

## Part 1: Build up Business Data Technology Platform

### ### Set up CVN68 virtual machine (memory, network)

1. Download ALP312.CVN68.DT.zip
2. Decompose ALP312.CVN68.DT.zip
3. Change memory/core to 12288/4 in .vmx
4. Start with VMware Workstation Player/player/file/open
5. Change settings in VMware Manage/Virtual Machine Settings/Network Adapter/Bridged
6. Putty:  
    HOST NAME: CVN68 IP  
    PORT: 22 (CVN68)  
    Login account/password: bigred/bigred

### ### Start docker-compose

```
# Act as bigred@cvn68
$dkc mdt create
$dkc mdt start
$dkc mdt ps
```

### ### Create 4 data scientists Linux user account in machine 'ds101' (ds01,ds02,ds03,ds04)

```
$ssh adm100
# Act as bigred@adm100
$echo $"#!/bin/bash
formathdfs
starthdfs;startyarn
hls
hdfs dfs -mkdir -p /user/{bigred,ds01,ds02,ds03,ds04}
hdfs dfs -ls /user
hdfs dfs -chown bigred:bigred /user/bigred
hdfs dfs -chown ds01:ds01 /user/ds01
hdfs dfs -chown ds02:ds02 /user/ds02
hdfs dfs -chown ds03:ds03 /user/ds03
hdfs dfs -chown ds04:ds04 /user/ds04
hdfs dfs -ls /user
hdfs dfs -chmod -R 777 /tmp;" > adm100_hdfs.sh

$cat adm100_hdfs.sh
$chmod +x adm100_hdfs.sh
$./adm100_hdfs.sh
```

### ### Create 4 data scientists Linux user account in machine 'ds101' (ds01,ds02,ds03,ds04)

```
$ssh ds101
# Act as bigred@ds101
$echo $"#!/bin/bash
sudo useradd -m -s /bin/bash ds01
sudo useradd -m -s /bin/bash ds02
sudo useradd -m -s /bin/bash ds03
sudo useradd -m -s /bin/bash ds04
echo ds01:ds01 | sudo chpasswd
echo ds02:ds02 | sudo chpasswd
echo ds03:ds03 | sudo chpasswd
echo ds04:ds04 | sudo chpasswd
ls -al /home
grep home /etc/passwd;" > ds101_user.sh
```

```
$cat ds101_user.sh
$chmod +x ds101_user.sh
$./ds101_user.sh
```