

**VPM'S B.N.BANDODKAR COLLEGE OF SCIENCE
THANE(W)**

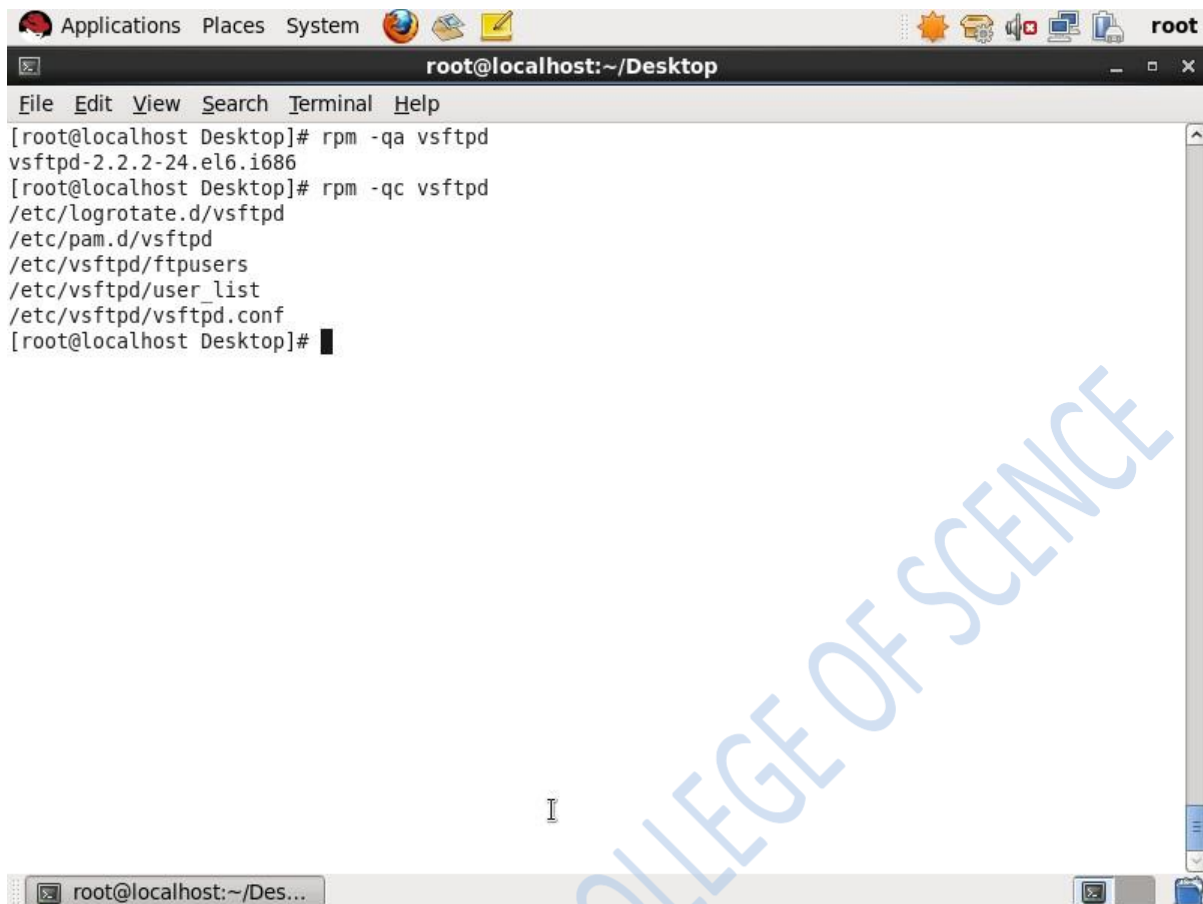
DEPARTMENT OF IT

**TYBSc IT Sem5 LINUX SYSTEM ADMINISTRATION
PRACTICAL MANUAL**

Practical 3

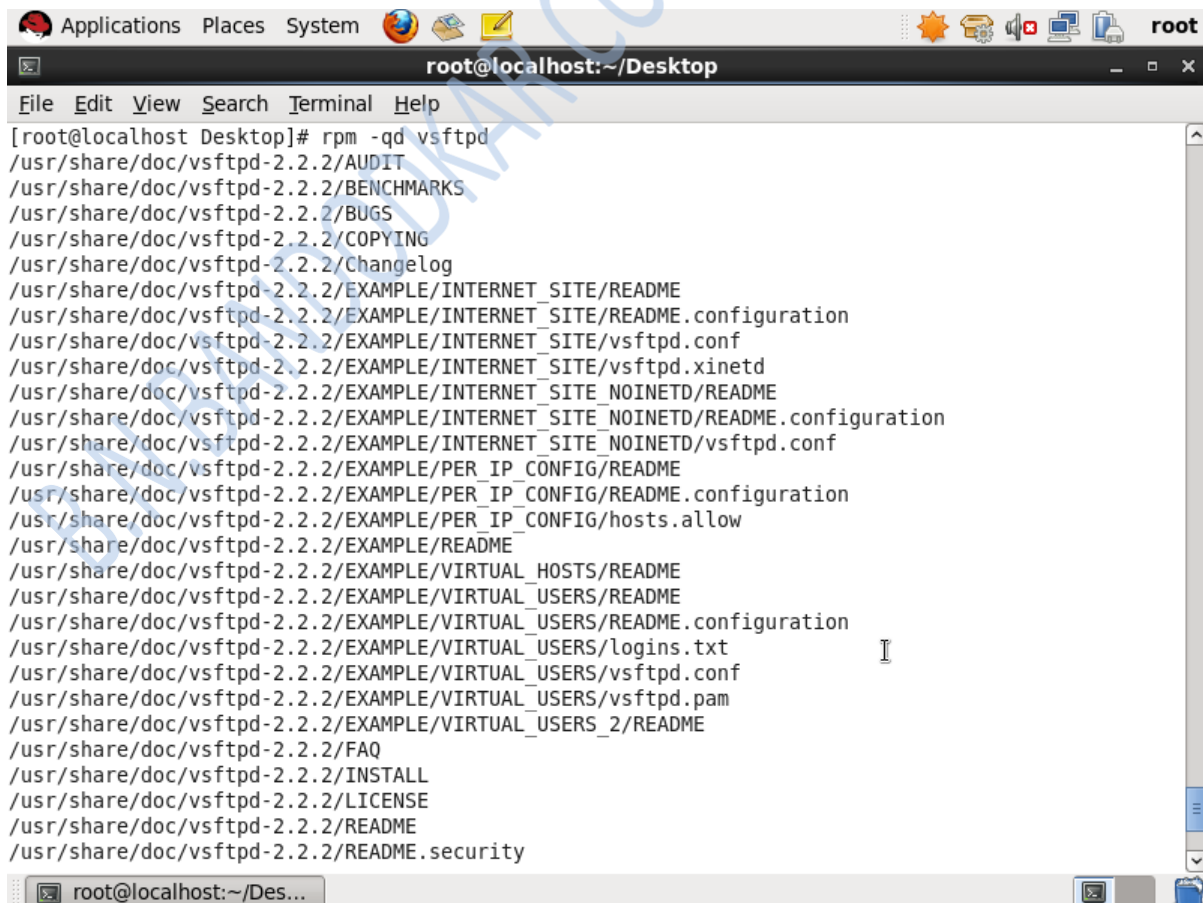
A. Using query option

- rpm -qa vsftpd
- rpm -qc vsftpd
- rpm -qd vsftpd
- rpm -ql vsftpd



A terminal window titled "root@localhost:~/Desktop" with a menu bar (File, Edit, View, Search, Terminal, Help) and a toolbar. The terminal shows the command `rpm -qa vsftpd` and its output: `vsftpd-2.2.2-24.el6.i686`. The prompt then changes to `root@localhost Desktop`, and the command `rpm -qc vsftpd` is executed, listing configuration files: `/etc/logrotate.d/vsftpd`, `/etc/pam.d/vsftpd`, `/etc/vsftpd/ftpusers`, `/etc/vsftpd/user_list`, and `/etc/vsftpd/vsftpd.conf`. The prompt returns to `root@localhost Desktop`. A large diagonal watermark "KAMAL COLLEGE OF SCIENCE" is visible across the terminal area.

```
root@localhost:~/Desktop
File Edit View Search Terminal Help
[root@localhost Desktop]# rpm -qa vsftpd
vsftpd-2.2.2-24.el6.i686
[root@localhost Desktop]# rpm -qc vsftpd
/etc/logrotate.d/vsftpd
/etc/pam.d/vsftpd
/etc/vsftpd/ftpusers
/etc/vsftpd/user_list
/etc/vsftpd/vsftpd.conf
[root@localhost Desktop]#
```



