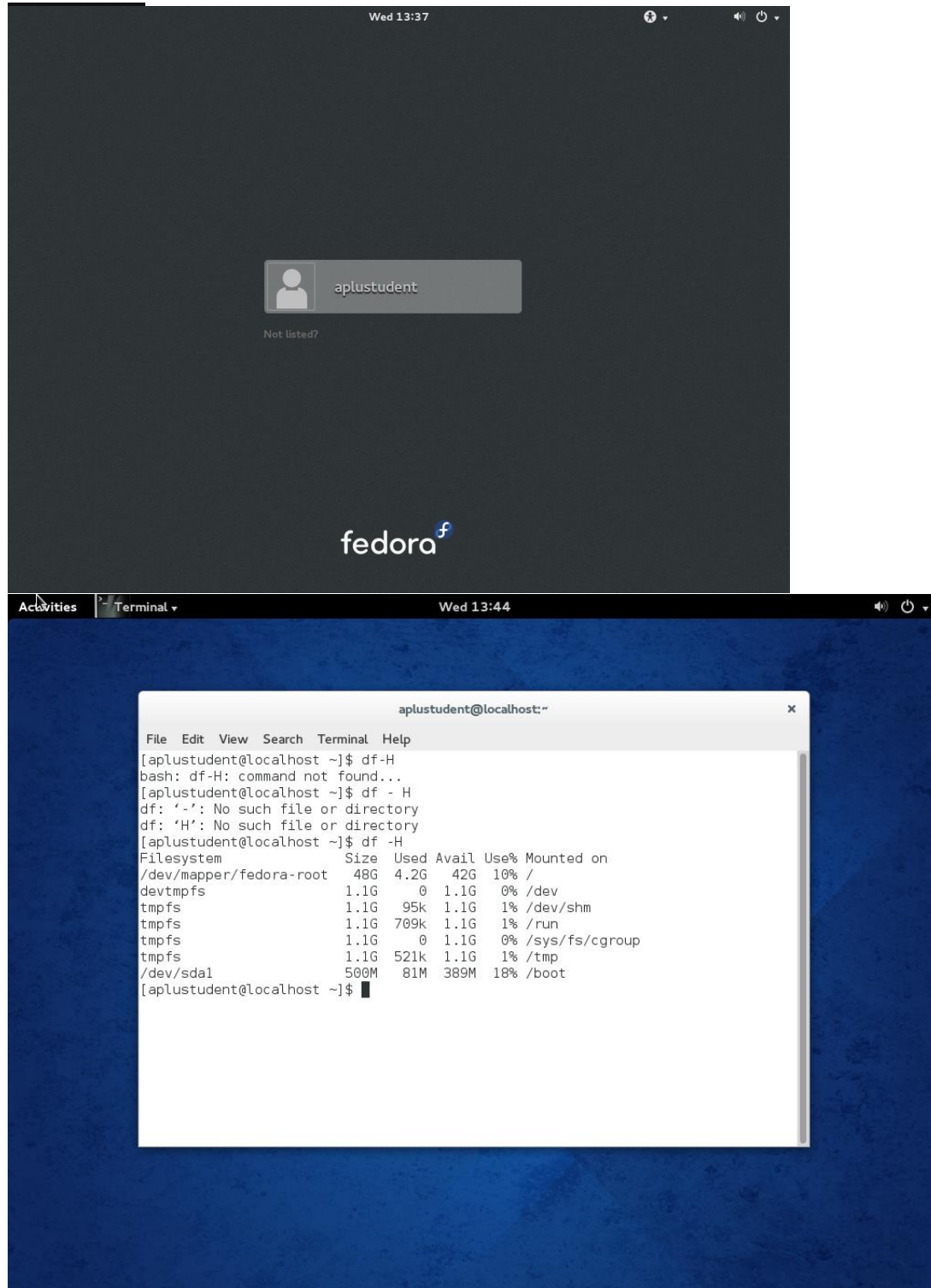
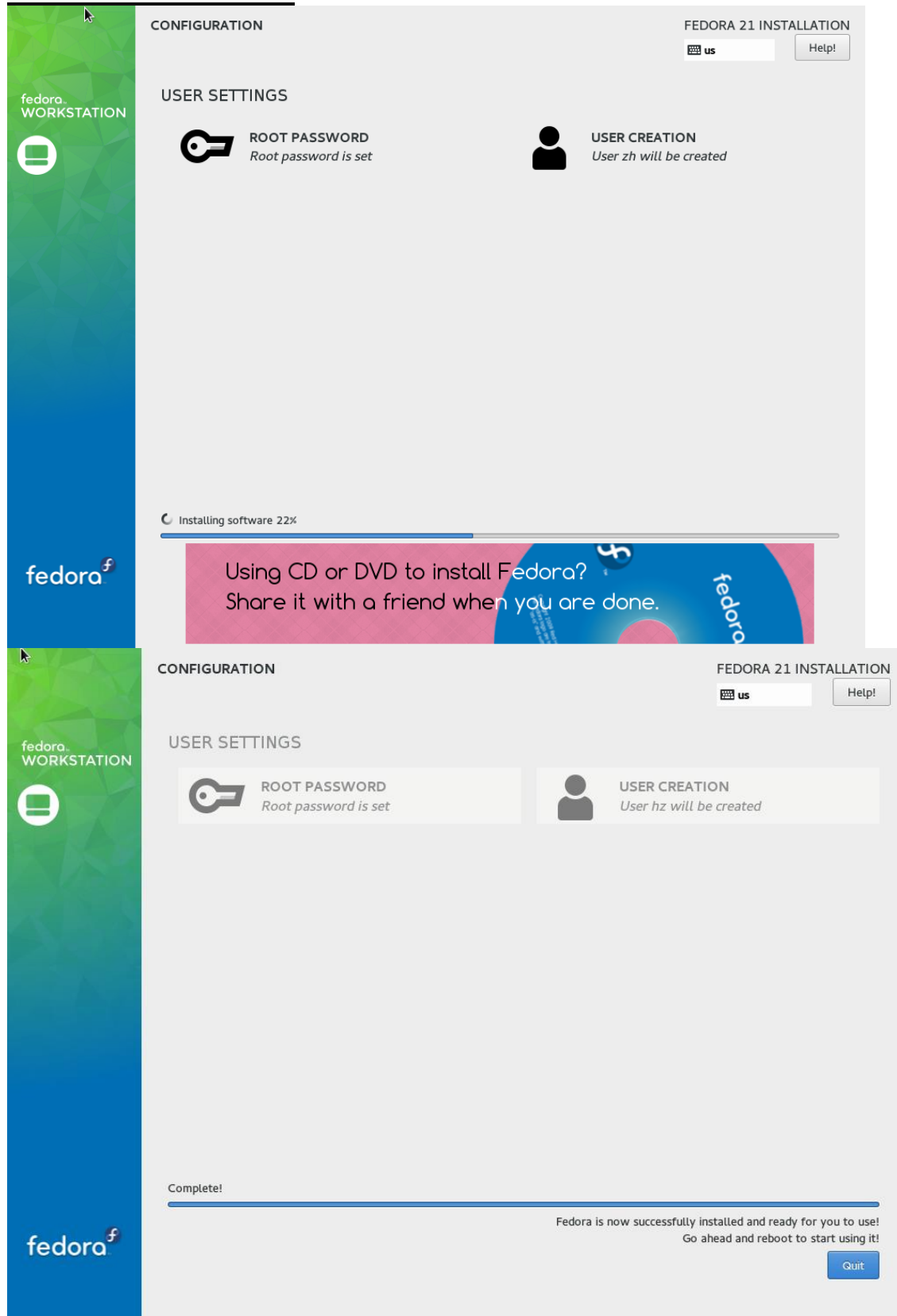
