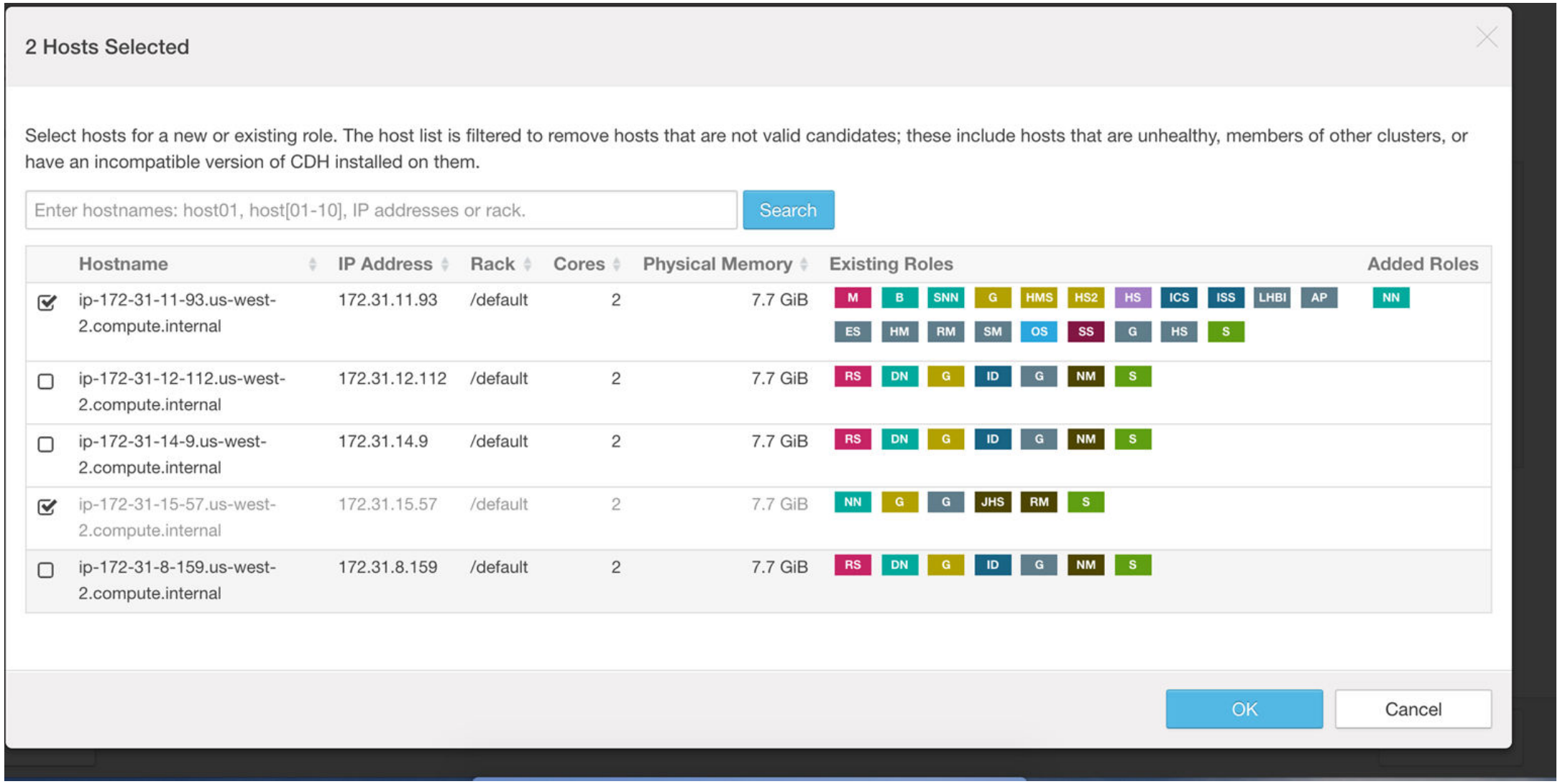
Enabling HA



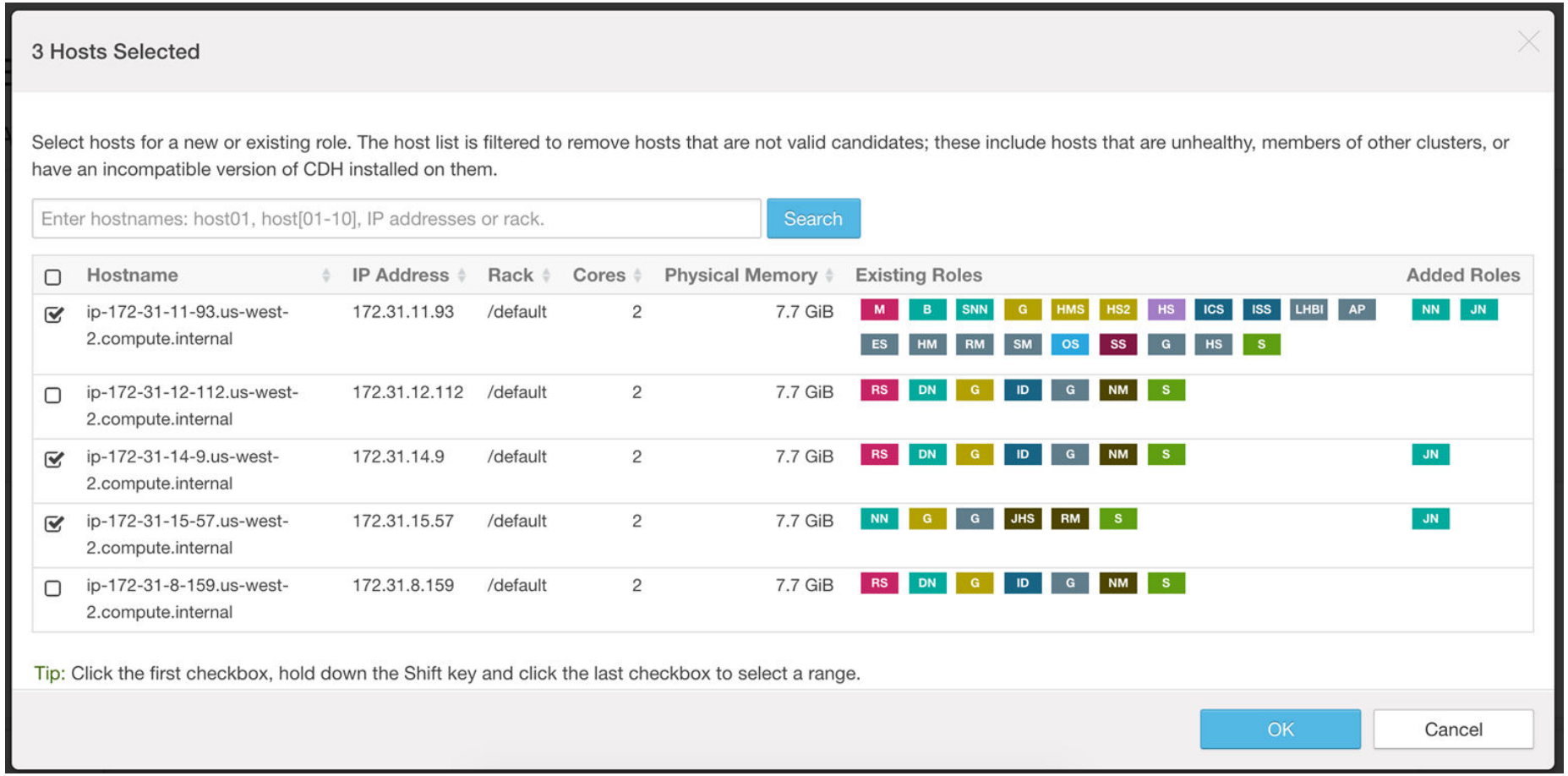
Enabling HA



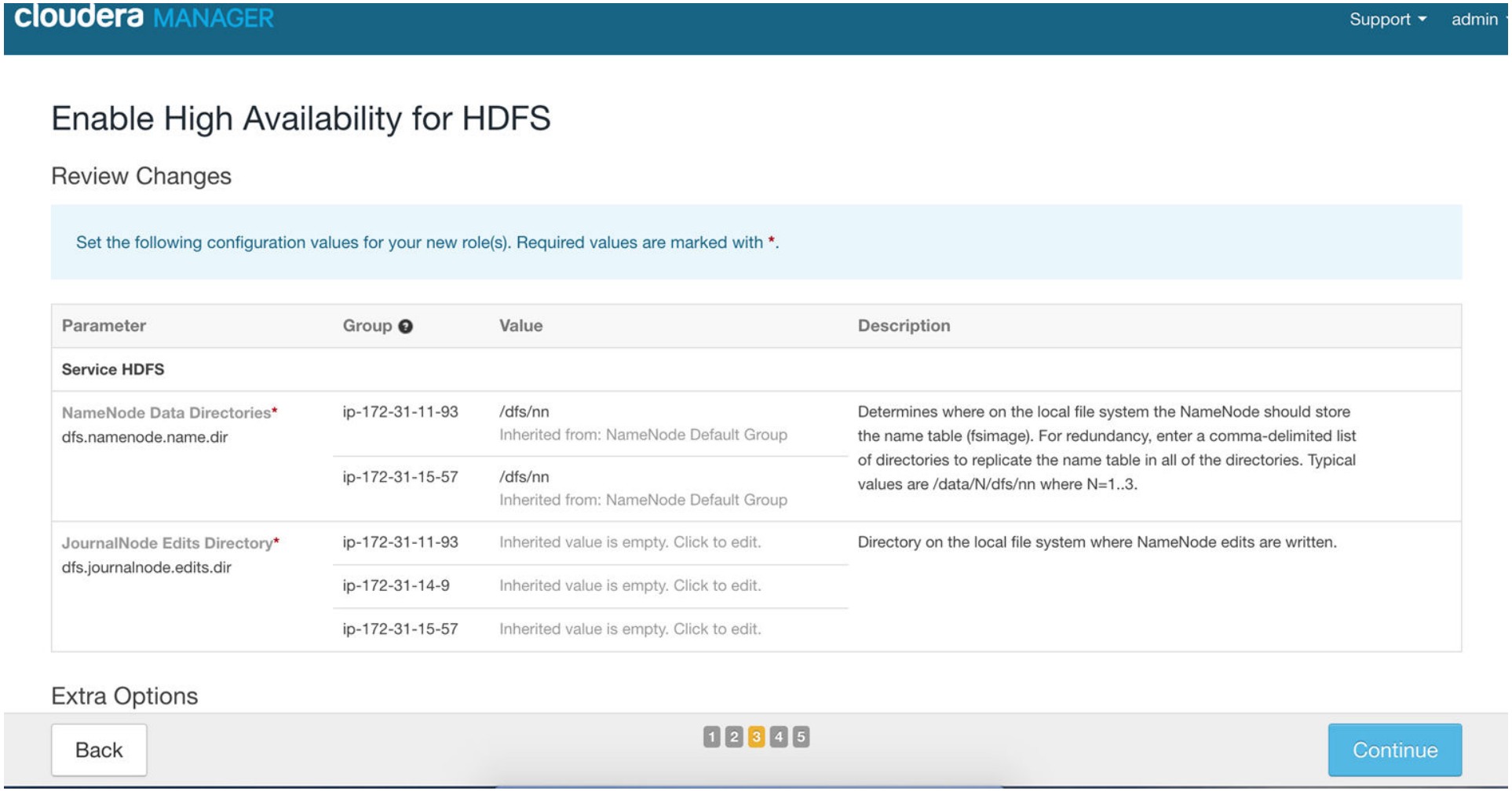
Enabling HA



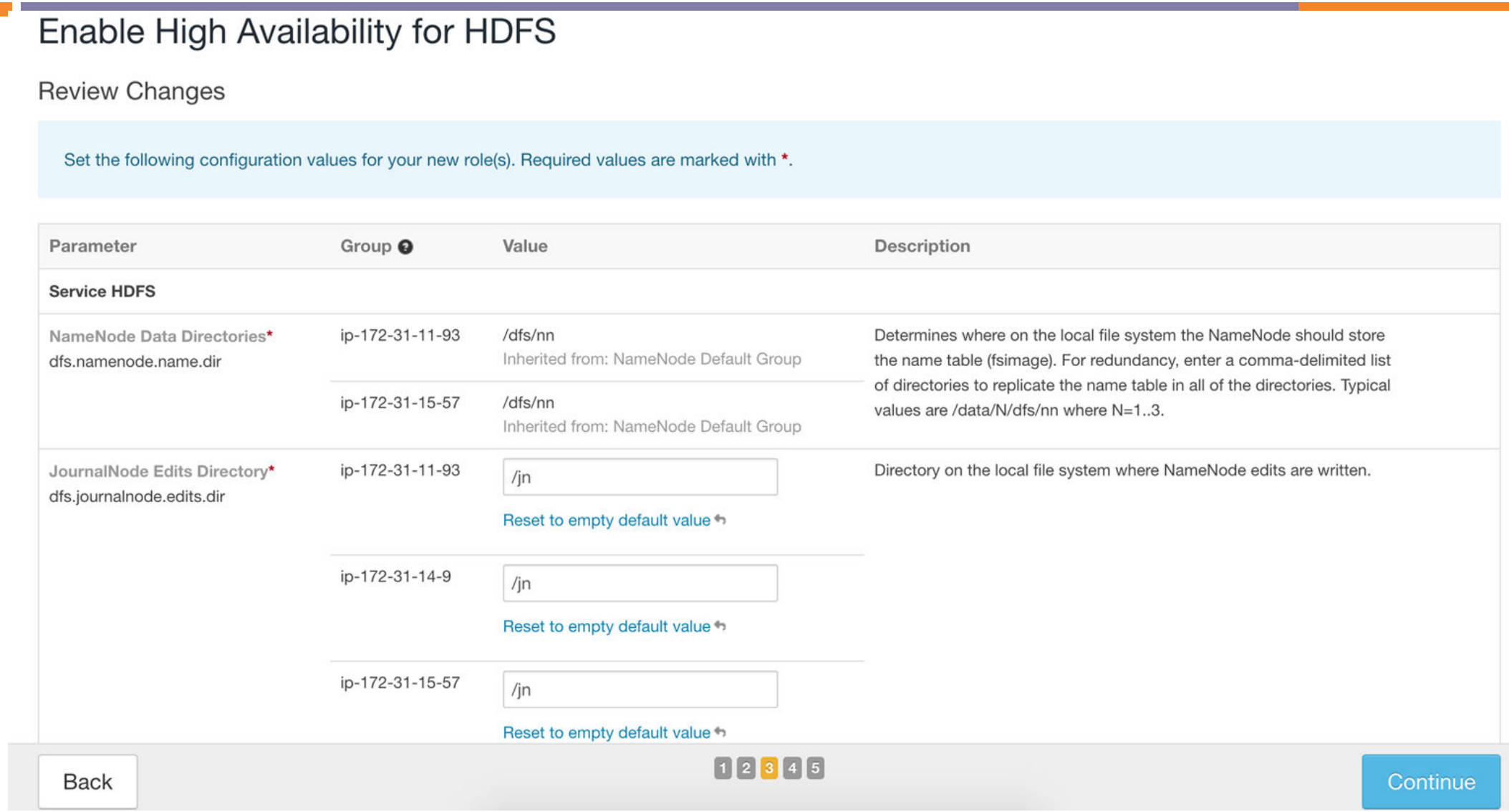
Enabling HA