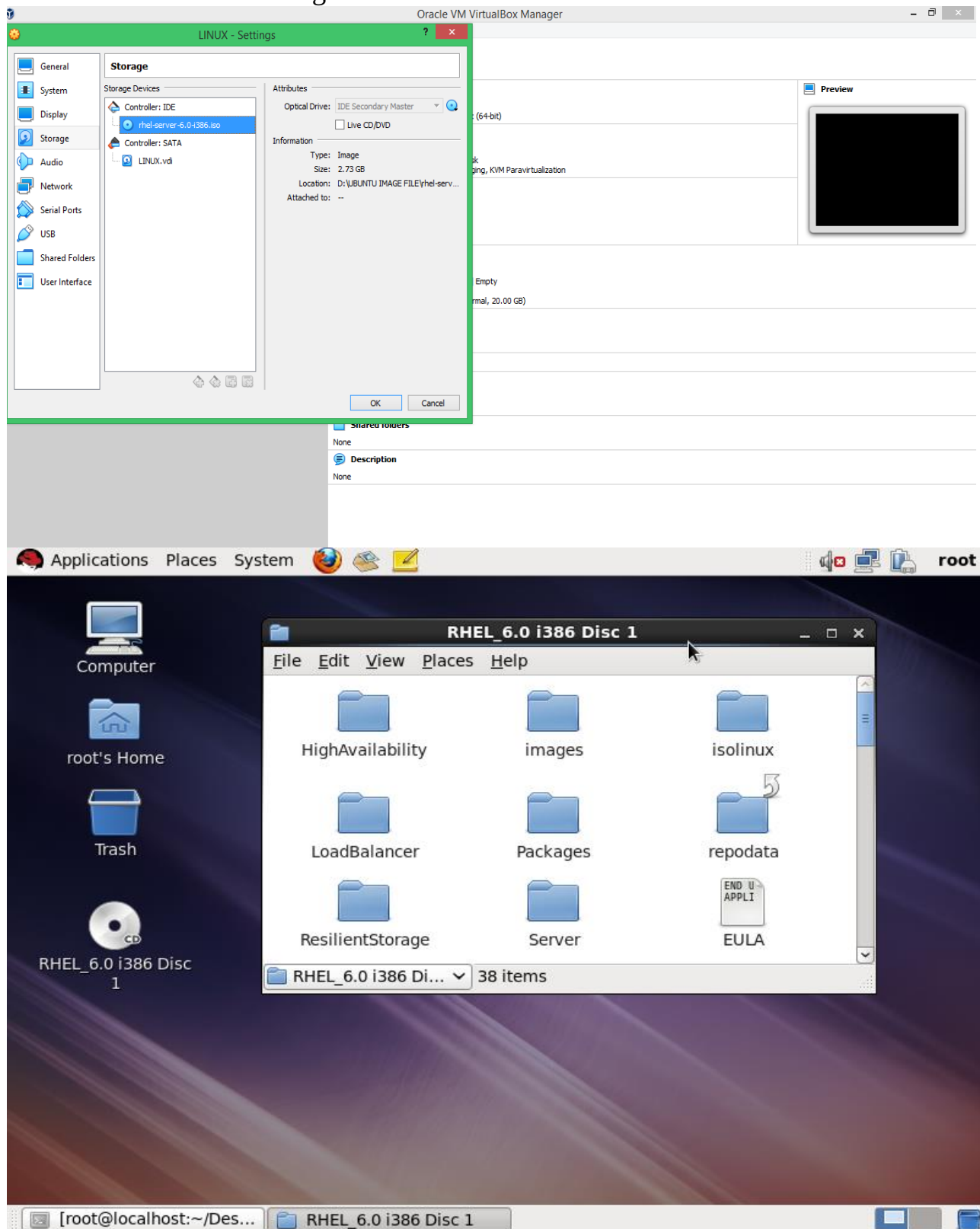
A terminal window titled "root@localhost:~/Desktop" with a menu bar (File, Edit, View, Search, Terminal, Help) and a toolbar. The terminal shows the command `rpm -qd vsftpd` and its output, listing various documentation and example files: `/usr/share/doc/vsftpd-2.2.2/AUDIT`, `/usr/share/doc/vsftpd-2.2.2/BENCHMARKS`, `/usr/share/doc/vsftpd-2.2.2/BUGS`, `/usr/share/doc/vsftpd-2.2.2/COPYING`, `/usr/share/doc/vsftpd-2.2.2/Changelog`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE/README`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE/README.configuration`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE/vsftpd.conf`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE/vsftpd.xinetd`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE_NOINETD/README`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE_NOINETD/README.configuration`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE_NOINETD/vsftpd.conf`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/PER_IP_CONFIG/README`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/PER_IP_CONFIG/README.configuration`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/PER_IP_CONFIG/hosts.allow`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/README`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/VIRTUAL_HOSTS/README`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/VIRTUAL_USERS/README`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/VIRTUAL_USERS/README.configuration`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/VIRTUAL_USERS/logins.txt`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/VIRTUAL_USERS/vsftpd.conf`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/VIRTUAL_USERS/vsftpd.pam`, `/usr/share/doc/vsftpd-2.2.2/EXAMPLE/VIRTUAL_USERS_2/README`, `/usr/share/doc/vsftpd-2.2.2/FAQ`, `/usr/share/doc/vsftpd-2.2.2/INSTALL`, `/usr/share/doc/vsftpd-2.2.2/LICENSE`, `/usr/share/doc/vsftpd-2.2.2/README`, and `/usr/share/doc/vsftpd-2.2.2/README.security`. The prompt returns to `root@localhost Desktop`. A large diagonal watermark "KAMAL COLLEGE OF SCIENCE" is visible across the terminal area.

```
root@localhost:~/Desktop
File Edit View Search Terminal Help
[root@localhost Desktop]# rpm -qd vsftpd
/usr/share/doc/vsftpd-2.2.2/AUDIT
/usr/share/doc/vsftpd-2.2.2/BENCHMARKS
/usr/share/doc/vsftpd-2.2.2/BUGS
/usr/share/doc/vsftpd-2.2.2/COPYING
/usr/share/doc/vsftpd-2.2.2/Changelog
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE/README
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE/README.configuration
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE/vsftpd.conf
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE/vsftpd.xinetd
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE_NOINETD/README
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE_NOINETD/README.configuration
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE_NOINETD/vsftpd.conf
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/PER_IP_CONFIG/README
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/PER_IP_CONFIG/README.configuration
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/PER_IP_CONFIG/hosts.allow
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/README
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/VIRTUAL_HOSTS/README
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/VIRTUAL_USERS/README
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/VIRTUAL_USERS/README.configuration
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/VIRTUAL_USERS/logins.txt
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/VIRTUAL_USERS/vsftpd.conf
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/VIRTUAL_USERS/vsftpd.pam
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/VIRTUAL_USERS_2/README
/usr/share/doc/vsftpd-2.2.2/FAQ
/usr/share/doc/vsftpd-2.2.2/INSTALL
/usr/share/doc/vsftpd-2.2.2/LICENSE
/usr/share/doc/vsftpd-2.2.2/README
/usr/share/doc/vsftpd-2.2.2/README.security
[root@localhost Desktop]#
```

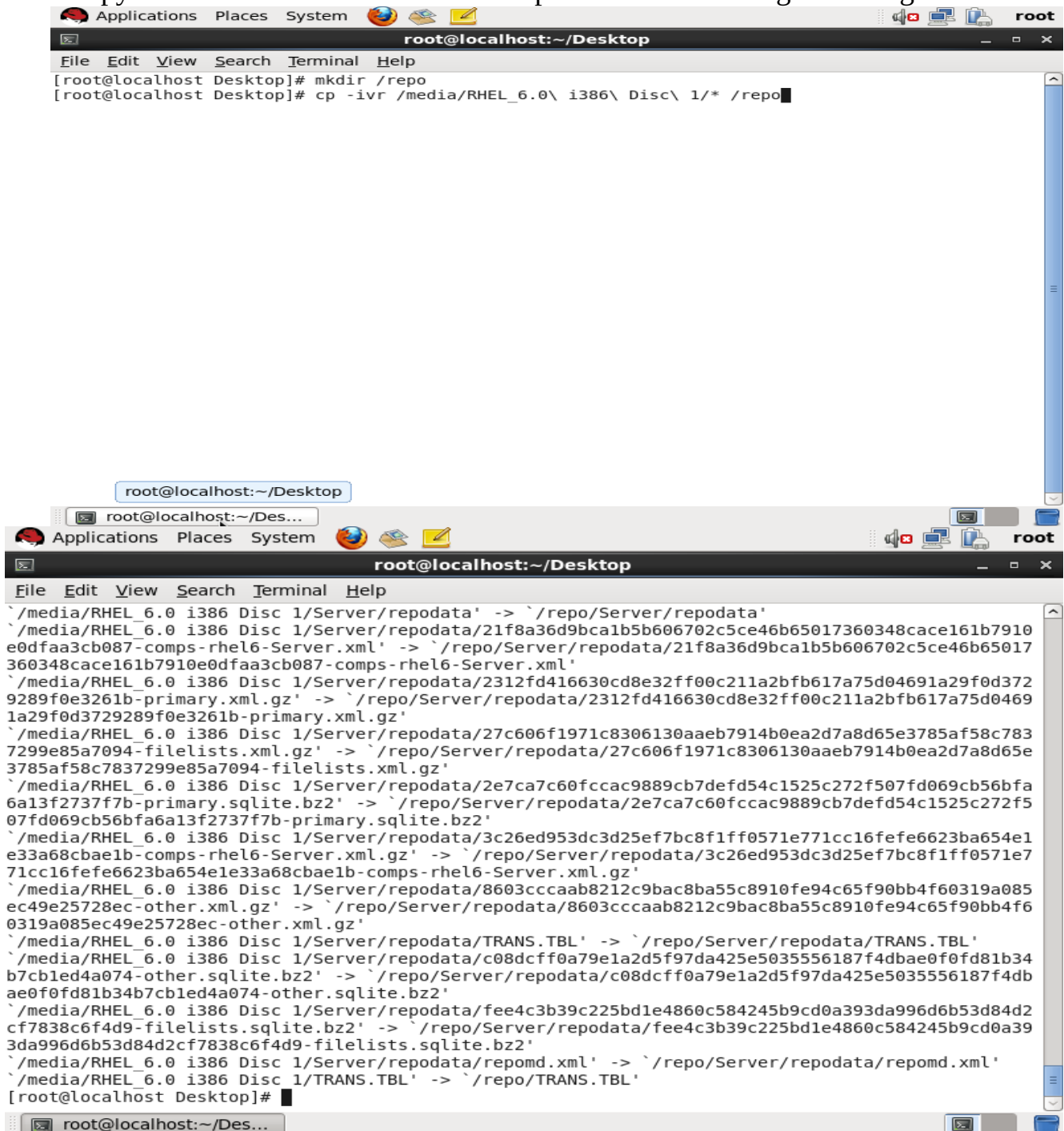
```
Applications Places System root
root@localhost: ~/Desktop
File Edit View Search Terminal Help
[root@localhost Desktop]# rpm -ql vsftpd
/etc/logrotate.d/vsftpd
/etc/pam.d/vsftpd
/etc/rc.d/init.d/vsftpd
/etc/vsftpd
/etc/vsftpd/ftpusers
/etc/vsftpd/user_list
/etc/vsftpd/vsftpd.conf
/etc/vsftpd/vsftpd_conf_migrate.sh
/usr/sbin/vsftpd
/usr/share/doc/vsftpd-2.2.2
/usr/share/doc/vsftpd-2.2.2/AUDIT
/usr/share/doc/vsftpd-2.2.2/BENCHMARKS
/usr/share/doc/vsftpd-2.2.2/BUGS
/usr/share/doc/vsftpd-2.2.2/COPYING
/usr/share/doc/vsftpd-2.2.2/Changelog
/usr/share/doc/vsftpd-2.2.2/EXAMPLE
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE/README
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE/README.configuration
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE/vsftpd.conf
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE/vsftpd.xinetd
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE_NOINETD
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE_NOINETD/README
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE_NOINETD/README.configuration
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/INTERNET_SITE_NOINETD/vsftpd.conf
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/PER_IP_CONFIG
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/PER_IP_CONFIG/README
/usr/share/doc/vsftpd-2.2.2/EXAMPLE/PER_IP_CONFIG/README.configuration
root@localhost: ~/Des...
```

B.Extracting files from RPMs

- To start with the extraction, first we need to set up a repository.
- This can be done using iso file attached to the machine.