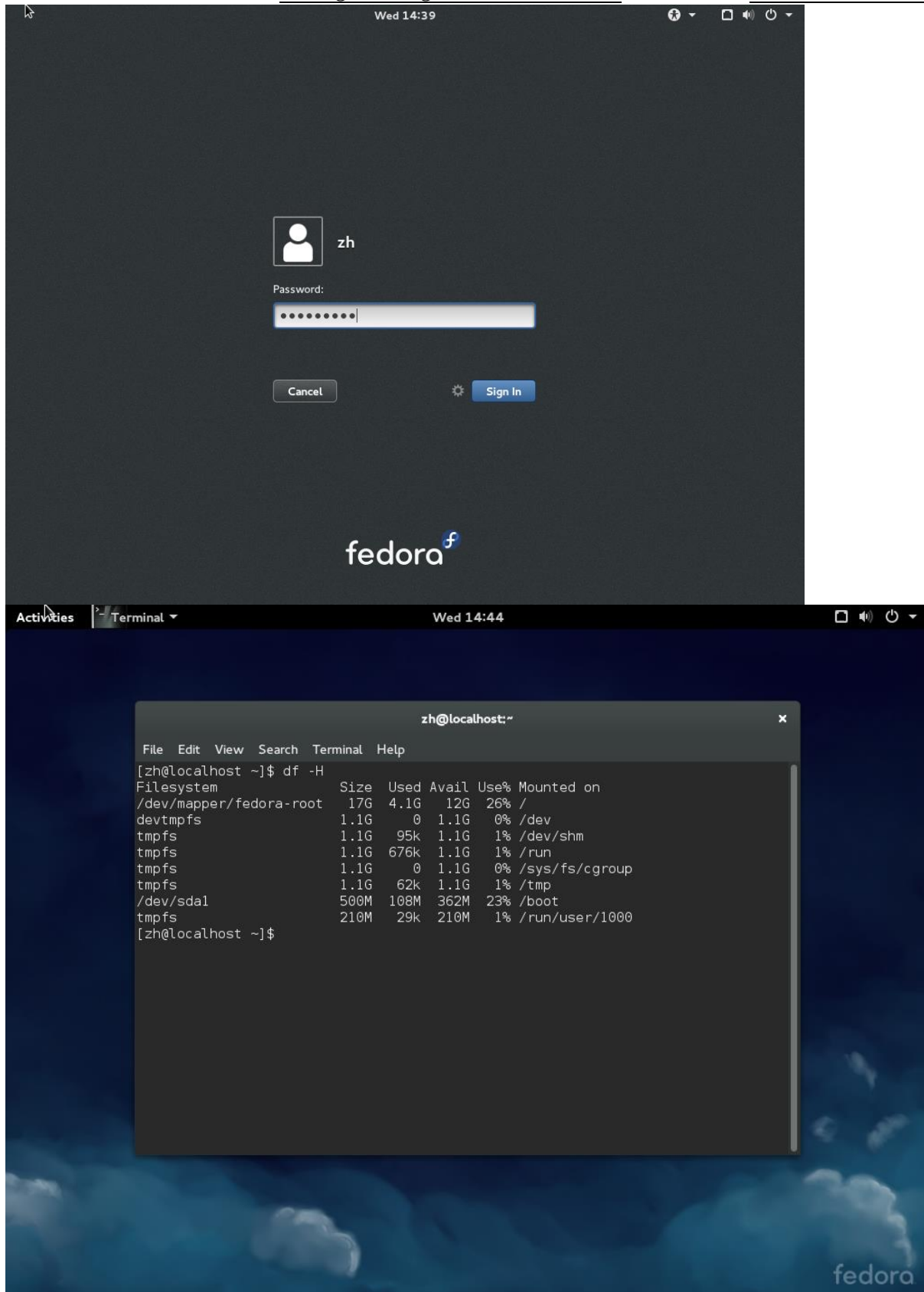