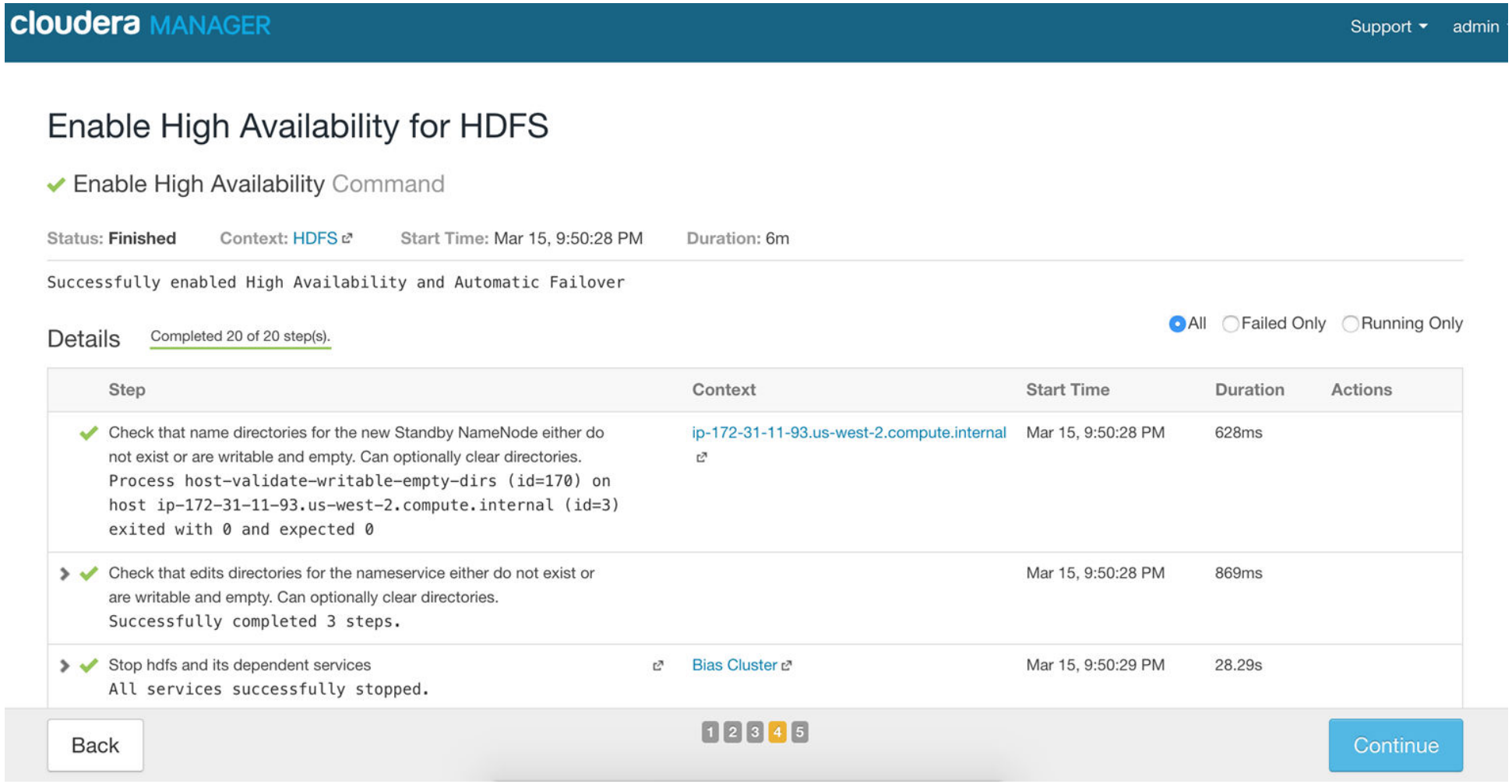
Enabling HA



Enabling HA



Enabling HA



Enabling HA

Enable High Availability for HDFS

Congratulations!

Successfully enabled High Availability.

Enabling HA

```
[root@ip-172-31-12-112 ~]# head -15 /etc/hadoop/conf/core-site.xml
<?xml version="1.0" encoding="UTF-8"?>

<!--Autogenerated by Cloudera Manager-->
<configuration>
  <property>
    <name>fs.defaultFS</name>
    <value>hdfs://nameservice1</value>
  </property>
  <property>
    <name>fs.trash.interval</name>
    <value>1</value>
  </property>
  <property>
    <name>io.compression.codecs</name>
    <value>org.apache.hadoop.io.compress.DefaultCodec,org.apache.hadoop.io.compress.GzipCodec,org.apache.hadoop.io.compress.BZip2C
odec,org.apache.hadoop.io.compress.DeflateCodec,org.apache.hadoop.io.compress.SnappyCodec,org.apache.hadoop.io.compress.Lz4Codec</
value>
```