- Copy the files of the mounted iso to a specific location using following command.



The image shows two screenshots of a Linux terminal window. The top screenshot shows the initial setup where a directory is created and files are copied from a mounted ISO. The bottom screenshot shows the same terminal window after a series of recursive copy commands have been executed to move all files from the ISO to a specific directory.

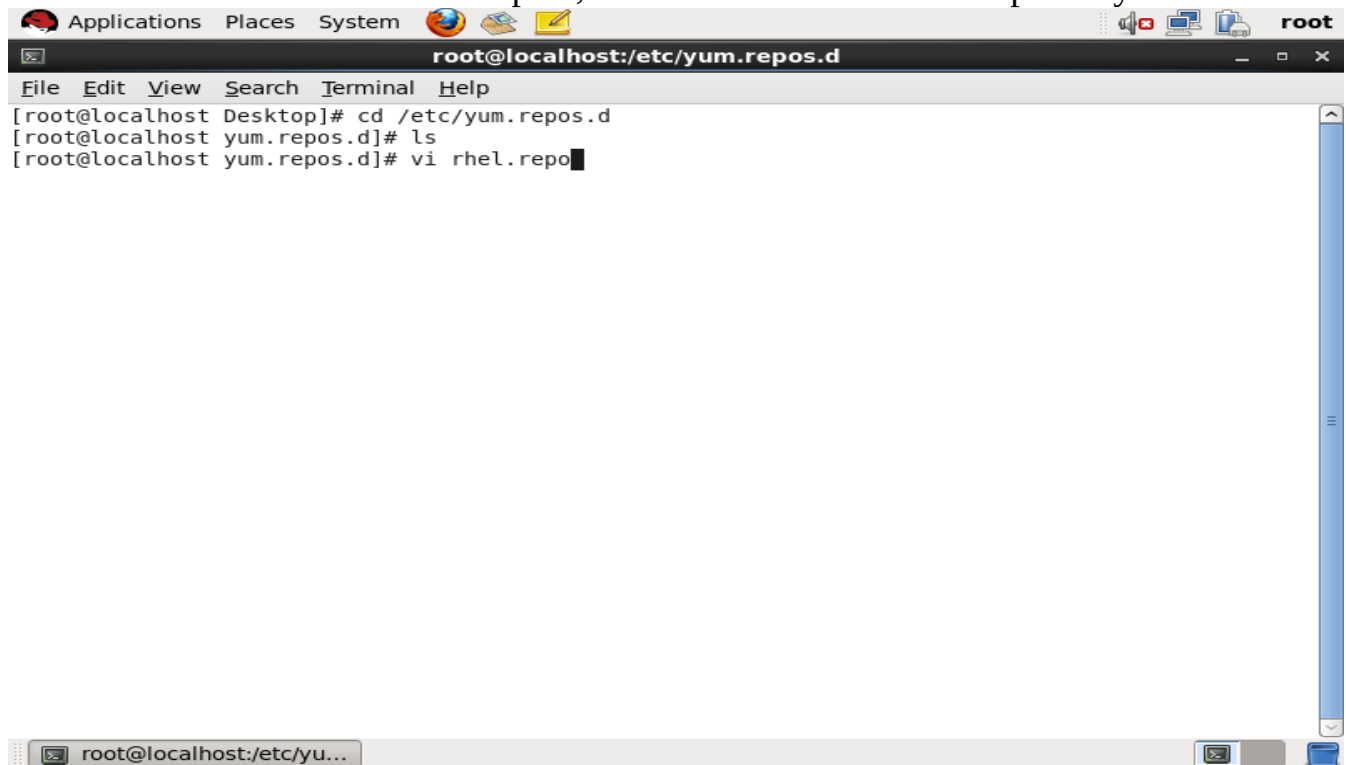
```

root@localhost: ~/Desktop
File Edit View Search Terminal Help
[root@localhost Desktop]# mkdir /repo
[root@localhost Desktop]# cp -ivr /media/RHEL_6.0\ i386\ Disc\ 1/* /repo

root@localhost: ~/Desktop
root@localhost: ~/Des...
Applications Places System
root@localhost: ~/Desktop
File Edit View Search Terminal Help
'/media/RHEL_6.0 i386 Disc 1/Server/repodata' -> '/repo/Server/repodata'
'/media/RHEL_6.0 i386 Disc 1/Server/repodata/21f8a36d9bca1b5b606702c5ce46b65017360348cace161b7910e0dfaa3cb087-comps-rhel6-Server.xml' -> '/repo/Server/repodata/21f8a36d9bca1b5b606702c5ce46b65017360348cace161b7910e0dfaa3cb087-comps-rhel6-Server.xml'
'/media/RHEL_6.0 i386 Disc 1/Server/repodata/2312fd416630cd8e32ff00c211a2bfb617a75d04691a29f0d3729289f0e3261b-primary.xml.gz' -> '/repo/Server/repodata/2312fd416630cd8e32ff00c211a2bfb617a75d04691a29f0d3729289f0e3261b-primary.xml.gz'
'/media/RHEL_6.0 i386 Disc 1/Server/repodata/27c606f1971c8306130aaeb7914b0ea2d7a8d65e3785af58c7837299e85a7094-filelists.xml.gz' -> '/repo/Server/repodata/27c606f1971c8306130aaeb7914b0ea2d7a8d65e3785af58c7837299e85a7094-filelists.xml.gz'
'/media/RHEL_6.0 i386 Disc 1/Server/repodata/2e7ca7c60fccac9889cb7defd54c1525c272f507fd069cb56bfa6a13f2737f7b-primary.sqlite.bz2' -> '/repo/Server/repodata/2e7ca7c60fccac9889cb7defd54c1525c272f507fd069cb56bfa6a13f2737f7b-primary.sqlite.bz2'
'/media/RHEL_6.0 i386 Disc 1/Server/repodata/3c26ed953dc3d25ef7bc8f1ff0571e771cc16fefe6623ba654e1e33a68cbae1b-comps-rhel6-Server.xml.gz' -> '/repo/Server/repodata/3c26ed953dc3d25ef7bc8f1ff0571e771cc16fefe6623ba654e1e33a68cbae1b-comps-rhel6-Server.xml.gz'
'/media/RHEL_6.0 i386 Disc 1/Server/repodata/8603cccaab8212c9bac8ba55c8910fe94c65f90bb4f60319a085ec49e25728ec-other.xml.gz' -> '/repo/Server/repodata/8603cccaab8212c9bac8ba55c8910fe94c65f90bb4f60319a085ec49e25728ec-other.xml.gz'
'/media/RHEL_6.0 i386 Disc 1/Server/repodata/TRANS.TBL' -> '/repo/Server/repodata/TRANS.TBL'
'/media/RHEL_6.0 i386 Disc 1/Server/repodata/c08dcff0a79e1a2d5f97da425e5035556187f4dbae0f0fd81b34b7cb1ed4a074-other.sqlite.bz2' -> '/repo/Server/repodata/c08dcff0a79e1a2d5f97da425e5035556187f4dbae0f0fd81b34b7cb1ed4a074-other.sqlite.bz2'
'/media/RHEL_6.0 i386 Disc 1/Server/repodata/fee4c3b39c225bd1e4860c584245b9cd0a393da996d6b53d84d2cf7838c6f4d9-filelists.sqlite.bz2' -> '/repo/Server/repodata/fee4c3b39c225bd1e4860c584245b9cd0a393da996d6b53d84d2cf7838c6f4d9-filelists.sqlite.bz2'
'/media/RHEL_6.0 i386 Disc 1/Server/repodata/repomd.xml' -> '/repo/Server/repodata/repomd.xml'
'/media/RHEL_6.0 i386 Disc 1/TRANS.TBL' -> '/repo/TRANS.TBL'
[root@localhost Desktop]#