**Part 1**

- Fedora 20**



• Fedora 21 workstation



• Fedora 21 server

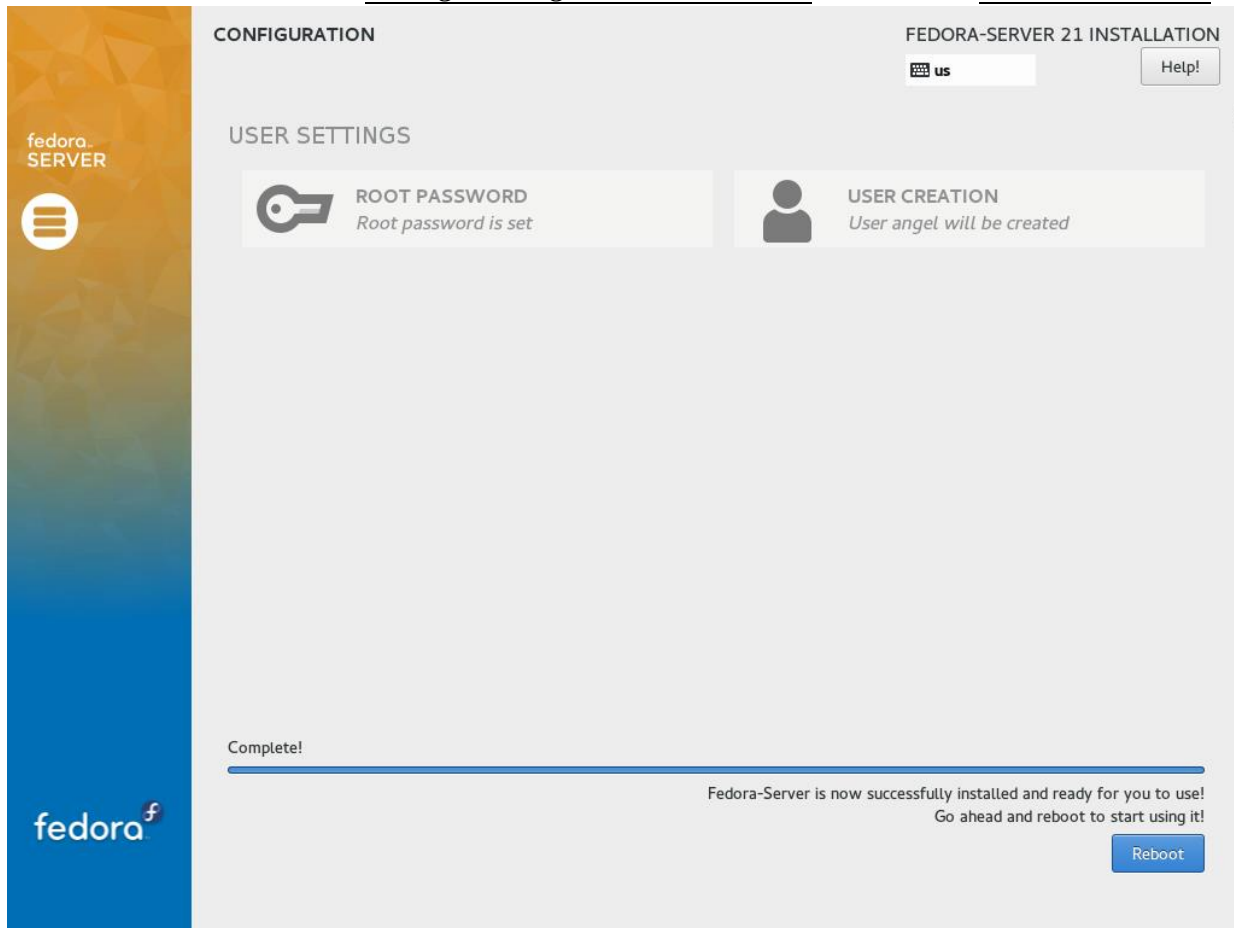
The image shows two screenshots of the Fedora 21 Server installation process.

**Top Screenshot: WELCOME TO FEDORA-SERVER 21.**

The window title is "FEDORA-SERVER 21 INSTALLATION". In the top right corner, there is a language dropdown menu showing "us" and a "Help!" button. The main text says "WELCOME TO FEDORA-SERVER 21." followed by "What language would you like to use during the installation process?". A language selection window is open, showing a list of languages. The left pane lists languages with their native names and English names: English, Español, Afrikaans, አማርኛ, العربية, অসমীয়া, Asturianu, Беларуская, Български, বাংলা, Bosanski, Català, Čeština, and Cymraeg. The right pane shows a list of English variants: English (United States), English (United Kingdom), English (India), English (Australia), English (Canada), English (Denmark), English (Ireland), English (New Zealand), English (Nigeria), English (Hong Kong SAR China), English (Philippines), English (Singapore), English (South Africa), English (Zambia), English (Zimbabwe), and English (Botswana). At the bottom right, there are "Quit" and "Continue" buttons.

**Bottom Screenshot: CONFIGURATION**

The window title is "FEDORA-SERVER 21 INSTALLATION". In the top right corner, there is a language dropdown menu showing "us" and a "Help!" button. The main text says "CONFIGURATION" followed by "USER SETTINGS". There are two sections: "ROOT PASSWORD" with a key icon and the text "Root password is set", and "USER CREATION" with a person icon and the text "User angel will be created". At the bottom, there is a progress bar showing "Installing mesa-libglapi (94/614)". At the bottom right, there is a link "ask.fedoraproject.org" and the text "Have a Question? We have Answers."



```
Fedora release 21 (Twenty One)
Kernel 3.17.4-301.fc21.x86_64 on an x86_64 (tty1)

localhost login: angel
Password:
Last login: Wed Jan 28 15:39:19 on tty1
[angel@localhost ~]$ df -H
Filesystem                                Size  Used Avail Use% Mounted on
/dev/mapper/fedora--server-root          17G   1.2G   15G   8% /
devtmpfs                                 1.1G     0   1.1G   0% /dev
tmpfs                                     1.1G     0   1.1G   0% /dev/shm
tmpfs                                     1.1G  336k   1.1G   1% /run
tmpfs                                     1.1G     0   1.1G   0% /sys/fs/cgroup
tmpfs                                     1.1G   4.1k   1.1G   1% /tmp
/dev/sda1                                500M   94M  375M  21% /boot
tmpfs                                     210M     0   210M   0% /run/user/1000
[angel@localhost ~]$ _
```