Enabling HA

```
<property>
  <name>dfs.ha.namenodes.nameservice1</name>
  <value>namenode95,namenode57</value>
</property>
<property>
  <name>dfs.namenode.rpc-address.nameservice1.namenode95</name>
  <value>ip-172-31-11-93.us-west-2.compute.internal:8020</value>
</property>
<property>
  <name>dfs.namenode.servicerpc-address.nameservice1.namenode95</name>
  <value>ip-172-31-11-93.us-west-2.compute.internal:8022</value>
</property>
<property>
  <name>dfs.namenode.http-address.nameservice1.namenode95</name>
  <value>ip-172-31-11-93.us-west-2.compute.internal:50070</value>
</property>
<property>
  <name>dfs.namenode.https-address.nameservice1.namenode95</name>
  <value>ip-172-31-11-93.us-west-2.compute.internal:50470</value>
</property>
<property>
  <name>dfs.namenode.rpc-address.nameservice1.namenode57</name>
  <value>ip-172-31-15-57.us-west-2.compute.internal:8020</value>
</property>
<property>
  <name>dfs.namenode.servicerpc-address.nameservice1.namenode57</name>
  <value>ip-172-31-15-57.us-west-2.compute.internal:8022</value>
</property>
<property>
```

Access using logical name

```
[root@ip-172-31-12-112 ~]# hadoop fs -ls hdfs://nameservice1:8020/
Found 6 items
drwxr-xr-x   - hbase hbase               0 2017-03-15 21:54 hdfs://nameservice1:8020/hbase
drwxr-xr-x   - hdfs  supergroup          0 2017-03-15 07:17 hdfs://nameservice1:8020/hello
drwxrwxr-x   - solr  solr                0 2017-03-15 06:14 hdfs://nameservice1:8020/solr
drwxr-xr-x   - hdfs  supergroup          0 2017-03-15 07:42 hdfs://nameservice1:8020/system
drwxrwxrwt   - hdfs  supergroup          0 2017-03-15 06:39 hdfs://nameservice1:8020/tmp
drwxr-xr-x   - hdfs  supergroup          0 2017-03-15 07:18 hdfs://nameservice1:8020/user
[root@ip-172-31-12-112 ~]#
```