```

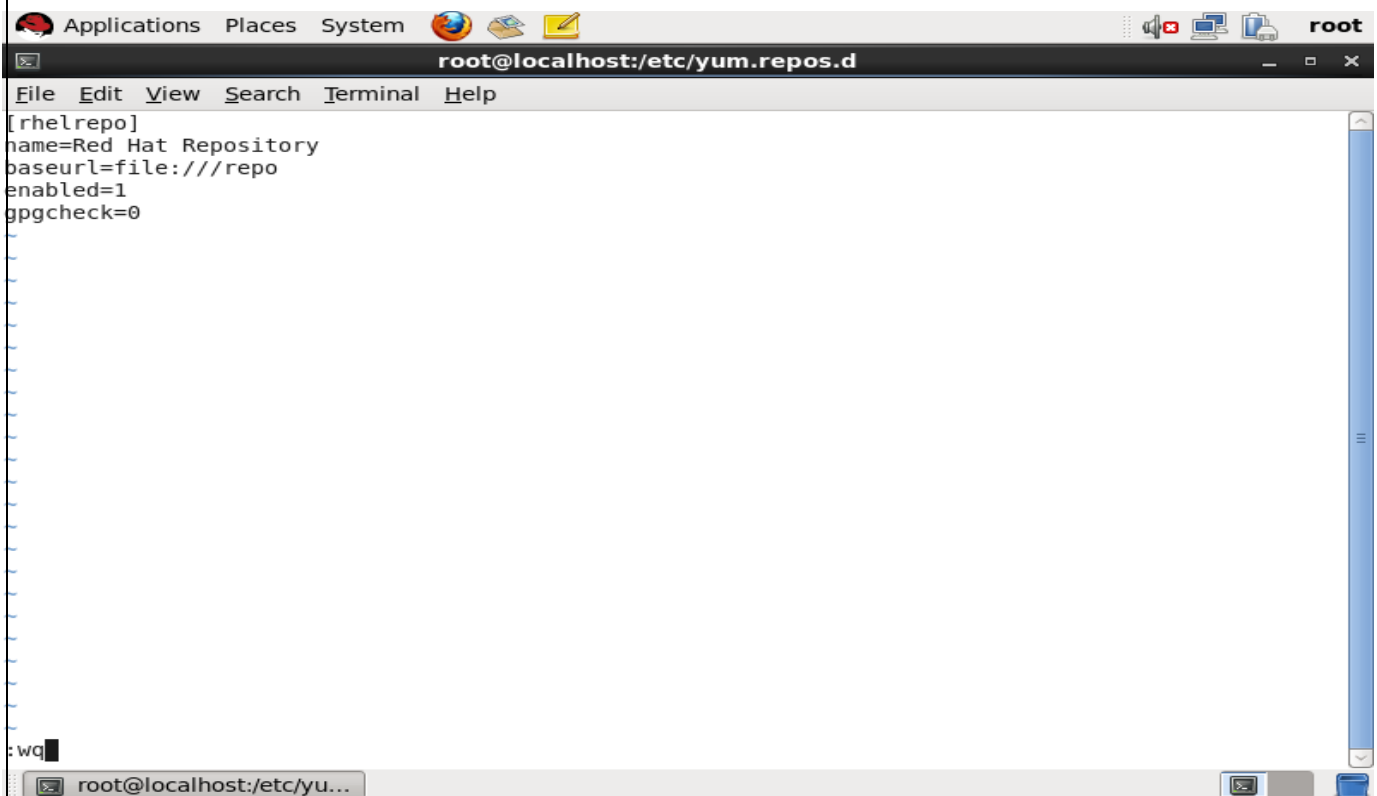
- Once files are copied, we need to convert it to a repository.



A terminal window titled 'root@localhost:/etc/yum.repos.d' with a menu bar (File, Edit, View, Search, Terminal, Help) and a toolbar. The terminal shows the following commands and output:

```
[root@localhost Desktop]# cd /etc/yum.repos.d
[root@localhost yum.repos.d]# ls
[root@localhost yum.repos.d]# vi rhel.repo
```

The window's title bar includes 'Applications', 'Places', 'System', and a 'root' user indicator. The taskbar at the bottom shows the terminal icon and the path 'root@localhost:/etc/yu...'.



A terminal window titled 'root@localhost:/etc/yum.repos.d' with a menu bar (File, Edit, View, Search, Terminal, Help) and a toolbar. The terminal shows the following configuration for a repository:

```
[rhelrepo]
name=Red Hat Repository
baseurl=file:///repo
enabled=1
gpgcheck=0
```

The window's title bar includes 'Applications', 'Places', 'System', and a 'root' user indicator. The taskbar at the bottom shows the terminal icon and the path 'root@localhost:/etc/yu...'.

```
Applications Places System root
root@localhost:/etc/yum.repos.d
File Edit View Search Terminal Help
[root@localhost yum.repos.d]# vi rhel.repo
[root@localhost yum.repos.d]# yum repolist
Loaded plugins: refresh-packagekit, rhnplugin
This system is not registered with RHN.
RHN support will be disabled.
rhelrepo | 3.7 kB 00:00 ...
repo id repo name status
rhelrepo Red Hat Repository 2,646
repolist: 2,646
[root@localhost yum.repos.d]# yum install createrepo
```

```
root@localhost:/etc/yu...
Applications Places System root
root@localhost:/etc/yum.repos.d
File Edit View Search Terminal Help
python-deltarpm i686 3.5-0.5.20090913git.el6 rhelrepo 27 k
Transaction Summary
=====
Install      3 Package(s)
Upgrade      0 Package(s)

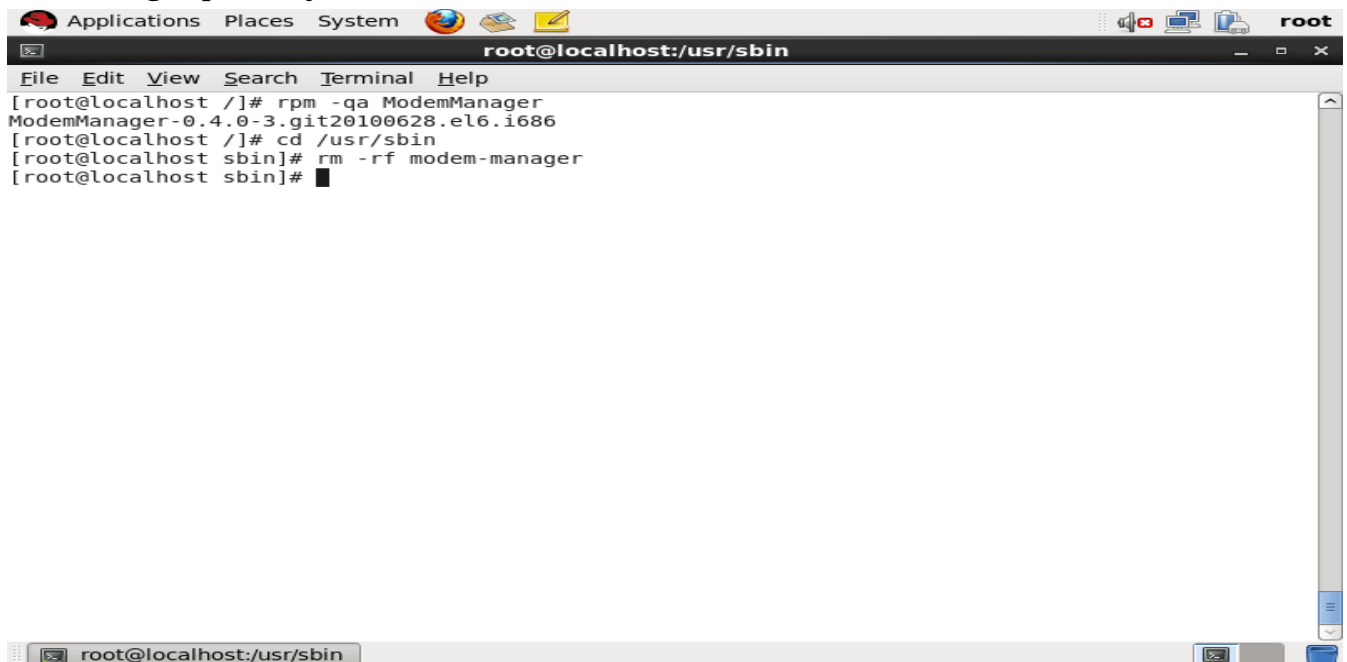
Total download size: 181 k
Installed size: 478 k
Is this ok [y/N]: y
Downloading Packages:
-----
Total                               3.2 MB/s | 181 kB 00:00
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing      : deltarpm-3.5-0.5.20090913git.el6.i686                1/3
  Installing      : python-deltarpm-3.5-0.5.20090913git.el6.i686        2/3
  Installing      : createrepo-0.9.8-4.el6.noarch                       3/3

Installed:
  createrepo.noarch 0:0.9.8-4.el6

Dependency Installed:
  deltarpm.i686 0:3.5-0.5.20090913git.el6 python-deltarpm.i686 0:3.5-0.5.20090913git.el6

Complete!
[root@localhost yum.repos.d]#
```