- Fedora 20 upgrade to Fedora 21 workstation**

The first screenshot shows the installation of the 'fedup.noarch' package. The terminal output includes a transaction check, successful installation of 'fedup-0.9.1-1.fc20.noarch', and the execution of 'sudo fedup --network 21 --product=workstation'. A progress bar shows the download of various repositories, including 'fedora/21/x86\_64/metalink' and 'fedora/21/x86\_64/group\_gz'.

```

aplustudent@localhost:~
File Edit View Search Terminal Help
Package : fedora-release-20-1.noarch (@anaconda)
From : /etc/pki/rpm-gpg/RPM-GPG-KEY-fedora-20-x86_64
Is this ok [y/N]: y
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : fedup-0.9.1-1.fc20.noarch                                1/1
  Verifying : fedup-0.9.1-1.fc20.noarch                                1/1

Installed:
  fedup.noarch 0:0.9.1-1.fc20

Complete!
[aplustudent@localhost ~]$ sudo fedup --network 21 --product=workstation
setting up repos...
default-installrepo/metalink | 18 kB 00:00
default-installrepo | 3.7 kB 00:00
default-installrepo/group_gz | 113 kB 00:00
default-installrepo/primary_db | 1.4 MB 00:01
fedora/21/x86_64/metalink | 15 kB 00:00
fedora/21/x86_64 | 3.8 kB 00:00
fedora/21/x86_64/group_gz | 232 kB 00:00
fedora/21/x86_64/primary_63% [=====] 2.0 MB/s 11 MB 00:03 ETA

```

The second screenshot shows the progress of the upgrade. It lists the download of various packages for Fedora 21, including 'yum-metadata-parser', 'zd1211-firmware', 'zeitgeist-libs', 'zip', 'yum-langpacks', 'zlib', 'yum', 'zenity', and 'yum-utils'. The progress bar indicates that the transaction is 100% complete and the system is being set up for the upgrade.

```

aplustudent@localhost:~
File Edit View Search Terminal Help
(1477/1485): yum-metadata-parser-1.1.4-14.fc21.x86_64.rpm | 39 kB 00:00
(1478/1485): zd1211-firmware-1.4-10.fc21.noarch.rpm | 23 kB 00:00
(1479/1485): zeitgeist-libs-0.9.16-0.3.20140808.git.ce9aff | 147 kB 00:00
(1480/1485): zip-3.0-12.fc21.x86_64.rpm | 266 kB 00:00
(1481/1485): yum-langpacks-0.4.4-1.fc21.noarch.rpm | 34 kB 00:01
(1482/1485): zlib-1.2.8-7.fc21.x86_64.rpm | 95 kB 00:00
(1483/1485): yum-3.4.3-153.fc21.noarch.rpm | 1.2 MB 00:02
(1484/1485): zenity-3.14.0-1.fc21.x86_64.rpm | 3.4 MB 00:01
(1485/1485): yum-utils-1.1.31-27.fc21.noarch.rpm | 118 kB 00:02
Importing GPG key 0x95A43F54:
  Userid : "Fedora (21) <fedora@fedoraproject.org>"
  Fingerprint: 6596 b8fb abda 5227 a9c5 b59e 89ad 4e87 95a4 3f54
  Package : fedora-release-20-1.noarch (@anaconda/20)
  From : /etc/pki/rpm-gpg/RPM-GPG-KEY-fedora-21-x86_64
testing upgrade transaction
rpm transaction 100% [=====]
rpm install 100% [=====]
setting up system for upgrade
Finished. Reboot to start upgrade.
Packages without updates:
  aic94xx-firmware-30-6.fc20.noarch
  fedup-0.9.1-1.fc20.noarch
  prelink-0.5.0-1.fc20.x86_64
[aplustudent@localhost ~]$

```



Student Name Hong ZhangDue Date 2/24/2015

```
[ OK ] Started Tell Plymouth To Write Out Runtime Data.
[ OK ] Started Trigger Flushing of Journal to Persistent Storage.
[ OK ] Started Recreate Volatile Files and Directories.
      Starting Update UTMP about System Reboot/Shutdown...
[ OK ] Found device /dev/mapper/fedora-swap.
      Activating swap /dev/mapper/fedora-swap...
[ OK ] Started Update UTMP about System Reboot/Shutdown.
[ OK ] Activated swap /dev/mapper/fedora-swap.
[ OK ] Reached target Swap.
[ OK ] Reached target System Initialization.
      Starting Prepare Upgrade Image...
[ OK ] Started Prepare Upgrade Image.
[ OK ] Reached target System Upgrade.
[ 23.895149] upgrade-prep.sh[753]: moving mounts into /system-upgrade-root
[ 24.004810] upgrade-prep.sh[753]: moved /boot
[ 24.012161] upgrade-prep.sh[753]: upgrade prep complete, switching root...
```

Welcome to **fedup-dracut-0.9.0!**

```
[ 26.380857] upgrade-pre[883]: starting upgrade-pre hook
[ 26.689469] upgrade[889]: starting upgrade hook
[ 26.802785] upgrade[889]: preparing for upgrade...
[ 26.814806] upgrade[889]: found 1485 packages to install
[ 26.816838] upgrade[889]: building RPM transaction, one moment...
```

