

```
# hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player ▾ || 🔍 🖨️ ⏮️ ⏭️
Applications Places System [🔌] [📶] [🔊] [🔴] root
root@hadoop1:~
File Edit View Search Terminal Help
# grub.conf generated by anaconda
#
# Note that you do not have to rerun grub after making changes to this file
# NOTICE: You have a /boot partition. This means that
#           all kernel and initrd paths are relative to /boot/, eg.
#           root (hd0,0)
#           kernel /vmlinuz-version ro root=/dev/mapper/vg_hadoop1-lv_root
#           initrd /initrd-[generic]-version.img
# boot=dev/sda
default=0
timeout=5
splashimage=(hd0,0)/grub/splash.xpm.gz
hiddenmenu
title CentOS (2.6.32-642.11.1.el6.x86_64)
    root (hd0,0)
    kernel /vmlinuz-2.6.32-642.11.1.el6.x86_64 ro root=/dev/mapper/vg_hadoop1-lv_root rd_NO_LUKS LANG=en_US.UTF-8 rd_LVM LV=vg_hadoop1/lv_swap rd_NO_MD SYSFONT=lata
rcyrheb-sun16 rd_NO_DM KEYBOARDTYPE=pc KEYTABLE=us rd_LVM LV=vg_hadoop1/lv_root rhgb quiet crashkernel=auto ipv6.disable=1 selinux=0
    initrd /initramfs-2.6.32-642.11.1.el6.x86_64.img
title CentOS 6 (2.6.32-642.el6.x86_64)
    root (hd0,0)
    kernel /vmlinuz-2.6.32-642.el6.x86_64 ro root=/dev/mapper/vg_hadoop1-lv_root rd_NO_LUKS LANG=en_US.UTF-8 rd_LVM LV=vg_hadoop1/lv_swap rd_NO_MD SYSFONT=lata rcyrb
eb-sun16 rd_NO_DM KEYBOARDTYPE=pc KEYTABLE=us rd_LVM LV=vg_hadoop1/lv_root rhgb quiet
    initrd /initramfs-2.6.32-642.el6.x86_64.img
~
~
~/boot/grub/grub.conf" 21L, 212C
Click to switch to "Workspace 2"
```

The screenshot shows a VMware Workstation 12 Player window titled "hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)". The player is running a virtual machine named "hadoop1". The terminal window inside the VM shows the command "cat /etc/sysconfig/network" being executed, with the following output:

```

NETWORKING=yes
HOSTNAME=hadoop1.demo.lab
NTPSERVERARGS=iburst

```

The terminal window also shows the prompt "root@hadoop1:~" and the command "cat /etc/sysconfig/network" being entered. The VMware interface includes a menu bar (File, Edit, View, Search, Terminal, Help) and a toolbar with icons for various functions. The host operating system is Windows 10, as indicated by the taskbar and system tray.

```
hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player ▾ | Applications Places System | Fri Dec 30, 8:55 PM | root
root@hadoop1:~
File Edit View Search Terminal Help
DEVICE=eth0
TYPE=Ethernet
#UUID=33c8862e-b203-472b-afc0-4b24e31ec84c
ONBOOT=yes
NM_CONTROLLED=no
BOOTPROTO=dhcp
DEFROUTE=yes
IPV4_FAILURE_FATAL=yes
IPV6INIT=no
NAME="System eth0"
#HWADDR=00:0C:29:08:8D:F7
PEERDNS=yes
PEERROUTES=yes

~/etc/sysconfig/network-scripts/ifcfg-eth0 13L, 232C
Current workspace: "Workspace 1"
```

VMware Workstation 12 Player (Non-commercial use only)

Player ▾ | Applications | Places | System | Fri Dec 30, 8:56 PM | root

root@hadoop1:~

File Edit View Search Terminal Tabs Help

```

root@hadoop1:~
network      0:off    1:off    2:on     3:on     4:on     5:on     6:off
[root@hadoop1 ~]# chkconfig --list|grep net
netconsole   0:off    1:off    2:off    3:off    4:off    5:off    6:off
netfs        0:off    1:off    2:off    3:on     4:on     5:on     6:off
network      0:off    1:off    2:on     3:on     4:on     5:on     6:off
[root@hadoop1 ~]# chkconfig --list|grep netw
network      0:off    1:off    2:on     3:on     4:on     5:on     6:off
[root@hadoop1 ~]# chkconfig --list|grep -i netw
NetworkManager 0:off    1:off    2:off    3:off    4:off    5:off    6:off
network        0:off    1:off    2:on     3:on     4:on     5:on     6:off
[root@hadoop1 ~]# vim /boot/grub/grub.conf
[root@hadoop1 ~]# vi /etc/sysconfig/network
[root@hadoop1 ~]# vi /etc/sysconfig/network-scripts/ifcfg-eth0
[root@hadoop1 ~]# iptables -L
Chain INPUT (policy ACCEPT)
target     prot opt source                destination
ACCEPT     all  --  anywhere               anywhere               state RELATED,ESTABLISHED
ACCEPT     icmp --  anywhere               anywhere
ACCEPT     all  --  anywhere               anywhere
ACCEPT     tcp  --  anywhere               anywhere               state NEW tcp dpt:ssh
REJECT     all  --  anywhere               anywhere               reject-with icmp-host-prohibited

Chain FORWARD (policy ACCEPT)
target     prot opt source                destination
REJECT     all  --  anywhere               anywhere               reject-with icmp-host-prohibited

Chain OUTPUT (policy ACCEPT)
target     prot opt source                destination
[root@hadoop1 ~]# uname -r
2.6.32-642.11.1.el6.x86_64
[root@hadoop1 ~]#
root@hadoop1:~

```

root@hadoop1:~

Search Windows | ENG 08:56 PM US 30-Dec-16

5)

```
hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
Fri Dec 30, 8:59 PM
root@hadoop1:~
File Edit View Search Terminal Help
[root@hadoop1 ~]# ifconfig
eth0      Link encap:Ethernet  HWaddr 00:0C:29:08:8D:F7
          inet addr:192.168.183.130  Bcast:192.168.183.255  Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:36  errors:0  dropped:0  overruns:0  frame:0
          TX packets:41  errors:0  dropped:0  overruns:0  carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:6277 (6.1 KiB)  TX bytes:3638 (3.5 KiB)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:168  errors:0  dropped:0  overruns:0  frame:0
          TX packets:168  errors:0  dropped:0  overruns:0  carrier:0
          collisions:0 txqueuelen:0
          RX bytes:13280 (12.9 KiB)  TX bytes:13280 (12.9 KiB)

[root@hadoop1 ~]#
```

6)

```
hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
Fri Dec 30, 8:59 PM
root@hadoop1:~
File Edit View Search Terminal Help
[root@hadoop1 ~]# ifconfig
eth0      Link encap:Ethernet  HWaddr 00:0C:29:08:8D:F7
          inet addr:192.168.183.130  Bcast:192.168.183.255  Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:36  errors:0  dropped:0  overruns:0  frame:0
          TX packets:41  errors:0  dropped:0  overruns:0  carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:6277 (6.1 KiB)  TX bytes:3638 (3.5 KiB)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:168  errors:0  dropped:0  overruns:0  frame:0
          TX packets:168  errors:0  dropped:0  overruns:0  carrier:0
          collisions:0 txqueuelen:0
          RX bytes:13280 (12.9 KiB)  TX bytes:13280 (12.9 KiB)

[root@hadoop1 ~]# getenforce
Disabled
[root@hadoop1 ~]#
```

Current workspace: "Workspace 1"

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```
hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
Fri Dec 30, 8:59 PM
root
root@hadoop1:~
File Edit View Search Terminal Help
[root@hadoop1 ~]# ifconfig
eth0      Link encap:Ethernet  HWaddr 00:0C:29:08:8D:F7
          inet addr:192.168.183.130  Bcast:192.168.183.255  Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:36  errors:0  dropped:0  overruns:0  frame:0
          TX packets:41  errors:0  dropped:0  overruns:0  carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:6277 (6.1 KiB)  TX bytes:3638 (3.5 KiB)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:168  errors:0  dropped:0  overruns:0  frame:0
          TX packets:168  errors:0  dropped:0  overruns:0  carrier:0
          collisions:0 txqueuelen:0
          RX bytes:13280 (12.9 KiB)  TX bytes:13280 (12.9 KiB)

[root@hadoop1 ~]# getenforce
Disabled
[root@hadoop1 ~]# iptables -L
Chain INPUT (policy ACCEPT)
target     prot opt source               destination

Chain FORWARD (policy ACCEPT)
target     prot opt source               destination

Chain OUTPUT (policy ACCEPT)
target     prot opt source               destination
[root@hadoop1 ~]#
```

8)