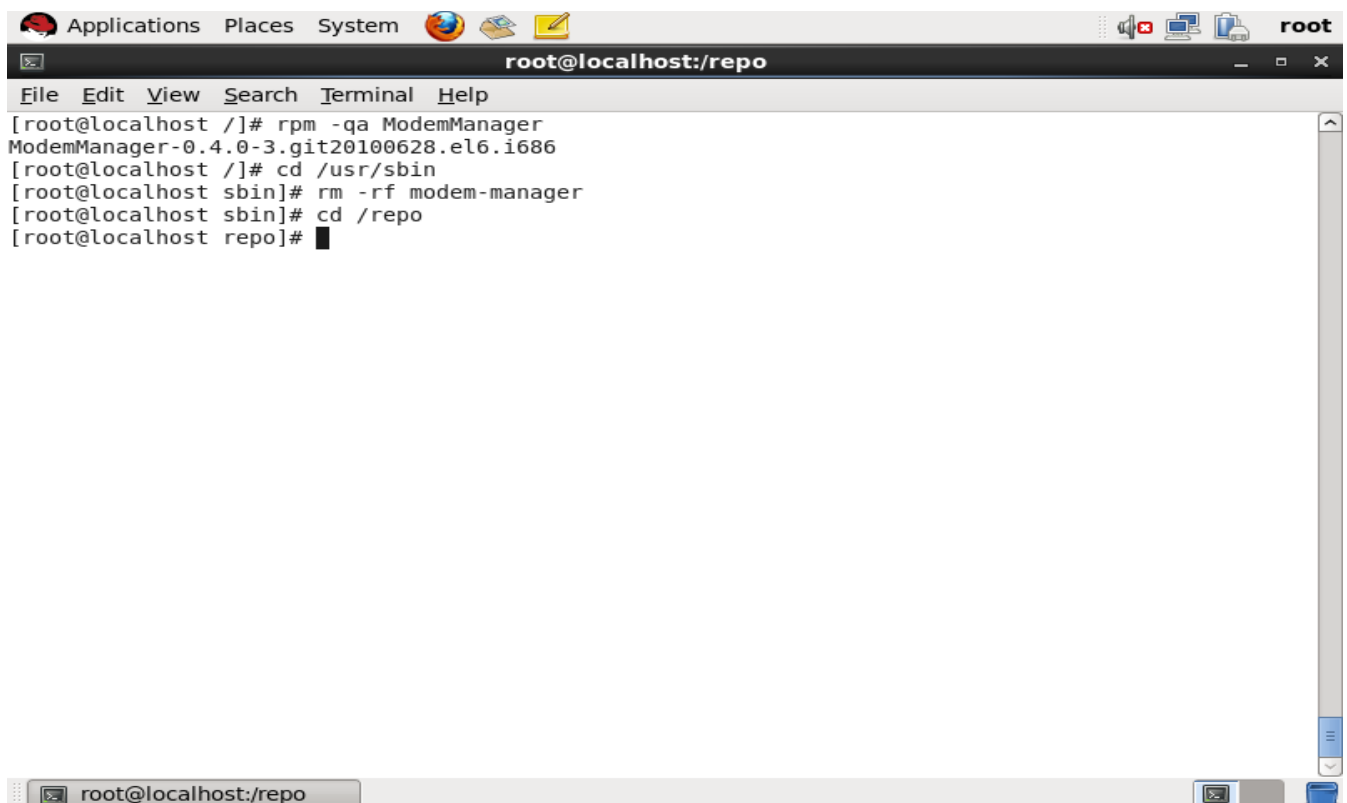
- Extraction is a process in which a damaged file can be replaced using the files from existing repository



A terminal window titled 'root@localhost:/usr/sbin' with a menu bar (File, Edit, View, Search, Terminal, Help) and a toolbar. The terminal shows the following commands and output:

```
[root@localhost ~]# rpm -qa ModemManager
ModemManager-0.4.0-3.git20100628.el6.i686
[root@localhost ~]# cd /usr/sbin
[root@localhost sbin]# rm -rf modem-manager
[root@localhost sbin]#
```

The window's title bar includes 'Applications', 'Places', 'System', and system icons. The bottom status bar shows 'root@localhost:/usr/sbin'.



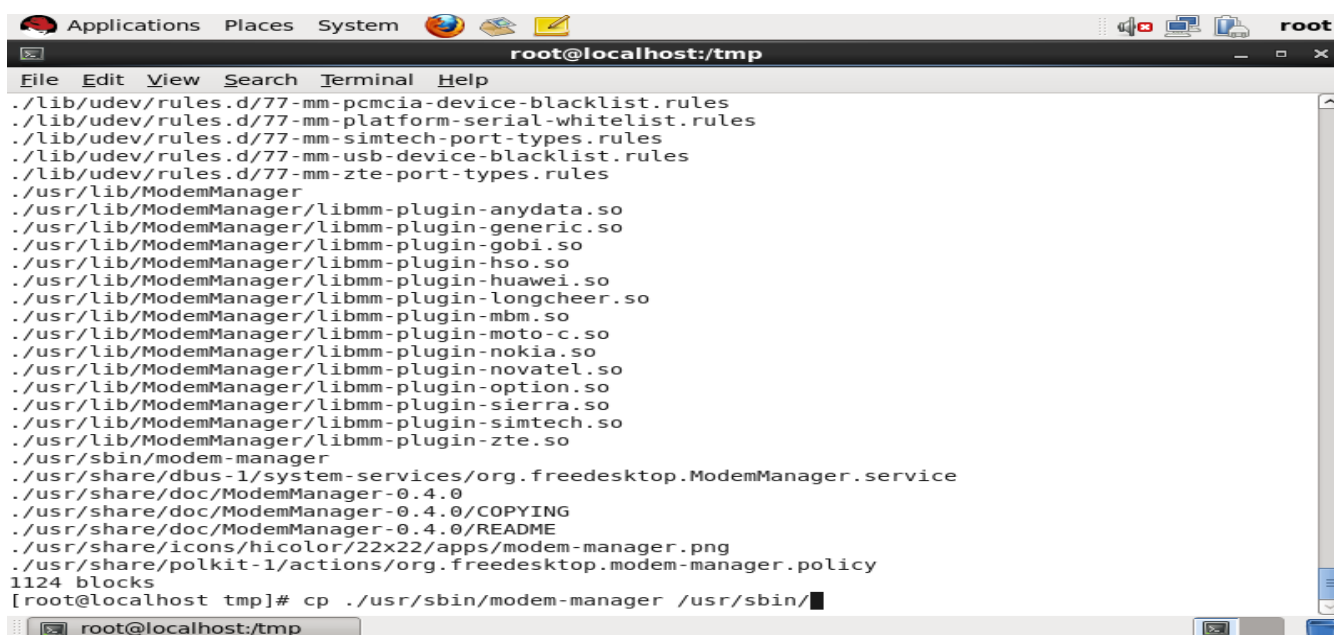
A terminal window titled 'root@localhost:/repo' with a menu bar (File, Edit, View, Search, Terminal, Help) and a toolbar. The terminal shows the following commands and output:

```
[root@localhost ~]# rpm -qa ModemManager
ModemManager-0.4.0-3.git20100628.el6.i686
[root@localhost ~]# cd /usr/sbin
[root@localhost sbin]# rm -rf modem-manager
[root@localhost sbin]# cd /repo
[root@localhost repo]#
```

The window's title bar includes 'Applications', 'Places', 'System', and system icons. The bottom status bar shows 'root@localhost:/repo'.

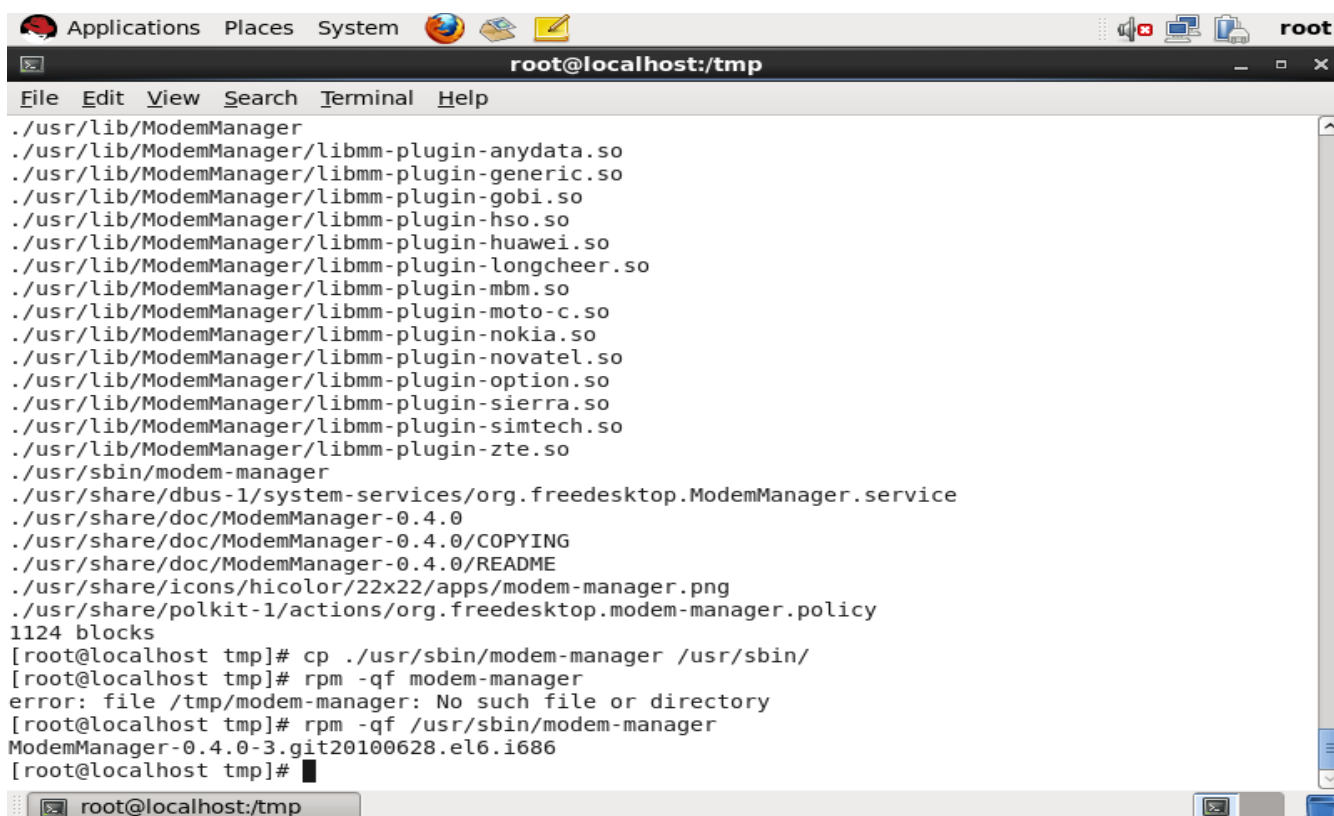

```
Applications Places System root
root@localhost:/repo/Packages
File Edit View Search Terminal Help
[root@localhost /]# rpm -qa ModemManager
ModemManager-0.4.0-3.git20100628.el6.i686
[root@localhost /]# cd /usr/sbin
[root@localhost sbin]# rm -rf modem-manager
[root@localhost sbin]# cd /repo
[root@localhost repo]# ls
EULA                                RELEASE-NOTES-es-ES.html           RELEASE-NOTES-ru-RU.html
GPL                                 RELEASE-NOTES-fr-FR.html           RELEASE-NOTES-si-LK.html
HighAvailability                    RELEASE-NOTES-gu-IN.html           RELEASE-NOTES-ta-IN.html
images                              RELEASE-NOTES-hi-IN.html           RELEASE-NOTES-te-IN.html
isolinux                           RELEASE-NOTES-it-IT.html           RELEASE-NOTES-zh-CN.html
LoadBalancer                       RELEASE-NOTES-ja-JP.html           RELEASE-NOTES-zh-TW.html
media.repo                         RELEASE-NOTES-kn-IN.html           repodata
Packages                           RELEASE-NOTES-ko-KR.html           ResilientStorage
README                             RELEASE-NOTES-ml-IN.html           RPM-GPG-KEY-redhat-beta
RELEASE-NOTES-as-IN.html           RELEASE-NOTES-mr-IN.html           RPM-GPG-KEY-redhat-release
RELEASE-NOTES-bn-IN.html           RELEASE-NOTES-or-IN.html           Server
RELEASE-NOTES-de-DE.html           RELEASE-NOTES-pa-IN.html           TRANS.TBL
RELEASE-NOTES-en-US.html           RELEASE-NOTES-pt-BR.html
[root@localhost repo]# cd Packages
[root@localhost Packages]# cp ModemManager-0.4.0-3.git20100628.el6.i686.rpm /tmp

root@localhost:/repo/P...
Applications Places System root
root@localhost:/tmp
File Edit View Search Terminal Help
[root@localhost Packages]# cd /tmp
[root@localhost tmp]# ls
keyring-D76lz1                    orbit-root                          tmpdd6eWx
ModemManager-0.4.0-3.git20100628.el6.i686.rpm  pulse-Bmo3N0llnQSA                 virtual-root.oRh42S
orbit-gdm                          pulse-UTcAfXsQMExi                 yum.log
[root@localhost tmp]# rpm2cpio ModemManager-0.4.0-3.git20100628.el6.i686.rpm | cpio -idmv
```