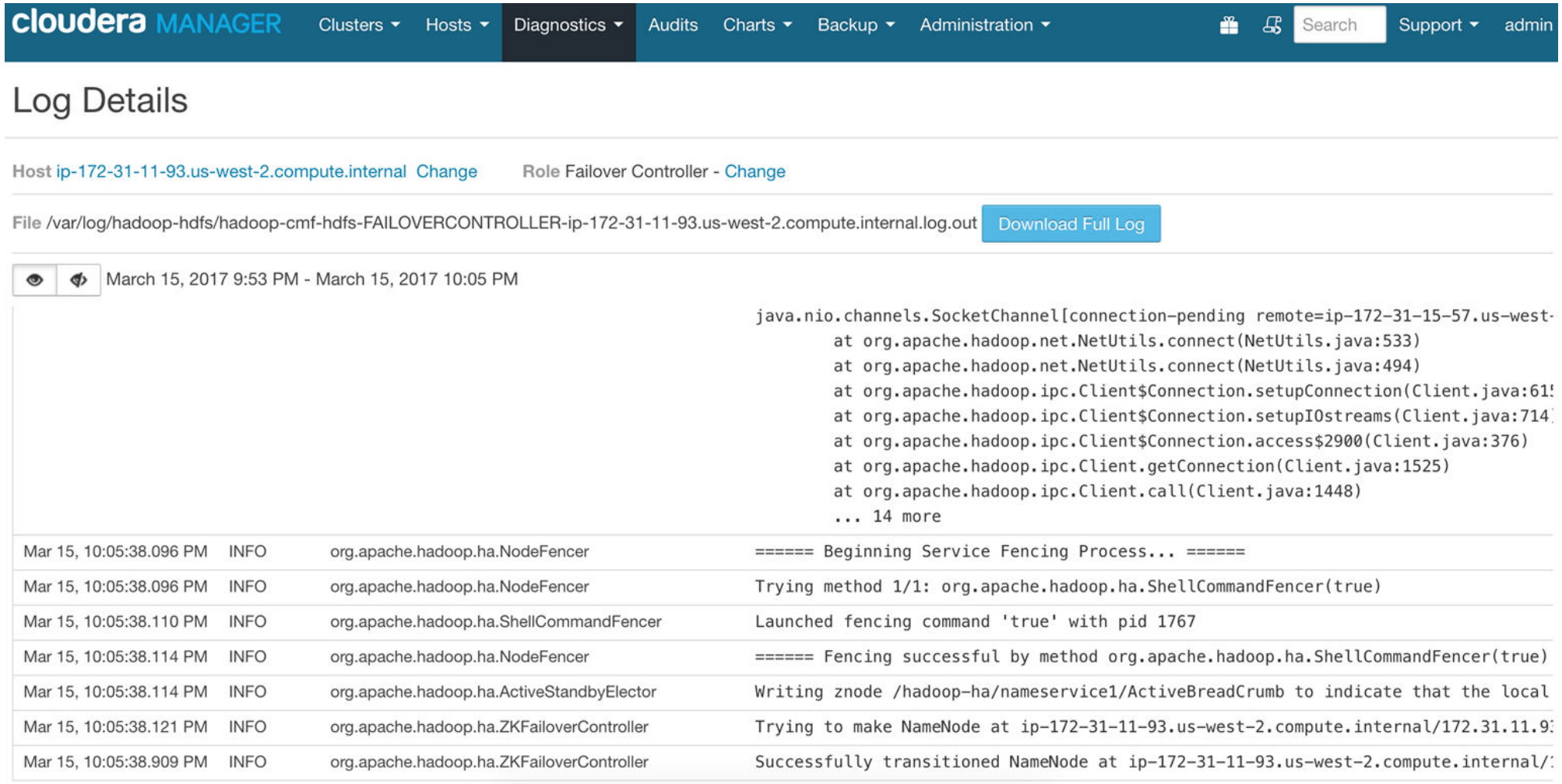
Failover

Demo CDM	i-01bf264dcca3e6dbb	t2.large	us-west-2c	running
Demo Namenode	i-03eb66e0a08a089ac	t2.large	us-west-2c	stopped
Demo SNamenode	i-057575c3ce81de46b	t2.large	us-west-2c	running
Demo DataNode1	i-0711013525c2586aa	t2.large	us-west-2c	running
Demo DatanNode2	i-085f5a4f098fb9f35	t2.large	us-west-2c	running
Demo DataNode3	i-0fd070bf5c899b169	t2.large	us-west-2c	running

Failover

```
Caused by: java.net.NoRouteToHostException: No route to host
        at sun.nio.ch.SocketChannelImpl.checkConnect(Native Method)
        at sun.nio.ch.SocketChannelImpl.finishConnect(SocketChannelImpl.java:739)
        at org.apache.hadoop.net.SocketIOWithTimeout.connect(SocketIOWithTimeout.java:206)
        at org.apache.hadoop.net.NetUtils.connect(NetUtils.java:530)
        at org.apache.hadoop.net.NetUtils.connect(NetUtils.java:494)
        at org.apache.hadoop.ipc.Client$Connection.setupConnection(Client.java:615)
        at org.apache.hadoop.ipc.Client$Connection.setupIOstreams(Client.java:714)
        at org.apache.hadoop.ipc.Client$Connection.access$2900(Client.java:376)
        at org.apache.hadoop.ipc.Client.getConnection(Client.java:1525)
        at org.apache.hadoop.ipc.Client.call(Client.java:1448)
        ... 29 more
Found 6 items
drwxr-xr-x   - hbase hbase               0 2017-03-15 21:54 hdfs://nameservice1:8020/hbase
drwxr-xr-x   - hdfs  supergroup          0 2017-03-15 07:17 hdfs://nameservice1:8020/hello
drwxrwxr-x   - solr  solr                0 2017-03-15 06:14 hdfs://nameservice1:8020/solr
drwxr-xr-x   - hdfs  supergroup          0 2017-03-15 07:42 hdfs://nameservice1:8020/system
drwxrwxrwt   - hdfs  supergroup          0 2017-03-15 06:39 hdfs://nameservice1:8020/tmp
drwxr-xr-x   - hdfs  supergroup          0 2017-03-15 07:18 hdfs://nameservice1:8020/user
```

Failover



Thank You