

User and group mapping In HDFS

1. In order to access hadoop we need to set hadoop related environment variables in globalay

```
sudo vi /etc/environment
```

```
#Java path
```

```
export JAVA_HOME=/usr/lib/jvm/jdk1.8.0_71
export JRE_HOME=/usr/lib/jvm/jdk1.8.0_71/jre/
export HADOOP_PREFIX=/usr/local/hadoop
export HADOOP_HOME=/usr/local/hadoop
export HADOOP_MAPRED_HOME=${HADOOP_HOME}
export HADOOP_COMMON_HOME=${HADOOP_HOME}
export HADOOP_HDFS_HOME=${HADOOP_HOME}
export YARN_HOME=${HADOOP_HOME}
export HADOOP_CONF_DIR=${HADOOP_HOME}/etc/hadoop
```

2. Create new user and group in linux

```
groupadd dev
```

```
useradd -g dev dev1
```

```
passwd dev1
```

3. Switch user as newly created user and try to create hadoop home directory

```
su dev1
```

```
hadoop fs -mkdir /user/dev1
```

(u will get a permission issue to create this step)

4. Switch as hadoop super user (hdsuer)

```
hadoop fs -mkdir /user/dev1
```

```
hdfs dfs -chown -R dev1:dev /user/dev1
```

```
hdfs dfsadmin -refreshUserToGroupsMappings
```

Set Quota In HDFS

1. Set directory quota and create more than 3 directories in it.

```
su hduser
```

```
hadoop dfsadmin -setQuota 3 /user/dev1
```

```
su dev1
```

```
hadoop fs -mkdir test1
```

```
hadoop fs -mkdir test2
```

```
hadoop fs -mkdir test3
```

2.

```
hadoop fs -count -q -v /user/dev1
```

3. If we want to clear the quota run the below command

```
hadoop dfsadmin -clrQuota /user/dev1
```