A terminal window titled 'root@localhost:/tmp' with a menu bar (File, Edit, View, Search, Terminal, Help) and a toolbar. The window displays a long list of files and directories, including udev rules, ModemManager plugins, and system services. The list is truncated with '1124 blocks'. The command prompt shows the execution of a 'cp' command to copy the modem-manager directory to /usr/sbin/.

```
root@localhost:/tmp
File Edit View Search Terminal Help
./lib/udev/rules.d/77-mm-pcmcia-device-blacklist.rules
./lib/udev/rules.d/77-mm-platform-serial-whitelist.rules
./lib/udev/rules.d/77-mm-simtech-port-types.rules
./lib/udev/rules.d/77-mm-usb-device-blacklist.rules
./lib/udev/rules.d/77-mm-zte-port-types.rules
./usr/lib/ModemManager
./usr/lib/ModemManager/libmm-plugin-anydata.so
./usr/lib/ModemManager/libmm-plugin-generic.so
./usr/lib/ModemManager/libmm-plugin-gobi.so
./usr/lib/ModemManager/libmm-plugin-hso.so
./usr/lib/ModemManager/libmm-plugin-huawei.so
./usr/lib/ModemManager/libmm-plugin-longcheer.so
./usr/lib/ModemManager/libmm-plugin-mbm.so
./usr/lib/ModemManager/libmm-plugin-moto-c.so
./usr/lib/ModemManager/libmm-plugin-nokia.so
./usr/lib/ModemManager/libmm-plugin-novatel.so
./usr/lib/ModemManager/libmm-plugin-option.so
./usr/lib/ModemManager/libmm-plugin-sierra.so
./usr/lib/ModemManager/libmm-plugin-simtech.so
./usr/lib/ModemManager/libmm-plugin-zte.so
./usr/sbin/modem-manager
./usr/share/dbus-1/system-services/org.freedesktop.ModemManager.service
./usr/share/doc/ModemManager-0.4.0
./usr/share/doc/ModemManager-0.4.0/COPYING
./usr/share/doc/ModemManager-0.4.0/README
./usr/share/icons/hicolor/22x22/apps/modem-manager.png
./usr/share/polkit-1/actions/org.freedesktop.modem-manager.policy
1124 blocks
[root@localhost tmp]# cp ./usr/sbin/modem-manager /usr/sbin/
```



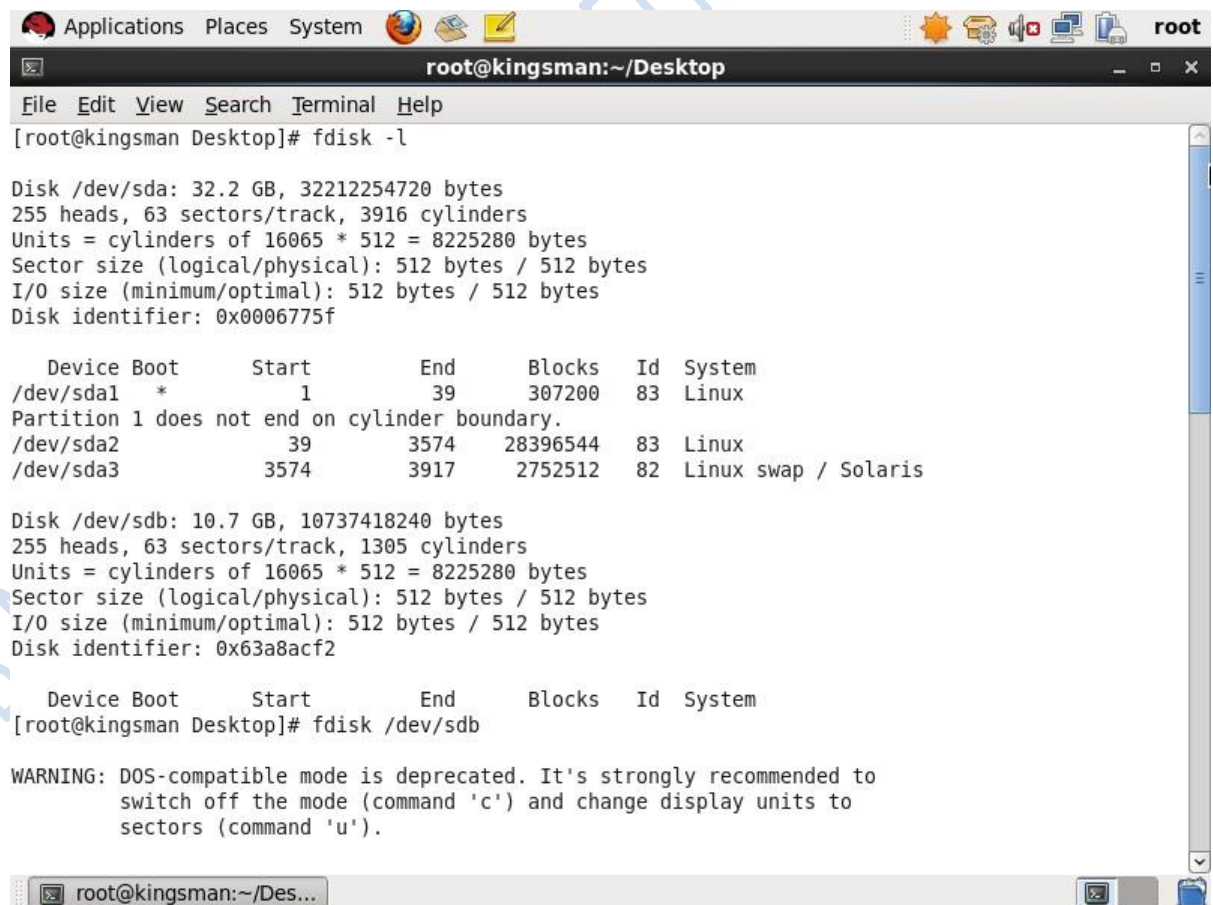
A terminal window titled 'root@localhost:/tmp' with a menu bar (File, Edit, View, Search, Terminal, Help) and a toolbar. The window displays the same file list as the first terminal. The command prompt shows the execution of 'cp', 'rpm -qf', and 'rpm -qf' commands. The 'rpm -qf' commands result in error messages because the files do not exist in the specified locations.

```
root@localhost:/tmp
File Edit View Search Terminal Help
./usr/lib/ModemManager
./usr/lib/ModemManager/libmm-plugin-anydata.so
./usr/lib/ModemManager/libmm-plugin-generic.so
./usr/lib/ModemManager/libmm-plugin-gobi.so
./usr/lib/ModemManager/libmm-plugin-hso.so
./usr/lib/ModemManager/libmm-plugin-huawei.so
./usr/lib/ModemManager/libmm-plugin-longcheer.so
./usr/lib/ModemManager/libmm-plugin-mbm.so
./usr/lib/ModemManager/libmm-plugin-moto-c.so
./usr/lib/ModemManager/libmm-plugin-nokia.so
./usr/lib/ModemManager/libmm-plugin-novatel.so
./usr/lib/ModemManager/libmm-plugin-option.so
./usr/lib/ModemManager/libmm-plugin-sierra.so
./usr/lib/ModemManager/libmm-plugin-simtech.so
./usr/lib/ModemManager/libmm-plugin-zte.so
./usr/sbin/modem-manager
./usr/share/dbus-1/system-services/org.freedesktop.ModemManager.service
./usr/share/doc/ModemManager-0.4.0
./usr/share/doc/ModemManager-0.4.0/COPYING
./usr/share/doc/ModemManager-0.4.0/README
./usr/share/icons/hicolor/22x22/apps/modem-manager.png
./usr/share/polkit-1/actions/org.freedesktop.modem-manager.policy
1124 blocks
[root@localhost tmp]# cp ./usr/sbin/modem-manager /usr/sbin/
[root@localhost tmp]# rpm -qf modem-manager
error: file /tmp/modem-manager: No such file or directory
[root@localhost tmp]# rpm -qf /usr/sbin/modem-manager
ModemManager-0.4.0-3.git20100628.el6.i686
[root@localhost tmp]#
```