```
hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
Fri Dec 30, 9:01 PM
root
root@hadoop1:~
File Edit View Search Terminal Help
[root@hadoop1 ~]# rpm -qa | grep -i perl
perl-devel-5.10.1-141.el6_7.1.x86_64
perl-version-0.77-141.el6_7.1.x86_64
perl-CGI-3.51-141.el6_7.1.x86_64
perl-Test-Harness-3.17-141.el6_7.1.x86_64
perl-Test-Simple-0.92-141.el6_7.1.x86_64
perl-libs-5.10.1-141.el6_7.1.x86_64
perl-5.10.1-141.el6_7.1.x86_64
perl-ExtUtils-MakeMaker-6.55-141.el6_7.1.x86_64
perl-Pod-Escapes-1.04-141.el6_7.1.x86_64
perl-Pod-Simple-3.13-141.el6_7.1.x86_64
perl-ExtUtils-ParserXS-2.2003.0-141.el6_7.1.x86_64
perl-Module-Pluggable-3.90-141.el6_7.1.x86_64
[root@hadoop1 ~]#
```

9)

```

hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
Fri Dec 30, 8:53 PM
root
root@hadoop1:~
File Edit View Search Terminal Help
rpcbind 0:off 1:off 2:on 3:on 4:on 5:on 6:off
rpcgssd 0:off 1:off 2:off 3:on 4:on 5:on 6:off
rpcsvcgssd 0:off 1:off 2:off 3:off 4:off 5:off 6:off
rsyslog 0:off 1:off 2:on 3:on 4:on 5:on 6:off
saslauthd 0:off 1:off 2:off 3:off 4:off 5:off 6:off
smartd 0:off 1:off 2:off 3:off 4:off 5:off 6:off
spice-vdagentd 0:off 1:off 2:off 3:off 4:off 5:on 6:off
sshd 0:off 1:off 2:on 3:on 4:on 5:on 6:off
sssd 0:off 1:off 2:off 3:off 4:off 5:off 6:off
sysstat 0:off 1:on 2:on 3:on 4:on 5:on 6:off
udev-post 0:off 1:on 2:on 3:on 4:on 5:on 6:off
vmware-tools 0:off 1:off 2:on 3:on 4:on 5:on 6:off
vmware-tools-thinprint 0:off 1:off 2:on 3:on 4:on 5:on 6:off
wdaemon 0:off 1:off 2:off 3:off 4:off 5:off 6:off
winbind 0:off 1:off 2:off 3:off 4:off 5:off 6:off
wpa_supplicant 0:off 1:off 2:off 3:off 4:off 5:off 6:off
ypbind 0:off 1:off 2:off 3:off 4:off 5:off 6:off
[root@hadoop1 ~]# chkconfig --list|grep netwo
network 0:off 1:off 2:on 3:on 4:on 5:on 6:off
[root@hadoop1 ~]# chkconfig --list|grep net
netconsole 0:off 1:off 2:off 3:off 4:off 5:off 6:off
netfs 0:off 1:off 2:off 3:on 4:on 5:on 6:off
network 0:off 1:off 2:on 3:on 4:on 5:on 6:off
[root@hadoop1 ~]# chkconfig --list|grep net
netconsole 0:off 1:off 2:off 3:off 4:off 5:off 6:off
netfs 0:off 1:off 2:off 3:on 4:on 5:on 6:off
network 0:off 1:off 2:on 3:on 4:on 5:on 6:off
[root@hadoop1 ~]# chkconfig --list|grep netw
network 0:off 1:off 2:on 3:on 4:on 5:on 6:off
[root@hadoop1 ~]# chkconfig --list|grep -i netw
NetworkManager 0:off 1:off 2:off 3:off 4:off 5:off 6:off
network 0:off 1:off 2:on 3:on 4:on 5:on 6:off
[root@hadoop1 ~]#

```

10)

```

hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
Fri Dec 30, 10:39 PM
root
root@hadoop1:~/hadoop1.0
File Edit View Search Terminal Help
[root@hadoop1 hadoop1.0]# rpm -qa|grep -i dkms
dkms-2.3-1.20161202gitde1dca9.el6.noarch
[root@hadoop1 hadoop1.0]#

```

11)

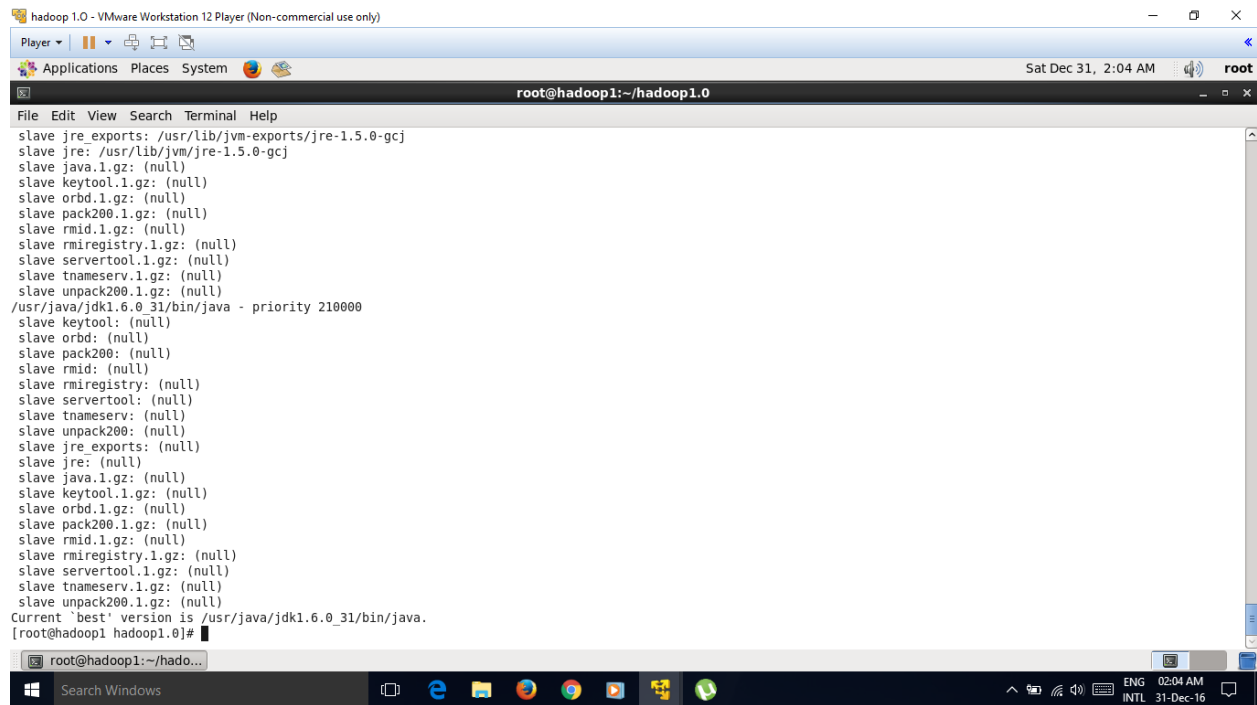
```
hadoop1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
Fri Dec 30, 10:40 PM
root
root@hadoop1:~/hadoop1.0
File Edit View Search Terminal Help
[root@hadoop1 hadoop1.0]# rpm -qa|grep -i dkms
dkms-2.3-1.20161202gitde1dca9.el6.noarch
[root@hadoop1 hadoop1.0]# rpm -qa|grep -i kernel-devel
kernel-devel-2.6.32-642.11.1.el6.x86_64
[root@hadoop1 hadoop1.0]#
```

12)

```
hadoop1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
Fri Dec 30, 10:41 PM
root
root@hadoop1:~/hadoop1.0
File Edit View Search Terminal Help
[root@hadoop1 hadoop1.0]# clear

