<p align="center">**Federation Setup**</p>

In this setup document we are going to deploy two namenode(bank,online) in a single cluster.

prerequisite

If you setup HA then Take a backup of your existing core-site.xml and hdfs-site.xml.

```
mkdir -p  ~/bcp_conf/ha

cp /usr/local/hadoop/etc/hadoop/core-site.xml
/usr/local/hadoop/etc/hadoop/hdfs-site.xml ~/bcp_conf/ha
```

```
1. Edit or add below settings in core-site.xml

vi /usr/local/hadoop/etc/hadoop/core-site.xml

<property>
<name>fs.defaultFS</name>
<value>viewfs://MyCluster</value>
</property>
<property>
    <name>fs.viewfs.mounttable.MyCluster.link./bank</name>
    <value>hdfs://namenode:9000/bank</value>
</property>

<property>
    <name>fs.viewfs.mounttable.MyCluster.link./online</name>
    <value>hdfs://datanode2:9000/online</value>
</property>
```

```
2. Add below settings in hdfs-site.xml

(keep as it is ur namenode.name.dir,datanode.data.dir and replication
settings)

vi /usr/local/hadoop/etc/hadoop/hdfs-site.xml

<property>
 <name>dfs.nameservices</name>
 <value>bank,online</value>
 </property>
 <property>
    <name>dfs.namenode.rpc-address.bank</name>
    <value>namenode:9000</value>
</property>
<property>
    <name>dfs.namenode.http-address.bank</name>
    <value>namenode:50070</value>
</property>
<property>
```

```xml
    <name>dfs.namenode.rpc-address.online</name>
    <value>datanode2:9000</value>
</property>
<property>
    <name>dfs.namenode.http-address.online</name>
    <value>datanode2:50070</value>
</property>
```

3. Format namenode in both nodes.

In the bank namenode

hdfs namenode -format

copy the cluster id from the logs or from VERSION file and use that id while formatting subsequent namenodes, In our case we are going to use that id For our onlie namenode.

hdfs namenode -format -clusterId   CID-384797d3-94d5-45ff-ad3a-2e324d119d3e

4. start namenode in both the nodes

hadoop-daemon.sh start namenode

5. Start datanode in all three nodes

hadoop-daemon.sh start datanode

6. Now check both namenode ui in browser.

7. run the below command to creta bank and online dir .

hadoop fs -mkdir hdfs://namenode:9000/bank

hadoop fs -mkdir hdfs://datanode2:9000/online

hadoop fs -mkdir /bank/bankdata

hadoop fs -mkdir /online/onlinedata

hadoop fs -put somefile /bank/bankdata

hadoop fs -put somefile /online/onlinedata

8. check namenode ui in both namenodes and browse the files sytem.