C. Creating partition and mounting filesystem

Following are commands for partition and file system

- Primary partition Creation
- `fdisk -l`
- `fdisk /dev/sdb`
- command `m` for help:n
- partition type: `p`
- First cylinder :1
- Last cylinder value:+2G
- command `m` for help:p
- command `m` for help:w



```
root@kingsman:~/Desktop
File Edit View Search Terminal Help
[root@kingsman Desktop]# fdisk -l

Disk /dev/sda: 32.2 GB, 32212254720 bytes
255 heads, 63 sectors/track, 3916 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x0006775f

   Device Boot      Start         End      Blocks   Id  System
/dev/sda1  *           1           39       307200    83   Linux
Partition 1 does not end on cylinder boundary.
/dev/sda2             39        3574      28396544    83   Linux
/dev/sda3          3574        3917       2752512    82   Linux swap / Solaris

Disk /dev/sdb: 10.7 GB, 10737418240 bytes
255 heads, 63 sectors/track, 1305 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x63a8acf2

   Device Boot      Start         End      Blocks   Id  System
[root@kingsman Desktop]# fdisk /dev/sdb

WARNING: DOS-compatible mode is deprecated. It's strongly recommended to
switch off the mode (command 'c') and change display units to
sectors (command 'u').
```

```
Applications Places System root
root@kingsman:~/Desktop
File Edit View Search Terminal Help

Command (m for help): n
Command action
  e extended
  p primary partition (1-4)
p
Partition number (1-4): 1
First cylinder (1-1305, default 1): 1
Last cylinder, +cylinders or +size{K,M,G} (1-1305, default 1305): +2G

Command (m for help): p

Disk /dev/sdb: 10.7 GB, 10737418240 bytes
255 heads, 63 sectors/track, 1305 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x63a8acf2

   Device Boot      Start         End      Blocks   Id  System
/dev/sdb1             1           262     2104483+   83   Linux

Command (m for help): w
The partition table has been altered!

Calling ioctl() to re-read partition table.
Syncing disks.
[root@kingsman Desktop]# partprobe /dev/sdb
[root@kingsman Desktop]#

root@kingsman:~/Des...
Applications Places System root
root@kingsman:~/Desktop
File Edit View Search Terminal Help

[root@kingsman Desktop]# mkfs -t ext4 /dev/sdb1
mke2fs 1.41.12 (17-May-2010)
Filesystem label=
OS type: Linux
Block size=4096 (log=2)
Fragment size=4096 (log=2)
Stride=0 blocks, Stripe width=0 blocks
131648 inodes, 526120 blocks
26306 blocks (5.00%) reserved for the super user
First data block=0
Maximum filesystem blocks=541065216
17 block groups
32768 blocks per group, 32768 fragments per group
7744 inodes per group
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912

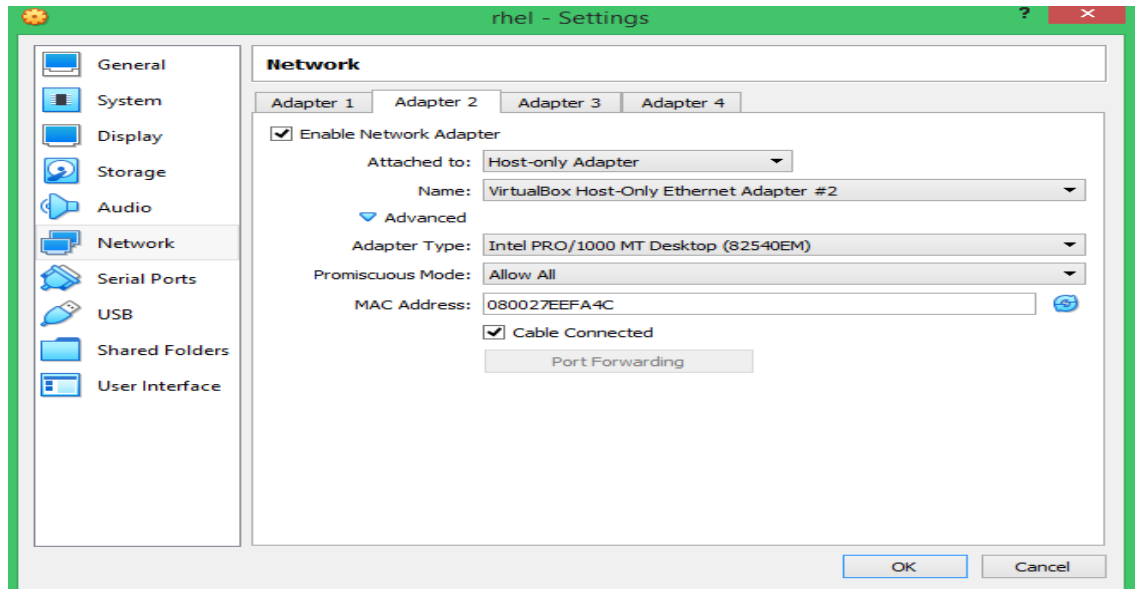
Writing inode tables: done
Creating journal (16384 blocks): done
Writing superblocks and filesystem accounting information: done

This filesystem will be automatically checked every 24 mounts or
180 days, whichever comes first.  Use tune2fs -c or -i to override.
[root@kingsman Desktop]#
```

```
Applications Places System root@kingsman:/data
File Edit View Search Terminal Help
[root@kingsman data]# cd /
[root@kingsman /]# cd data
[root@kingsman data]# ls
file1.txt m1
[root@kingsman data]# cd /
[root@kingsman /]# mount /dev/sdb1 /data
[root@kingsman /]# cd data
[root@kingsman data]# ls
lost+found
[root@kingsman data]# cd /
[root@kingsman /]# umount /data
[root@kingsman /]# cd data
[root@kingsman data]# ls
file1.txt m1
[root@kingsman data]#
```