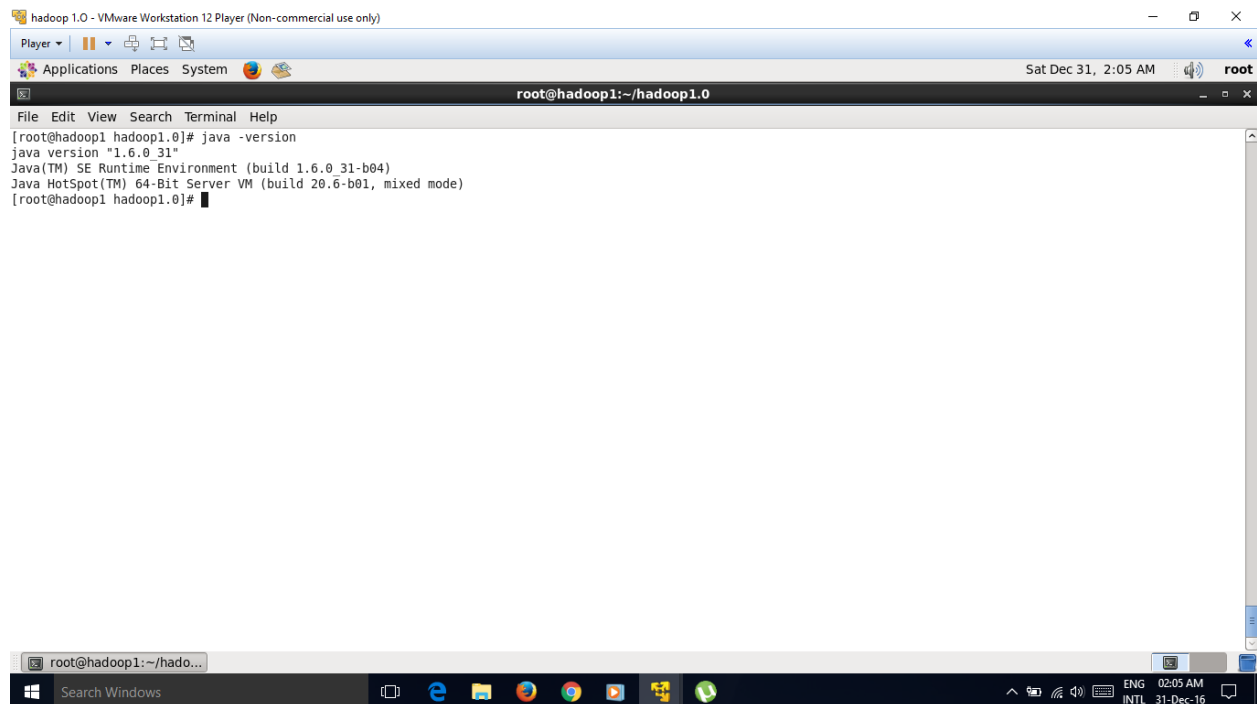
[root@hadoop1 hadoop1.0]# rpm -qa|grep -i gcc
gcc-s390x-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-aarch64-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-avr32-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-h8300-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-bfin-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-frv-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
cross-gcc-common-4.7.2-2.aa.20121114svn.el6.1.noarch
gcc-java-4.4.7-17.el6.x86_64
gcc-tile-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-mips64-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-m32r-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-arm-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-m68k-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-gnat-4.4.7-17.el6.x86_64
libgcc-4.4.7-17.el6.x86_64
gcc-4.4.7-17.el6.x86_64
gcc-objc++-4.4.7-17.el6.x86_64
gcc-sh-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-x86_64-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-powerpc64-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-ia64-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-sparc64-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-alpha-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-xtensa-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-objc-4.4.7-17.el6.x86_64
gcc-cris-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-c6x-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-sh64-linux-gnu-4.7.2-2.aa.20121114svn.el6.1.x86_64
gcc-c++-4.4.7-17.el6.x86_64
gcc-gfortran-4.4.7-17.el6.x86_64
```

13)



```
hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
Sat Dec 31, 2:04 AM root
root@hadoop1:~/hadoop1.0
File Edit View Search Terminal Help
slave jre_exports: /usr/lib/jvm-exports/jre-1.5.0-gcj
slave jre: /usr/lib/jvm/jre-1.5.0-gcj
slave java.1.gz: (null)
slave keytool.1.gz: (null)
slave orbd.1.gz: (null)
slave pack200.1.gz: (null)
slave rmid.1.gz: (null)
slave rmiregistry.1.gz: (null)
slave servertool.1.gz: (null)
slave tnameserv.1.gz: (null)
slave unpack200.1.gz: (null)
/usr/java/jdk1.6.0_31/bin/java - priority 210000
slave keytool: (null)
slave orbd: (null)
slave pack200: (null)
slave rmid: (null)
slave rmiregistry: (null)
slave servertool: (null)
slave tnameserv: (null)
slave unpack200: (null)
slave jre_exports: (null)
slave jre: (null)
slave java.1.gz: (null)
slave keytool.1.gz: (null)
slave orbd.1.gz: (null)
slave pack200.1.gz: (null)
slave rmid.1.gz: (null)
slave rmiregistry.1.gz: (null)
slave servertool.1.gz: (null)
slave tnameserv.1.gz: (null)
slave unpack200.1.gz: (null)
Current 'best' version is /usr/java/jdk1.6.0_31/bin/java.
[root@hadoop1 hadoop1.0]#
```

14)



```
hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
Sat Dec 31, 2:05 AM root
root@hadoop1:~/hadoop1.0
File Edit View Search Terminal Help
[root@hadoop1 hadoop1.0]# java -version
java version "1.6.0_31"
Java(TM) SE Runtime Environment (build 1.6.0_31-b04)
Java HotSpot(TM) 64-Bit Server VM (build 20.6-b01, mixed mode)
[root@hadoop1 hadoop1.0]#
```

15)

```

hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
Sat Dec 31, 2:12 AM root
root@hadoop1:/usr/local/hadoop
File Edit View Search Terminal Help
380 -rw-r--r-- 1 hduser hadoop 385634 Dec 31 02:09 hadoop-tools-1.2.1.jar
12 -rw-r--r-- 1 hduser hadoop 10525 Dec 31 02:09 ivy.xml
16 -rw-r--r-- 1 hduser hadoop 13366 Dec 31 02:09 LICENSE.txt
4 -rw-r--r-- 1 hduser hadoop 101 Dec 31 02:09 NOTICE.txt
4 -rw-r--r-- 1 hduser hadoop 1366 Dec 31 02:09 README.txt
[root@hadoop1 hadoop]# ls -al
total 8388
drwx----- 8 hduser hadoop 4096 Dec 31 02:10 .
drwxr-xr-x 13 root root 4096 Dec 31 02:07 ..
-rw----- 1 hduser hadoop 10 Dec 31 02:08 .bash_history
-rw-r--r-- 1 hduser hadoop 18 May 11 2016 .bash_logout
-rw-r--r-- 1 hduser hadoop 176 May 11 2016 .bash_profile
-rw-r--r-- 1 hduser hadoop 124 May 11 2016 .bashrc
drwxr-xr-x 2 hduser hadoop 4096 Dec 31 01:55 bin
-rw-r--r-- 1 hduser hadoop 121130 Dec 31 02:09 build.xml
drwxr-xr-x 4 hduser hadoop 4096 Jul 23 2013 c++
-rw-r--r-- 1 hduser hadoop 493744 Dec 31 02:09 CHANGES.txt
drwxr-xr-x 2 hduser hadoop 4096 Dec 31 01:55 contrib
drwxr-xr-x 10 hduser hadoop 4096 Jul 23 2013 contrib
drwxr-xr-x 2 hduser hadoop 4096 Nov 12 2010 .gnome2
-rw-r--r-- 1 hduser hadoop 6842 Dec 31 02:09 hadoop-ant-1.2.1.jar
-rw-r--r-- 1 hduser hadoop 414 Dec 31 02:09 hadoop-client-1.2.1.jar
-rw-r--r-- 1 hduser hadoop 4203147 Dec 31 02:09 hadoop-core-1.2.1.jar
-rw-r--r-- 1 hduser hadoop 142726 Dec 31 02:09 hadoop-examples-1.2.1.jar
-rw-r--r-- 1 hduser hadoop 417 Dec 31 02:09 hadoop-miniclust-1.2.1.jar
-rw-r--r-- 1 hduser hadoop 3126576 Dec 31 02:09 hadoop-test-1.2.1.jar
-rw-r--r-- 1 hduser hadoop 385634 Dec 31 02:09 hadoop-tools-1.2.1.jar
-rw-r--r-- 1 hduser hadoop 10525 Dec 31 02:09 ivy.xml
-rw-r--r-- 1 hduser hadoop 13366 Dec 31 02:09 LICENSE.txt
drwxr-xr-x 4 hduser hadoop 4096 Dec 29 22:40 mozilla
-rw-r--r-- 1 hduser hadoop 101 Dec 31 02:09 NOTICE.txt
-rw-r--r-- 1 hduser hadoop 1366 Dec 31 02:09 README.txt
[root@hadoop1 hadoop]#

```

16)

```

hadoop 2.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
Sat Dec 31, 2:28 AM root
root@hadoop2:~
File Edit View Search Terminal Help
* updates: centos.excellmedia.net
Resolving Dependencies
--> Running transaction check
--> Package epel-release.noarch 0:6-8 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package Arch Version Repository Size
=====
Installing:
epel-release noarch 6-8 /epel-release-6-8.noarch 22 k
Transaction Summary
=====
Install 1 Package(s)

Total size: 22 k
Installed size: 22 k
Downloading Packages:
Running rpm check debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
Installing : epel-release-6-8.noarch 1/1
Verifying : epel-release-6-8.noarch 1/1

Installed:
epel-release.noarch 0:6-8

Complete!
[root@hadoop2 ~]#

```


17)

[illegible]

18)

The screenshot shows a VMware Workstation 12 Player window titled "hadoop2.0 - VMware Workstation 12 Player (Non-commercial use only)". Inside the player, there's a desktop environment with a terminal window open. The terminal prompt is "root@hadoop2:~". The terminal output shows the following information:

```
DEVICE=eth0  
#HWADDR=08:0C:29:06:1E:AB  
TYPE=Ethernet  
#UUID=25618d47-4496-45bb-ba97-fec871a1a3cc  
ONBOOT=no  
NM_CONTROLLED=no  
BOOTPROTO=dhcp
```


Below the terminal window, another terminal window is partially visible with the prompt ":wq". The bottom of the screen shows the Windows taskbar with various icons like Search, File Explorer, Chrome, and system tray icons indicating the time as 02:31 AM on 31-Dec-16.

19)

The screenshot shows a VMware Workstation 12 Player window titled "hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)". The main window displays a terminal window for a virtual machine named "root@hadoop1: ~/hadoop1.0". The terminal shows the command `cat /etc/hosts` being executed, resulting in the following output:

```
127.0.0.1    localhost localhost.localdomain localhost4 localhost4.localdomain4
::1         localhost localhost.localdomain localhost6 localhost6.localdomain6
192.168.183.130 hadoop1.demo.lab hadoop1
```

The terminal window also shows the prompt `root@hadoop1:~/hadoop1.0` and a status bar at the bottom indicating the current directory is `root@hadoop1:~/hadoop1.0`. The VMware interface includes a menu bar (File, Edit, View, Search, Terminal, Tabs, Help) and a toolbar with various icons for file operations and window management. The system tray at the bottom of the VMware window shows the time as 02:33 AM on 31-Dec-16 and the language as ENG INTL.

20)

The screenshot displays a VMware Workstation 12 Player window titled "hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)". The main area shows a terminal window titled "hduser@hadoop1:~/ssh". The terminal output is as follows:

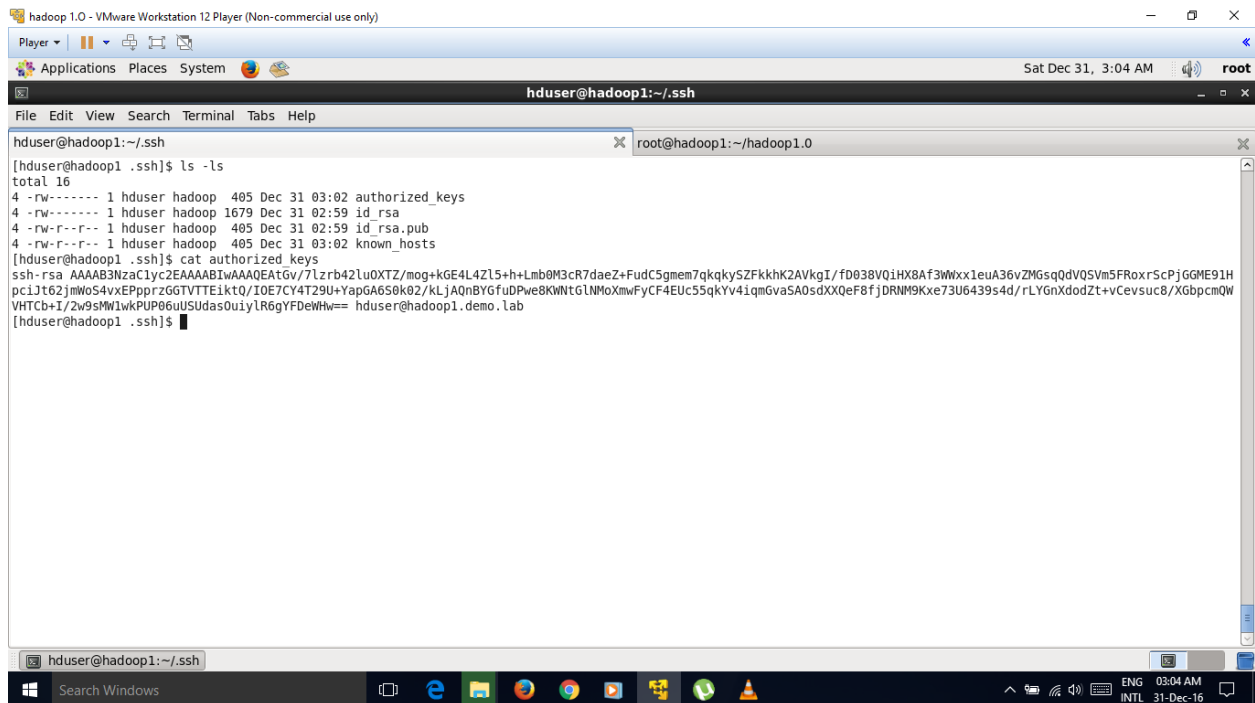
```

[hduser@hadoop1 .ssh]$ ls -ls
total 16
4 -rw----- 1 hduser  hadoop   405 Dec 31 03:02 authorized_keys
4 -rw----- 1 hduser  hadoop  1679 Dec 31 02:59 id_rsa
4 -rw-r--r-- 1 hduser  hadoop   405 Dec 31 02:59 id_rsa.pub
4 -rw-r--r-- 1 hduser  hadoop   405 Dec 31 03:02 known_hosts
[hduser@hadoop1 .ssh]$

```

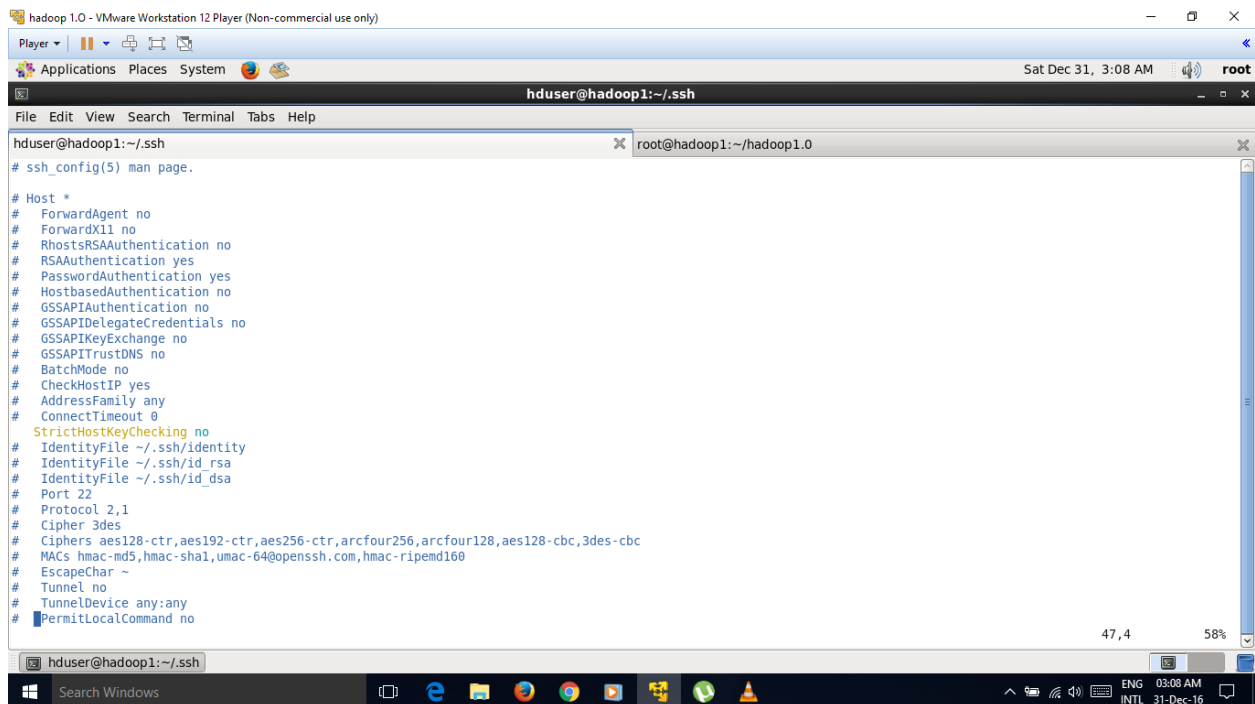
The terminal window has a menu bar with "File", "Edit", "View", "Search", "Terminal", "Tabs", and "Help". The status bar at the bottom of the terminal shows "hduser@hadoop1:~/ssh". The VMware interface includes a top toolbar with icons for Player, Applications, Places, and System, and a system tray at the bottom right showing the date and time as "Sat Dec 31, 3:04 AM".

21)