Activities

Terminal

Mon 16:36

□ 🔊 🔌 ▾

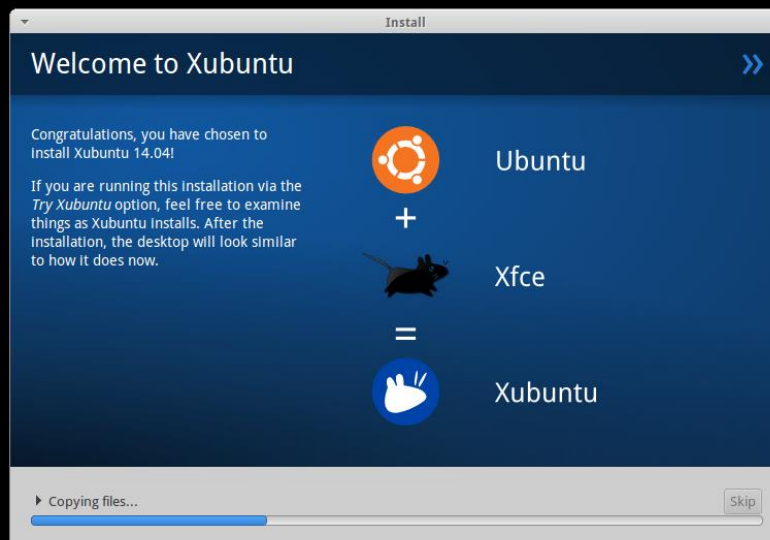
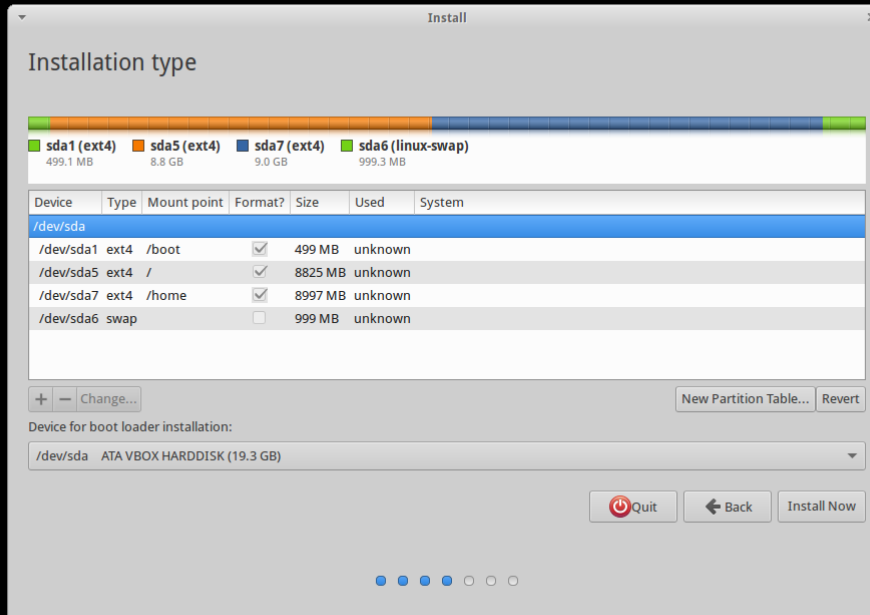
aplustudent@localhost:~

File Edit View Search Terminal Help

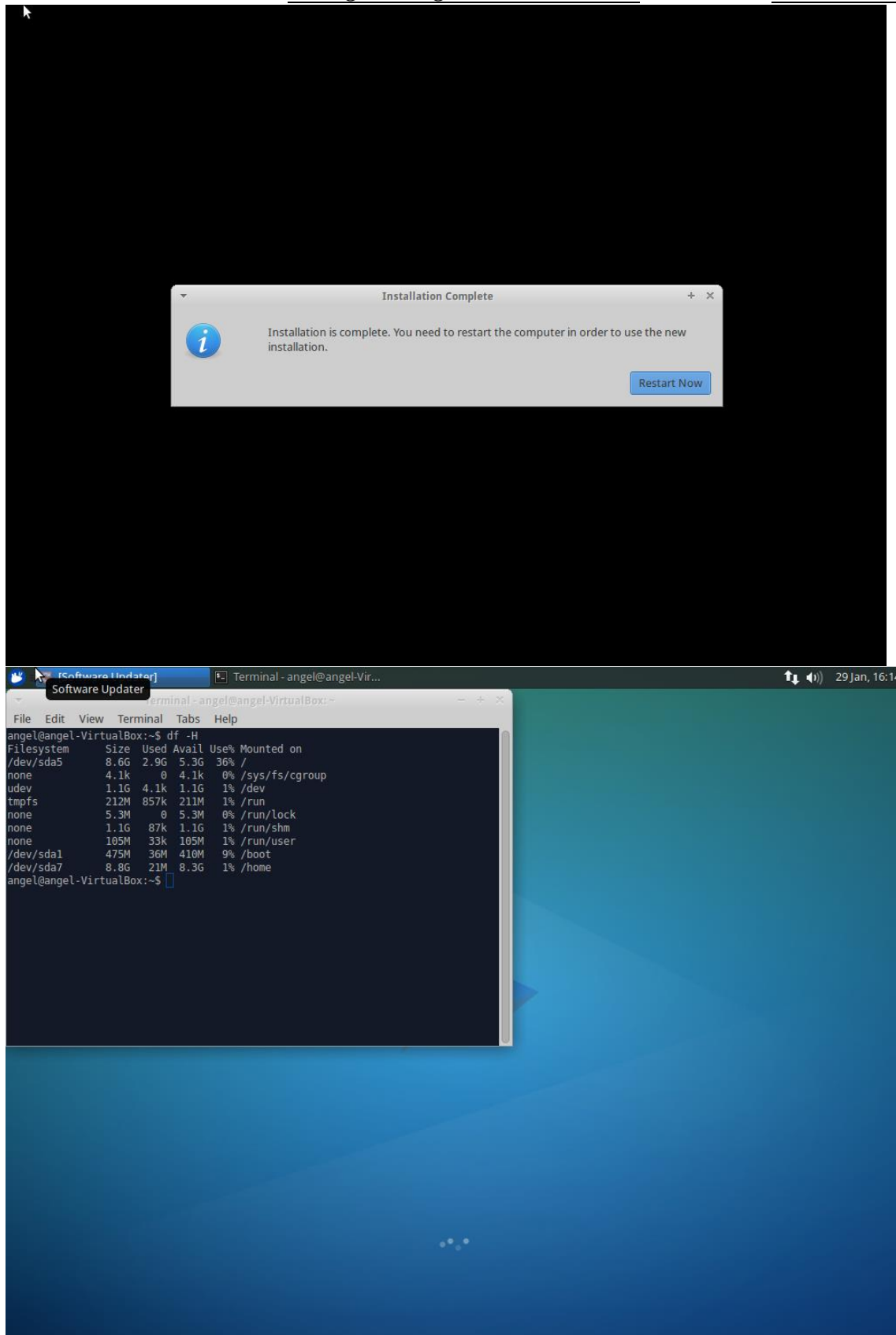
```
[aplustudent@localhost ~]$ df -H
Filesystem      Size  Used Avail Use% Mounted on
/dev/mapper/fedora-root  48G  4.9G   41G  11% /
devtmpfs        1.1G     0   1.1G   0% /dev
tmpfs           1.1G   99k   1.1G   1% /dev/shm
tmpfs           1.1G  672k   1.1G   1% /run
tmpfs           1.1G     0   1.1G   0% /sys/fs/cgroup
tmpfs           1.1G   25k   1.1G   1% /tmp
/dev/sda1       500M  109M   361M  24% /boot
tmpfs           210M   17k   210M   1% /run/user/1000
[aplustudent@localhost ~]$
```