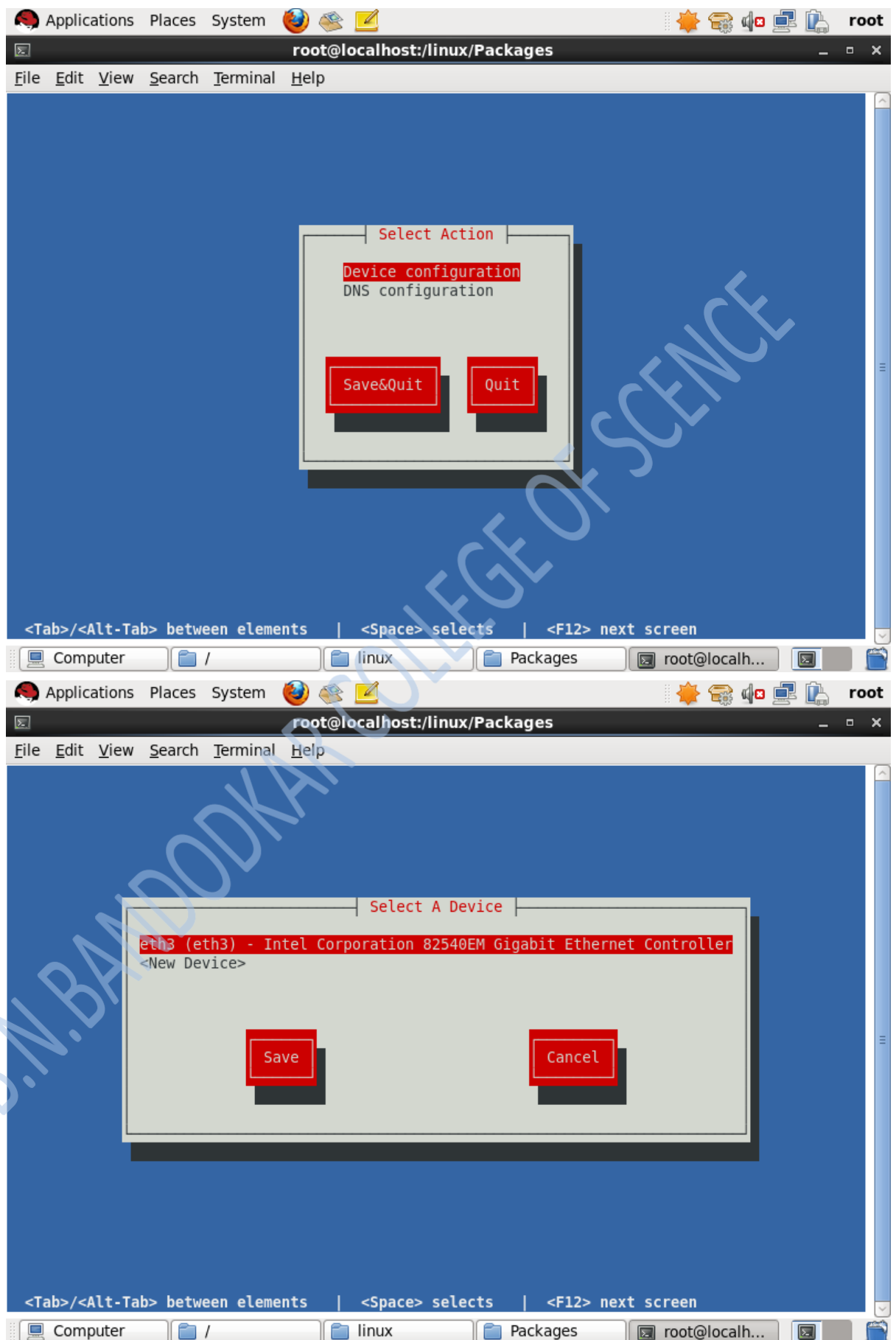
D. Connecting Network

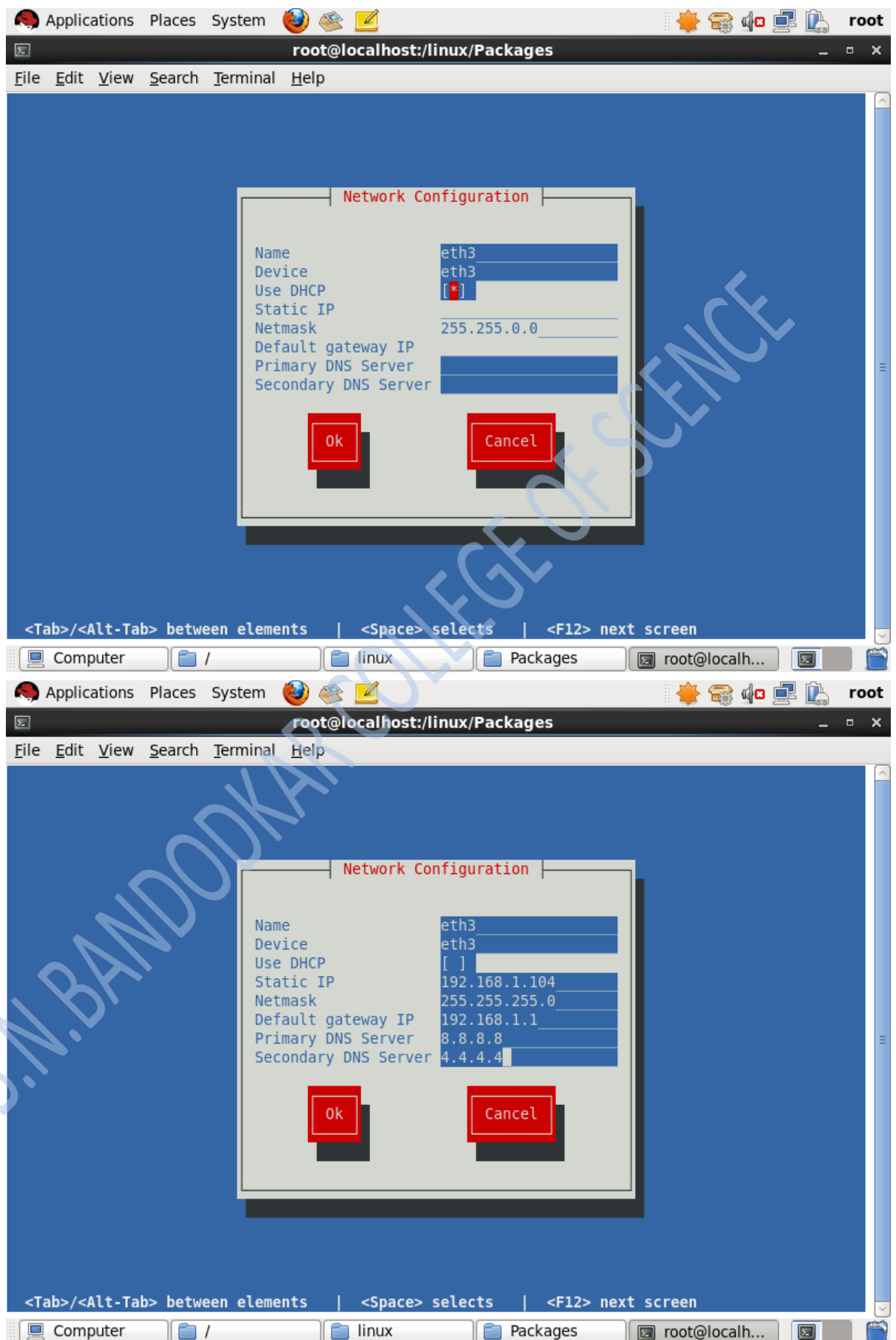
Before starting network configuration, it is important to perform some initial settings.



In virtualbox setting, goto network tab, select attached to option as Host Only Adapter and click ok to save.

Now following are steps for configuration.
First we need to use the command
“system-config-network”





The image displays two screenshots of a Linux terminal window. The window title is 'root@localhost:/linux/Packages'. The terminal shows the execution of network configuration commands and their output.

Top Screenshot:

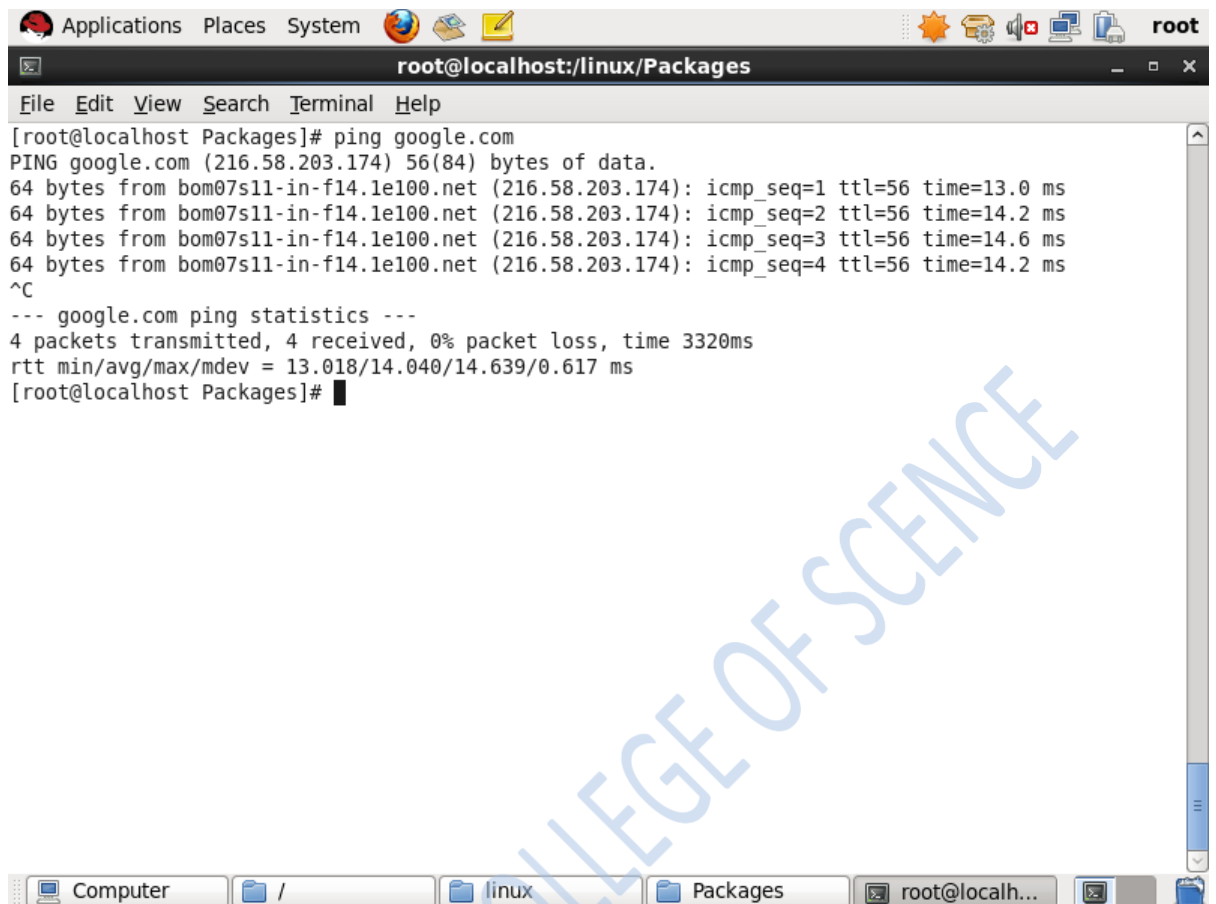
```
[root@localhost Packages]# system-config-network
[root@localhost Packages]# service network restart
Shutting down interface eth3: Device state: 3 (disconnected)
[ OK ]
Shutting down loopback interface:
[ OK ]
Bringing up loopback interface:
[ OK ]
Bringing up interface eth3: Active connection state: activated
Active connection path: /org/freedesktop/NetworkManager/ActiveConnection/3
[ OK ]
[root@localhost Packages]#
```

Bottom Screenshot:

```
[root@localhost Packages]# ifconfig
eth3      Link encap:Ethernet  HWaddr 08:00:27:71:08:78
          inet addr:192.168.1.104  Bcast:192.168.1.255  Mask:255.255.255.0
          inet6 addr: fe80::a00:27ff:fe71:878/64  Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:2415 errors:0 dropped:0 overruns:0 frame:0
          TX packets:1653 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:3279806 (3.1 MiB)  TX bytes:102745 (100.3 KiB)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128  Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:149 errors:0 dropped:0 overruns:0 frame:0
          TX packets:149 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:14996 (14.6 KiB)  TX bytes:14996 (14.6 KiB)

[root@localhost Packages]#
```



```
Applications Places System root@localhost:/linux/Packages
File Edit View Search Terminal Help
[root@localhost Packages]# ping google.com
PING google.com (216.58.203.174) 56(84) bytes of data:
64 bytes from bom07s11-in-f14.1e100.net (216.58.203.174): icmp_seq=1 ttl=56 time=13.0 ms
64 bytes from bom07s11-in-f14.1e100.net (216.58.203.174): icmp_seq=2 ttl=56 time=14.2 ms
64 bytes from bom07s11-in-f14.1e100.net (216.58.203.174): icmp_seq=3 ttl=56 time=14.6 ms
64 bytes from bom07s11-in-f14.1e100.net (216.58.203.174): icmp_seq=4 ttl=56 time=14.2 ms
^C
--- google.com ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3320ms
rtt min/avg/max/mdev = 13.018/14.040/14.639/0.617 ms
[root@localhost Packages]#
```