```
hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
hduser@hadoop1:~/.ssh Sat Dec 31, 3:04 AM root
File Edit View Search Terminal Tabs Help
hduser@hadoop1:~/.ssh root@hadoop1:~/hadoop1.0
[hduser@hadoop1 .ssh]$ ls -ls
total 16
4 -rw----- 1 hduser hadoop 405 Dec 31 03:02 authorized_keys
4 -rw----- 1 hduser hadoop 1679 Dec 31 02:59 id_rsa
4 -rw-r--r-- 1 hduser hadoop 405 Dec 31 02:59 id_rsa.pub
4 -rw-r--r-- 1 hduser hadoop 405 Dec 31 03:02 known_hosts
[hduser@hadoop1 .ssh]$ cat authorized_keys
ssh-rsa AAAAB3NzaC1yc2EAAAABIwAAAQEAatGv/7Lzrb42Lu0XTZ/mog+kGE4L4ZL5+h+Lmb0M3cR7daeZ+FudC5gmem7qkqkySZFkKhK2AVkgI/fD038VQIHx8Af3Wwxx1euA36vZMgsqQdVQ5Vm5FRoxrScPjGGME91H
pc1Jt6ZjmoS4vxEPprzG6TVTE1ktQ/I0E7CY4T29U+YapGA6S0k0Z/KLjA0nBYGfuDPwe8KwntGLNMoXmwFyCF4Euc55qkYv41qmGvaSA0sdXXQeF8fjDRNM9Kxe73U6439s4d/rLYGnXdd0Zt+vCevsuc8/XGbpccmQW
VHTCb+I/2w9sMW1wkPUP06uUSUdas0uiyLR6gYFDeWw== hduser@hadoop1.demo.lab
[hduser@hadoop1 .ssh]$
```

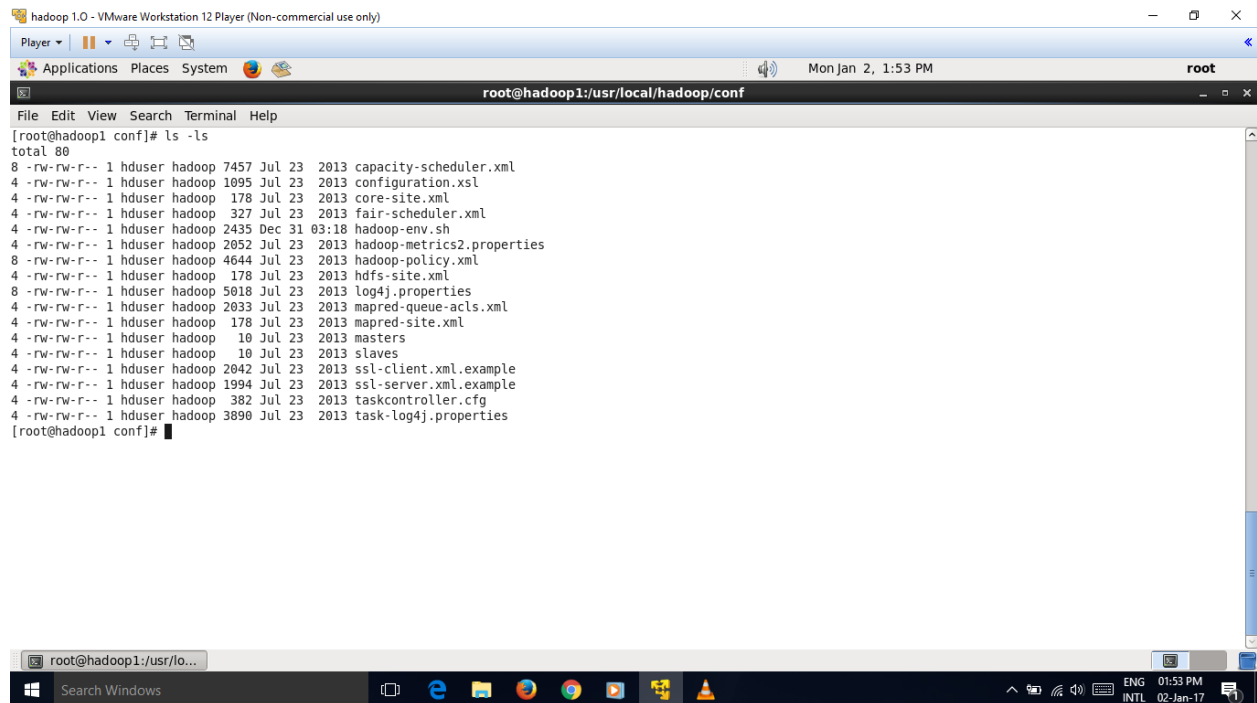
22)



```
hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
hduser@hadoop1:~/.ssh Sat Dec 31, 3:08 AM root
File Edit View Search Terminal Tabs Help
hduser@hadoop1:~/.ssh root@hadoop1:~/hadoop1.0
# ssh_config(5) man page.

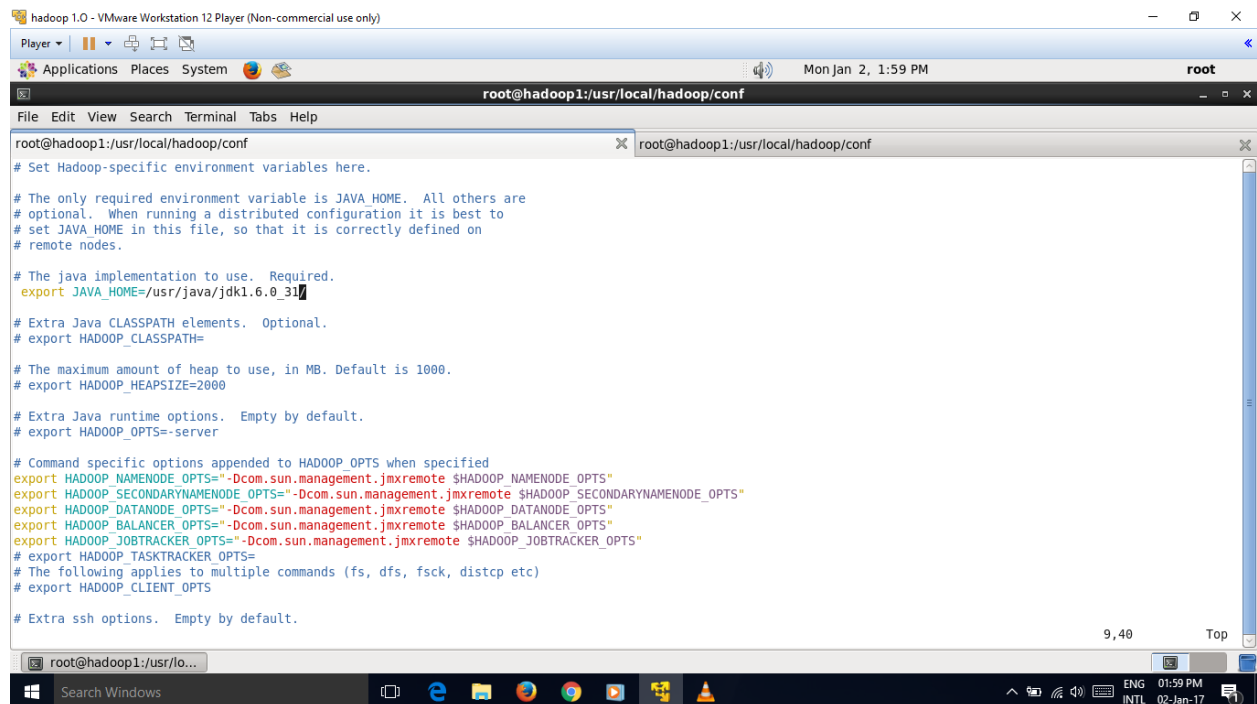
# Host *
# ForwardAgent no
# ForwardX11 no
# RhostsRSAAuthentication no
# RSAAuthentication yes
# PasswordAuthentication yes
# HostbasedAuthentication no
# GSSAPIAuthentication no
# GSSAPIDelegateCredentials no
# GSSAPIKeyExchange no
# GSSAPITrustDNS no
# BatchMode no
# CheckHostIP yes
# AddressFamily any
# ConnectTimeout 0
# StrictHostKeyChecking no
# IdentityFile ~/.ssh/identity
# IdentityFile ~/.ssh/id_rsa
# IdentityFile ~/.ssh/id_dsa
# Port 22
# Protocol 2,1
# Cipher 3des
# Ciphers aes128-ctr,aes192-ctr,aes256-ctr,arcfour256,arcfour128,aes128-cbc,3des-cbc
# MACs hmac-md5,hmac-sha1,umac-64@openssh.com,hmac-ripemd160
# EscapeChar ~
# Tunnel no
# TunnelDevice any:any
# PermitLocalCommand no
```

23)



```
hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
root@hadoop1:/usr/local/hadoop/conf
File Edit View Search Terminal Help
[root@hadoop1 conf]# ls -ls
total 80
8 -rw-rw-r-- 1 hduser hadoop 7457 Jul 23 2013 capacity-scheduler.xml
4 -rw-rw-r-- 1 hduser hadoop 1095 Jul 23 2013 configuration.xml
4 -rw-rw-r-- 1 hduser hadoop 178 Jul 23 2013 core-site.xml
4 -rw-rw-r-- 1 hduser hadoop 327 Jul 23 2013 fair-scheduler.xml
4 -rw-rw-r-- 1 hduser hadoop 2435 Dec 31 03:18 hadoop-env.sh
4 -rw-rw-r-- 1 hduser hadoop 2052 Jul 23 2013 hadoop-metrics2.properties
8 -rw-rw-r-- 1 hduser hadoop 4644 Jul 23 2013 hadoop-policy.xml
4 -rw-rw-r-- 1 hduser hadoop 178 Jul 23 2013 hdfs-site.xml
8 -rw-rw-r-- 1 hduser hadoop 5018 Jul 23 2013 log4j.properties
4 -rw-rw-r-- 1 hduser hadoop 2033 Jul 23 2013 mapred-queue-acls.xml
4 -rw-rw-r-- 1 hduser hadoop 178 Jul 23 2013 mapred-site.xml
4 -rw-rw-r-- 1 hduser hadoop 10 Jul 23 2013 masters
4 -rw-rw-r-- 1 hduser hadoop 10 Jul 23 2013 slaves
4 -rw-rw-r-- 1 hduser hadoop 2042 Jul 23 2013 ssl-client.xml.example
4 -rw-rw-r-- 1 hduser hadoop 1994 Jul 23 2013 ssl-server.xml.example
4 -rw-rw-r-- 1 hduser hadoop 382 Jul 23 2013 taskcontroller.cfg
4 -rw-rw-r-- 1 hduser hadoop 3890 Jul 23 2013 task-log4j.properties
[root@hadoop1 conf]#
```

24)



```
hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
root@hadoop1:/usr/local/hadoop/conf
File Edit View Search Terminal Tabs Help
root@hadoop1:/usr/local/hadoop/conf
# Set Hadoop-specific environment variables here.