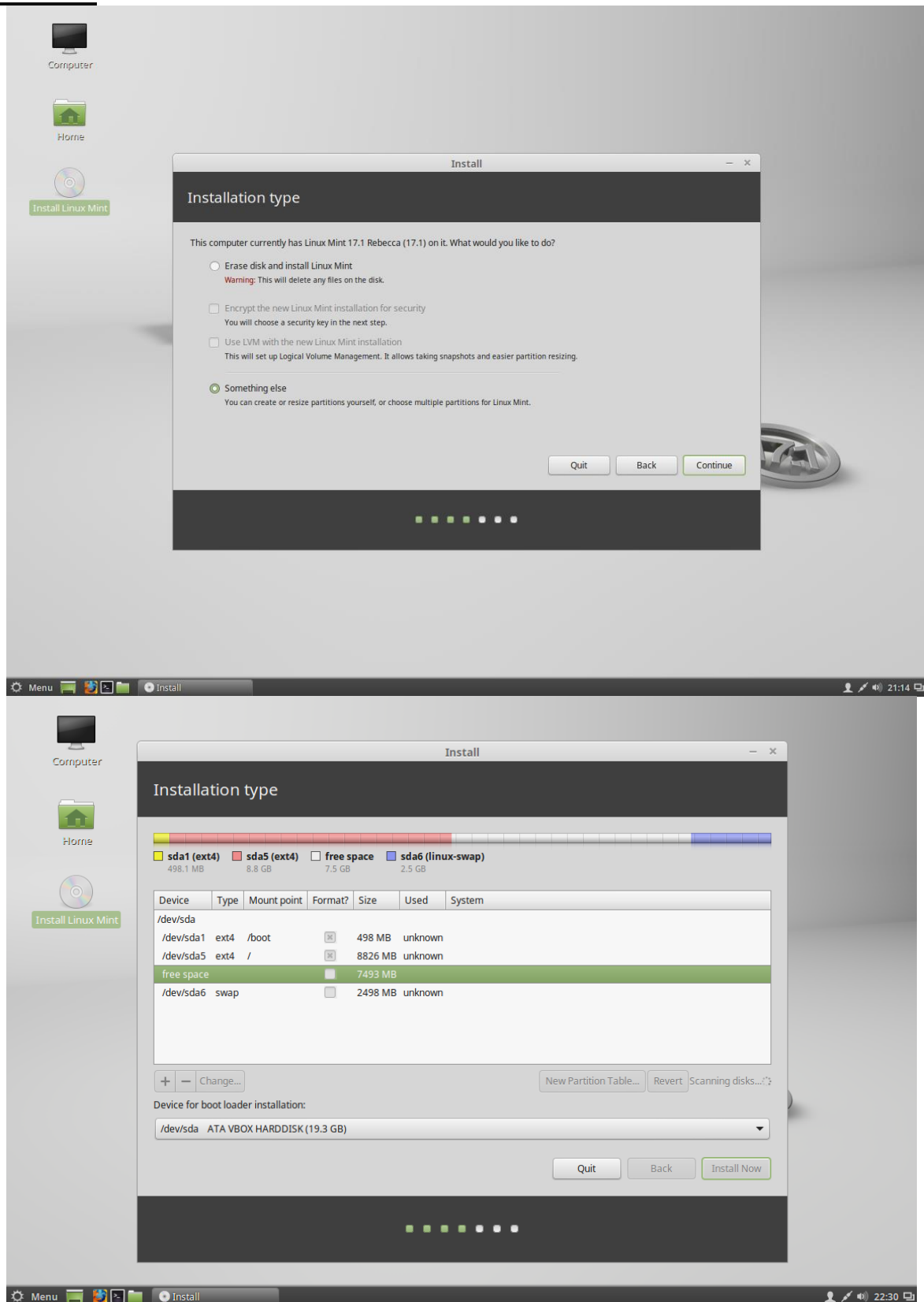
fedora

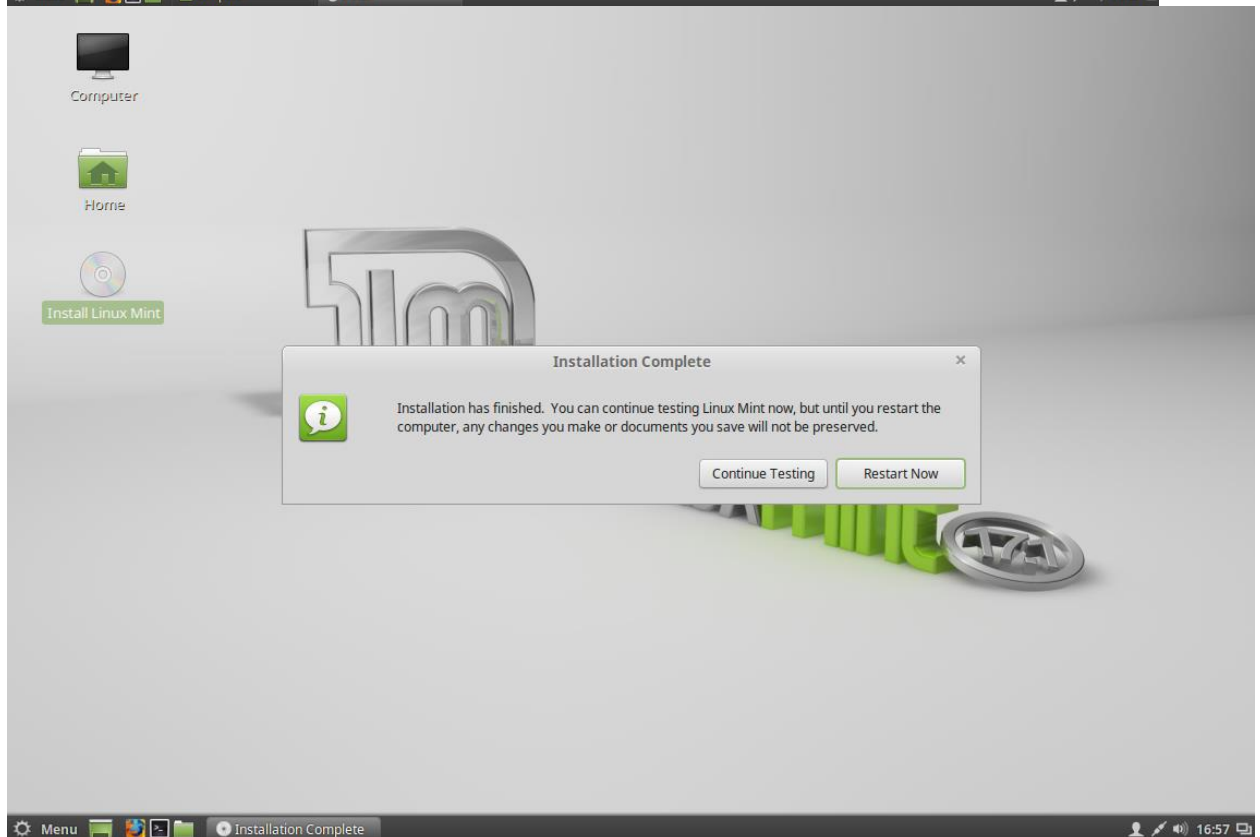