# The only required environment variable is JAVA_HOME. All others are
# optional. When running a distributed configuration it is best to
# set JAVA_HOME in this file, so that it is correctly defined on
# remote nodes.

# The java implementation to use. Required.
export JAVA_HOME=/usr/java/jdk1.6.0_31

# Extra Java CLASSPATH elements. Optional.
# export HADOOP_CLASSPATH=

# The maximum amount of heap to use, in MB. Default is 1000.
# export HADOOP_HEAPSIZE=2000

# Extra Java runtime options. Empty by default.
# export HADOOP_OPTS=-server

# Command specific options appended to HADOOP_OPTS when specified
export HADOOP_NAMENODE_OPTS="-Dcom.sun.management.jmxremote $HADOOP_NAMENODE_OPTS"
export HADOOP_SECONDARYNAMENODE_OPTS="-Dcom.sun.management.jmxremote $HADOOP_SECONDARYNAMENODE_OPTS"
export HADOOP_DATANODE_OPTS="-Dcom.sun.management.jmxremote $HADOOP_DATANODE_OPTS"
export HADOOP_BALANCER_OPTS="-Dcom.sun.management.jmxremote $HADOOP_BALANCER_OPTS"
export HADOOP_JOBTRACKER_OPTS="-Dcom.sun.management.jmxremote $HADOOP_JOBTRACKER_OPTS"
# export HADOOP_TASKTRACKER_OPTS=
# The following applies to multiple commands (fs, dfs, fsck, distcp etc)
# export HADOOP_CLIENT_OPTS

# Extra ssh options. Empty by default.
```

25)

```

hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
hduser@hadoop1:~/conf
File Edit View Search Terminal Tabs Help
hduser@hadoop1:~/conf
# Set Hadoop-specific environment variables here.

# The only required environment variable is JAVA_HOME. All others are
# optional. When running a distributed configuration it is best to
# set JAVA_HOME in this file, so that it is correctly defined on
# remote nodes.

# The java implementation to use. Required.
export JAVA_HOME=/usr/java/jdk1.6.0_31

# Extra Java CLASSPATH elements. Optional.
# export HADOOP_CLASSPATH=

# The maximum amount of heap to use, in MB. Default is 1000.
# export HADOOP_HEAPSIZE=2000

# Extra Java runtime options. Empty by default.
# export HADOOP_OPTS=-server

# Command specific options appended to HADOOP_OPTS when specified
export HADOOP_NAMENODE_OPTS="-Dcom.sun.management.jmxremote $HADOOP_NAMENODE_OPTS"
export HADOOP_SECONDARYNAMENODE_OPTS="-Dcom.sun.management.jmxremote $HADOOP_SECONDARYNAMENODE_OPTS"
export HADOOP_DATANODE_OPTS="-Dcom.sun.management.jmxremote $HADOOP_DATANODE_OPTS"
export HADOOP_BALANCER_OPTS="-Dcom.sun.management.jmxremote $HADOOP_BALANCER_OPTS"
export HADOOP_JOBTRACKER_OPTS="-Dcom.sun.management.jmxremote $HADOOP_JOBTRACKER_OPTS"
# export HADOOP_TASKTRACKER_OPTS=
# The following applies to multiple commands (fs, dfs, fsck, distcp etc)
# export HADOOP_CLIENT_OPTS

# Extra ssh options. Empty by default.
"hadoop-env.sh" 57L, 2434C
9,2 Top
hduser@hadoop1:~/c...
Search Windows

```

26)

```

hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
hduser@hadoop1:~/conf
File Edit View Search Terminal Tabs Help
hduser@hadoop1:~/conf
<?xml version="1.0"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>

<!-- Put site-specific property overrides in this file. -->

<configuration>
<property>
  <name>hadoop.tmp.dir</name>
  <value>/data/tmp</value>
</property>
<property>
  <name>fs.default.name</name>
  <value>hdfs://localhost:8020</value>
</property>
</configuration>

"core-site.xml" 15L, 377C
14,2 All
hduser@hadoop1:~/c...
Search Windows

```

27)

Player 1.0 - VMware Workstation 12 Player (Non-commercial use only)

Applications Places System

Mon Jan 2, 2:05 PM root

hduser@hadoop1:~/conf

File Edit View Search Terminal Tabs Help

hduser@hadoop1:~/conf root@hadoop1:~/hadoop1.0

```
<?xml version="1.0"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>

<!-- Put site-specific property overrides in this file. -->

<configuration>
<property>
<name>dfs.replication</name>
<value>1</value>
</property>
<property>
<name>dfs.namenode.name.dir</name>
<value>file:/data/nn</value>
</property>
<property>
<name>dfs.datanode.data.dir</name>
<value>file:/data/dn1,file:/data/dn2,file:/data/dn3</value>
</property>
<property>
<name>dfs.namenode.checkpoint.dir</name>
<value>file:/data/snn</value>
</property>
<property>
<name>dfs.namenode.checkpoint.edits.dir</name>
<value>file:/data/snn</value>
</property>
</configuration>
~
~
~
:wc
```

hduser@hadoop1:~/c...

Search Windows

ENG INTL 02:05 PM 02-Jan-17

28)

The screenshot shows a VMware Workstation 12 Player window titled "hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)". The main display area shows a terminal window with the prompt "hduser@hadoop1:~/conf". The terminal output is as follows:

```
<?xml version="1.0"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>

<!-- Put site-specific property overrides in this file. -->

<configuration>
<property>
  <name>mapred.job.tracker</name>
  <value>localhost:8021</value>
</property>
</configuration>
```

The terminal window also shows the file name "mapred-site.xml" and its size "11L, 269C". The bottom status bar of the VMware Workstation 12 Player shows the search bar "Search Windows" and the system tray with the time "02:06 PM" and date "02-Jan-17".

hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)

Player Applications Places System Mon Jan 2, 2:11 PM root

root@hadoop1:/data

File Edit View Search Terminal Tabs Help

hduser@hadoop1:~/conf root@hadoop1:~/hadoop1.0 root@hadoop1:/data

```
[root@hadoop1 data]# ls -ls
total 24
4 drwxr-xr-x 2 hduser hadoop 4096 Jan 2 14:08 dn1
4 drwxr-xr-x 2 hduser hadoop 4096 Jan 2 14:08 dn2
4 drwxr-xr-x 2 hduser hadoop 4096 Jan 2 14:08 dn3
4 drwxr-xr-x 2 hduser hadoop 4096 Jan 2 14:08 nn
4 drwxr-xr-x 2 hduser hadoop 4096 Jan 2 14:08 snn
4 drwxr-xr-x 2 hduser hadoop 4096 Jan 2 14:10 tmp
[root@hadoop1 data]#
```

root@hadoop1/data

Search Windows 02:11 PM 02-Jan-17

The screenshot shows a VMware Workstation 12 Player interface. The main window title is "hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)". Inside the player, there's a desktop environment with a taskbar at the bottom containing icons for Windows, Search Windows, and several application icons. A terminal window is open, displaying the contents of the ".bashrc" file. The terminal has three tabs: "hduser@hadoop1:~", "root@hadoop1:~/hadoop1.0", and "root@hadoop1:/data". The active tab is "hduser@hadoop1:~". The terminal output shows the following commands and their results:

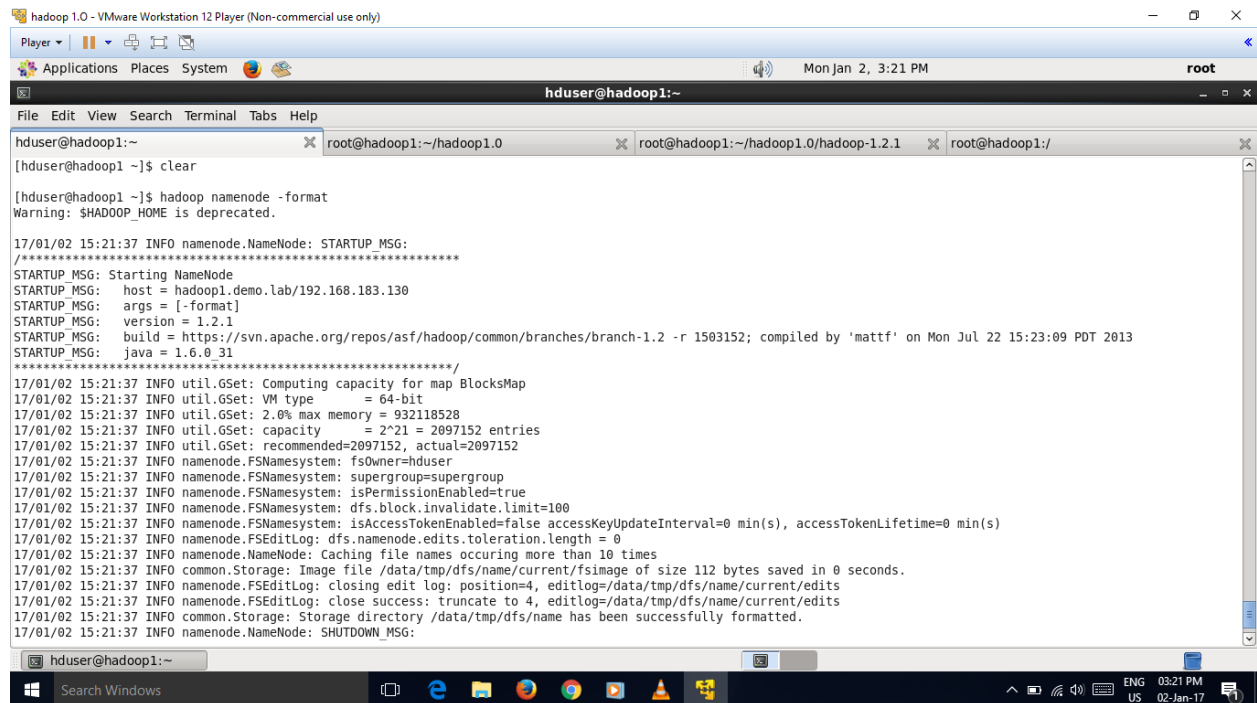
```
# .bashrc