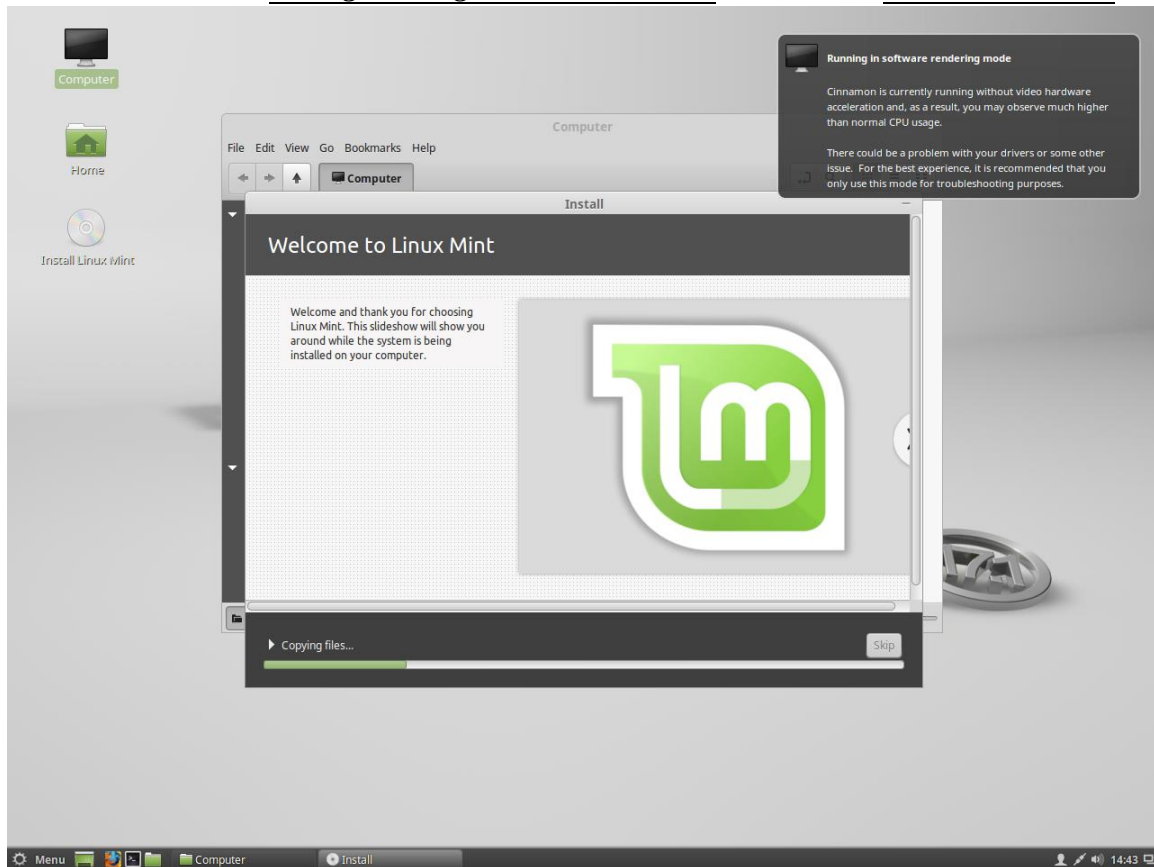
## Part II