# Source global definitions
if [ -f /etc/bashrc ]; then
    . /etc/bashrc
fi

# User specific aliases and functions
export JAVA_HOME=/usr/java/jdk1.6.0_31
export HADOOP_HOME=/usr/local/hadoop
export PATH=$HADOOP_HOME/bin:$HADOOP_HOME/sbin:$JAVA_HOME/bin:$PATH
export HADOOP_INSTALL=/usr/local/hadoop
export PATH=$PATH:$HADOOP_INSTALL/bin
export PATH=$PATH:$HADOOP_INSTALL/sbin
export HADOOP_MAPRED_HOME=$HADOOP_INSTALL
export HADOOP_COMMON_HOME=$HADOOP_INSTALL
export HADOOP_HDFS_HOME=$HADOOP_INSTALL
export YARN_HOME=$HADOOP_INSTALL
export HADOOP_COMMON_LIB_NATIVE_DIR=$HADOOP_INSTALL/lib/native
export HADOOP_OPTS="-Djava.library.path=$HADOOP_INSTALL/lib"
```

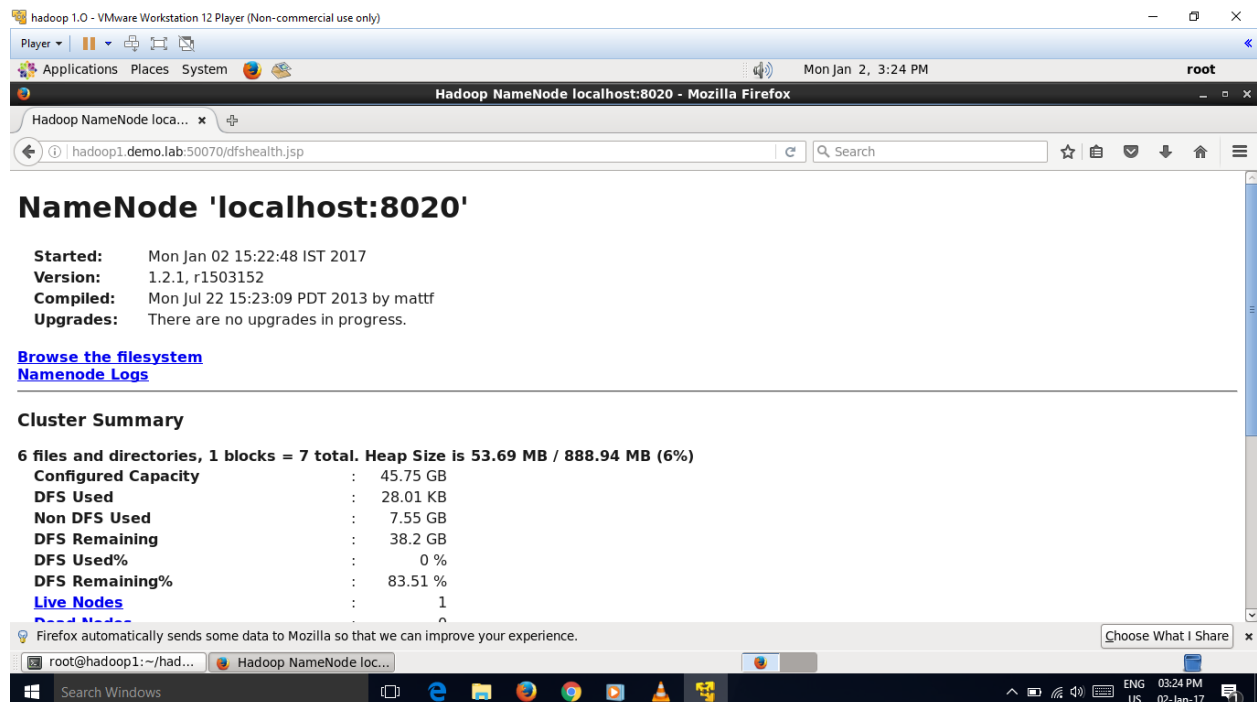
At the bottom of the terminal window, it says ".bashrc" 20L, 666C. The status bar at the very bottom of the screen shows system information like "ENG INTEL", "02:12 PM", and "02-Jan-17".

31)



```
hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)
Player
Applications Places System
hduser@hadoop1:~
File Edit View Search Terminal Tabs Help
hduser@hadoop1:~$ clear
[hduser@hadoop1 ~]$ hadoop namenode -format
Warning: $HADOOP_HOME is deprecated.
17/01/02 15:21:37 INFO namenode.NameNode: STARTUP_MSG:
/*****
STARTUP_MSG: Starting NameNode
STARTUP_MSG: host = hadoop1.demo.lab/192.168.183.130
STARTUP_MSG: args = [-format]
STARTUP_MSG: version = 1.2.1
STARTUP_MSG: build = https://svn.apache.org/repos/asf/hadoop/common/branches/branch-1.2 -r 1503152; compiled by 'mattf' on Mon Jul 22 15:23:09 PDT 2013
STARTUP_MSG: java = 1.6.0_31
*****/
17/01/02 15:21:37 INFO util.GSet: Computing capacity for map BlocksMap
17/01/02 15:21:37 INFO util.GSet: VM type = 64-bit
17/01/02 15:21:37 INFO util.GSet: 2.0% max memory = 932118528
17/01/02 15:21:37 INFO util.GSet: capacity = 2^21 = 2097152 entries
17/01/02 15:21:37 INFO util.GSet: recommended=2097152, actual=2097152
17/01/02 15:21:37 INFO namenode.FSNamesystem: fsOwner=hduser
17/01/02 15:21:37 INFO namenode.FSNamesystem: supergroup=supergroup
17/01/02 15:21:37 INFO namenode.FSNamesystem: isPermissionEnabled=true
17/01/02 15:21:37 INFO namenode.FSNamesystem: dfs.block.invalidate.limit=100
17/01/02 15:21:37 INFO namenode.FSNamesystem: isAccessTokenEnabled=false accessKeyUpdateInterval=0 min(s), accessTokenLifetime=0 min(s)
17/01/02 15:21:37 INFO namenode.FSEditlog: dfs.namenode.edits.toleration.length = 0
17/01/02 15:21:37 INFO namenode.NameNode: Caching file names occurring more than 10 times
17/01/02 15:21:37 INFO common.Storage: Image file /data/tmp/dfs/name/current/fsimage of size 112 bytes saved in 0 seconds.
17/01/02 15:21:37 INFO namenode.FSEditlog: closing edit log: position=4, editlog=/data/tmp/dfs/name/current/edits
17/01/02 15:21:37 INFO namenode.FSEditlog: close success: truncate to 4, editlog=/data/tmp/dfs/name/current/edits
17/01/02 15:21:37 INFO common.Storage: Storage directory /data/tmp/dfs/name has been successfully formatted.
17/01/02 15:21:37 INFO namenode.NameNode: SHUTDOWN_MSG:
```

32)



Hadoop NameNode localhost:8020 - Mozilla Firefox

hadoop1.demo.lab:50070/dfshealth.jsp

NameNode 'localhost:8020'

Started: Mon Jan 02 15:22:48 IST 2017
Version: 1.2.1, r1503152
Compiled: Mon Jul 22 15:23:09 PDT 2013 by mattf
Upgrades: There are no upgrades in progress.

[Browse the filesystem](#)
[Namenode Logs](#)

Cluster Summary

6 files and directories, 1 blocks = 7 total. Heap Size is 53.69 MB / 888.94 MB (6%)

Configured Capacity	: 45.75 GB
DFS Used	: 28.01 KB
Non DFS Used	: 7.55 GB
DFS Remaining	: 38.2 GB
DFS Used%	: 0 %
DFS Remaining%	: 83.51 %
Live Nodes	: 1
Dead Nodes	: 0

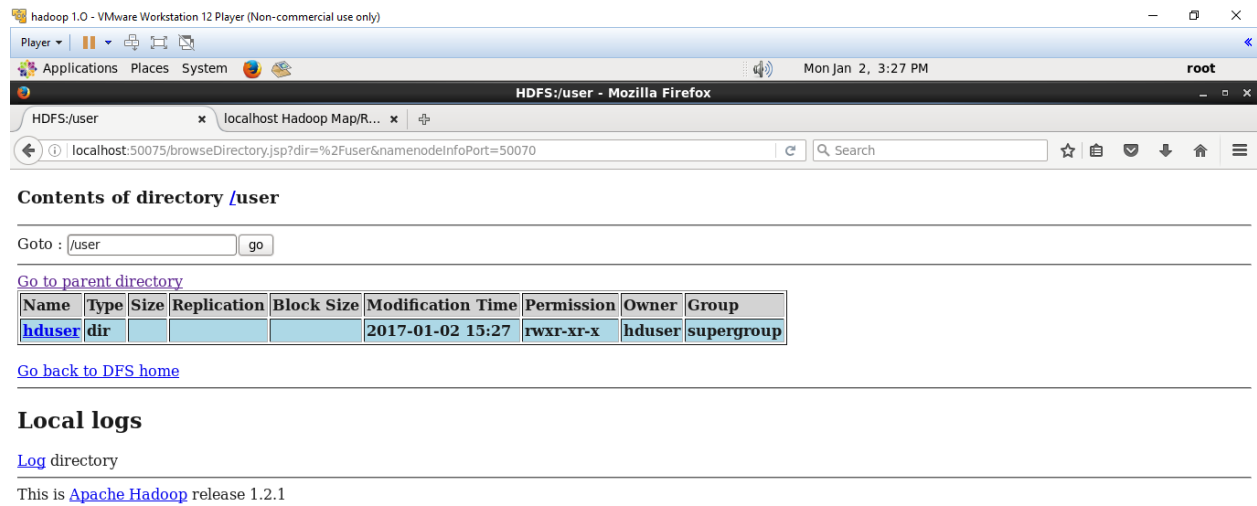
Firefox automatically sends some data to Mozilla so that we can improve your experience.

33)

34)

[illegible]

35)



hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)

Player ▾ | Applications | Places | System | Mon Jan 2, 3:27 PM | root

HDFS:/user | localhost Hadoop Map/R... |

localhost:50075/browseDirectory.jsp?dir=%2Fuser&namenodeInfoPort=50070

Contents of directory /user

Goto : /user go

[Go to parent directory](#)

Name	Type	Size	Replication	Block Size	Modification Time	Permission	Owner	Group
hduser	dir				2017-01-02 15:27	rw-r-xr-x	hduser	supergroup

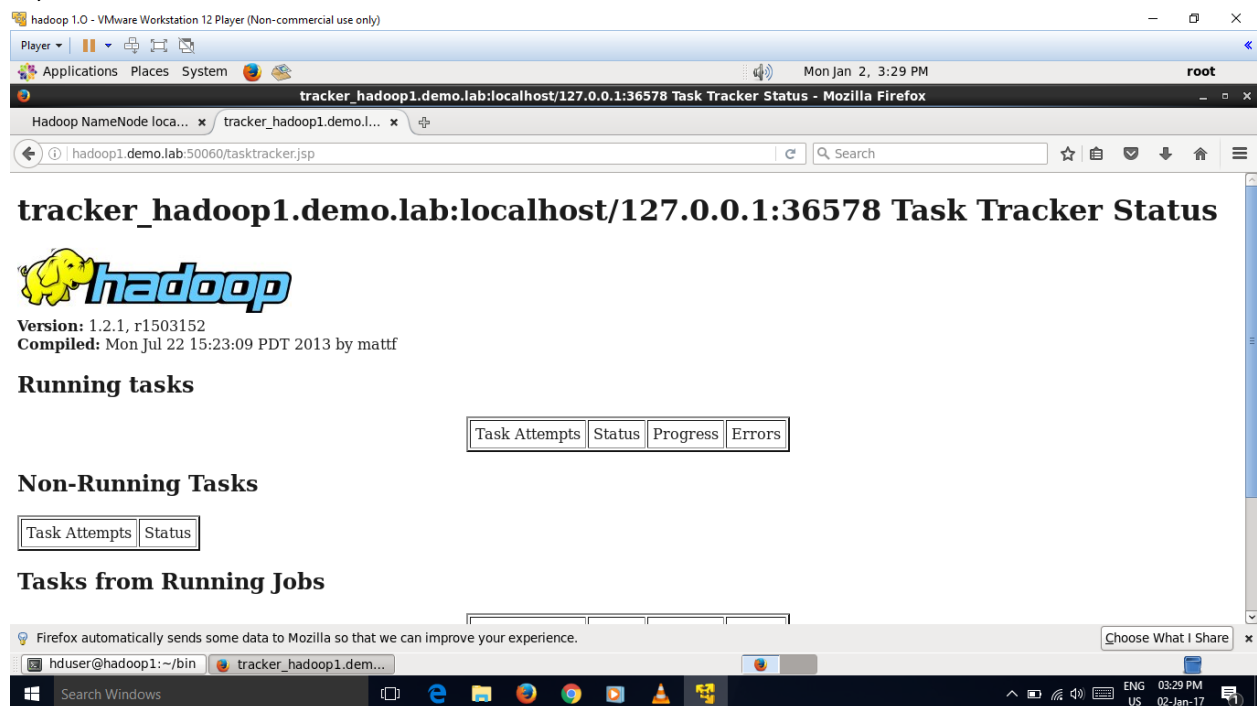
[Go back to DFS home](#)

Local logs

[Log](#) directory

This is [Apache Hadoop](#) release 1.2.1

36)



hadoop 1.0 - VMware Workstation 12 Player (Non-commercial use only)


Player ▾ | Applications | Places | System | Mon Jan 2, 3:29 PM | root

tracker_hadoop1.demo.lab:localhost/127.0.0.1:36578 Task Tracker Status - Mozilla Firefox

Hadoop NameNode loca... | tracker_hadoop1.demo.l... |

hadoop1.demo.lab:50060/tasktracker.jsp

tracker_hadoop1.demo.lab:localhost/127.0.0.1:36578 Task Tracker Status



Version: 1.2.1, r1503152
Compiled: Mon Jul 22 15:23:09 PDT 2013 by mattf

Running tasks

Task Attempts	Status	Progress	Errors
---------------	--------	----------	--------

Non-Running Tasks

Task Attempts	Status
---------------	--------

Tasks from Running Jobs

Firefox automatically sends some data to Mozilla so that we can improve your experience.

hduser@hadoop1:~/bin | tracker_hadoop1.dem... |

Search Windows | Mon Jan 2, 3:29 PM | ENG US | 02-Jan-17

37)

The screenshot shows a web browser window titled "localhost Hadoop Map/Reduce Administration - Mozilla Firefox". The address bar indicates the URL is "http://localhost:50030/jobtracker.jsp". The page content is divided into sections:

- Completed Jobs**: A table listing job details.

Jobid	Started	Priority	User	Name	Map % Complete	Map Total	Maps Completed	Reduce % Complete	Reduce Total	Reduces Completed	Job Scheduling Information	Diagnostic Info
job_201701021522_0001	Mon Jan 02 15:31:22 IST 2017	NORMAL	hduser	PIEstimator	100.00%	1	1	100.00%	1	1	NA	NA
- Retired Jobs**: Displays "none".
- Local Logs**: Contains links for "[Log directory](#)" and "[Job Tracker History](#)".

A footer note mentions "This is Apache Hadoop release 1.2.1". The browser's taskbar at the bottom shows various application icons and system time/date.

38)

The screenshot shows a web browser window displaying the details of a Hadoop job named 'Hadoop job_201701021522_0001' on the local host. The browser's address bar shows the URL 'http://localhost:8020/jobdetails.jsp?jobid=job_201701021522_0001&refresh=0'. The page title is 'Hadoop job_201701021522_0001 on localhost'. The main content area displays the following information:
User: hduser
Job Name: PiEstimator
Job File: https://localhost:8020/data/tmp/mapred/staging/hduser/staging/job_201701021522_0001/job.xml
Submit Host: hadoop1.demo.lab
Submit Host Address: 192.168.183.130
Job-ACLs: All users are allowed
Job Setup: Successful
Status: Succeeded
Started at: Mon Jan 02 15:31:22 IST 2017
Finished at: Mon Jan 02 15:31:36 IST 2017
Finished in: 14sec
Job Cleanup: Successful
Below this information is a table showing the progress of the job components:

Kind	% Complete	Num Tasks	Pending	Running	Complete	Killed	Failed/Killed Task Attempts
map	100.00%	1	0	0	1	0	0 / 0
reduce	100.00%	1	0	0	1	0	0 / 0

The bottom of the browser window shows a notification from Mozilla and a taskbar with various application icons.