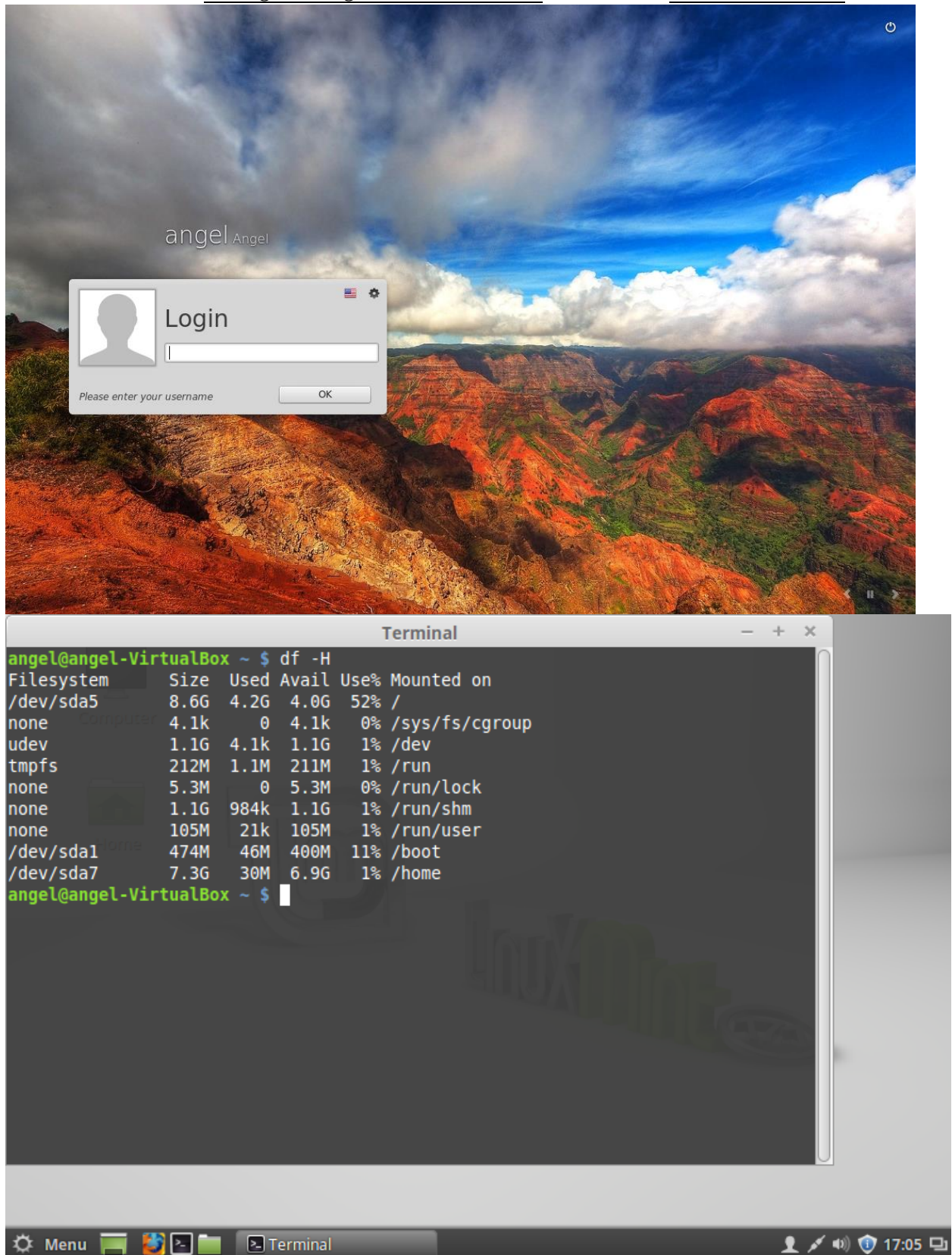
• **Xubuntu**



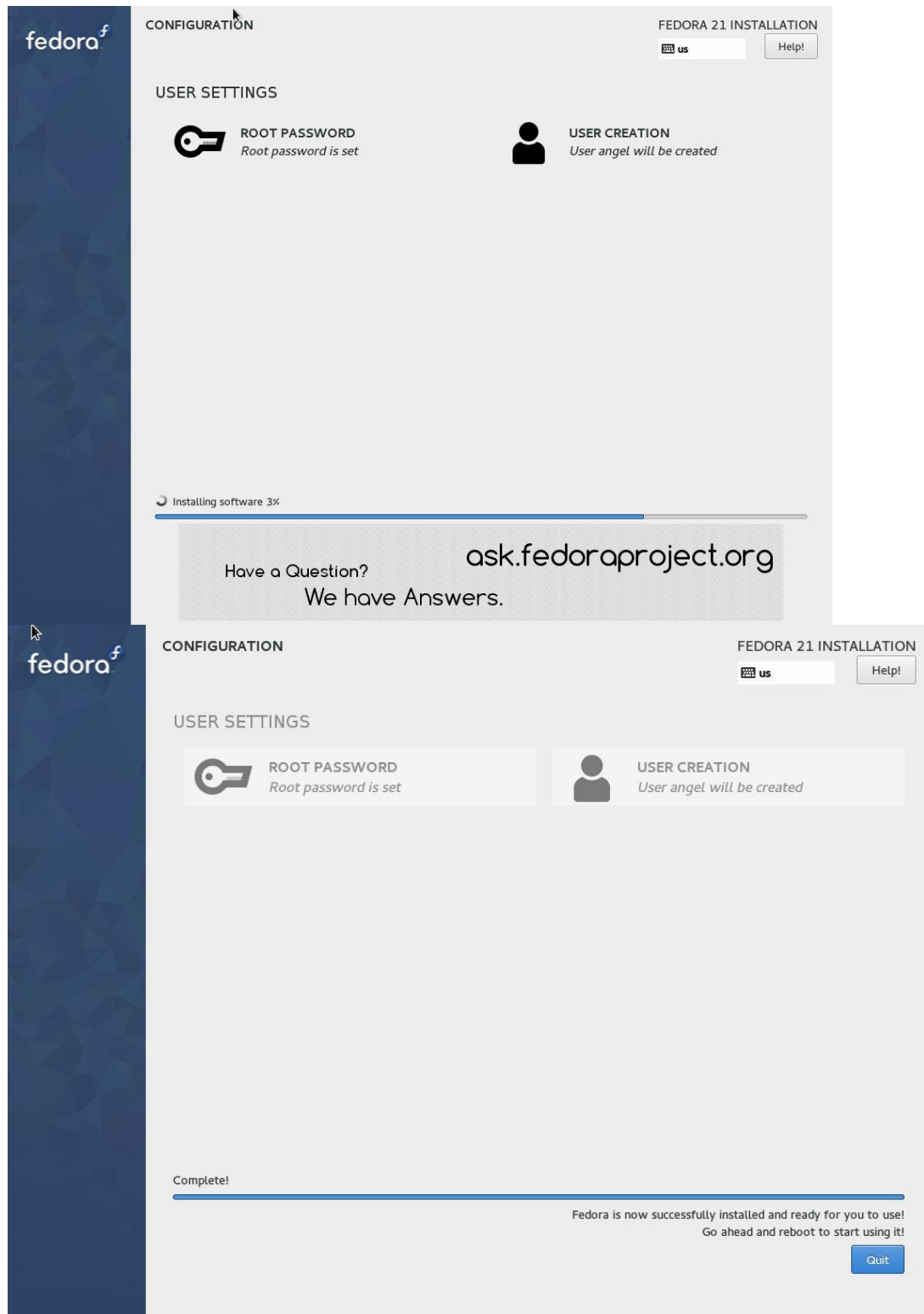


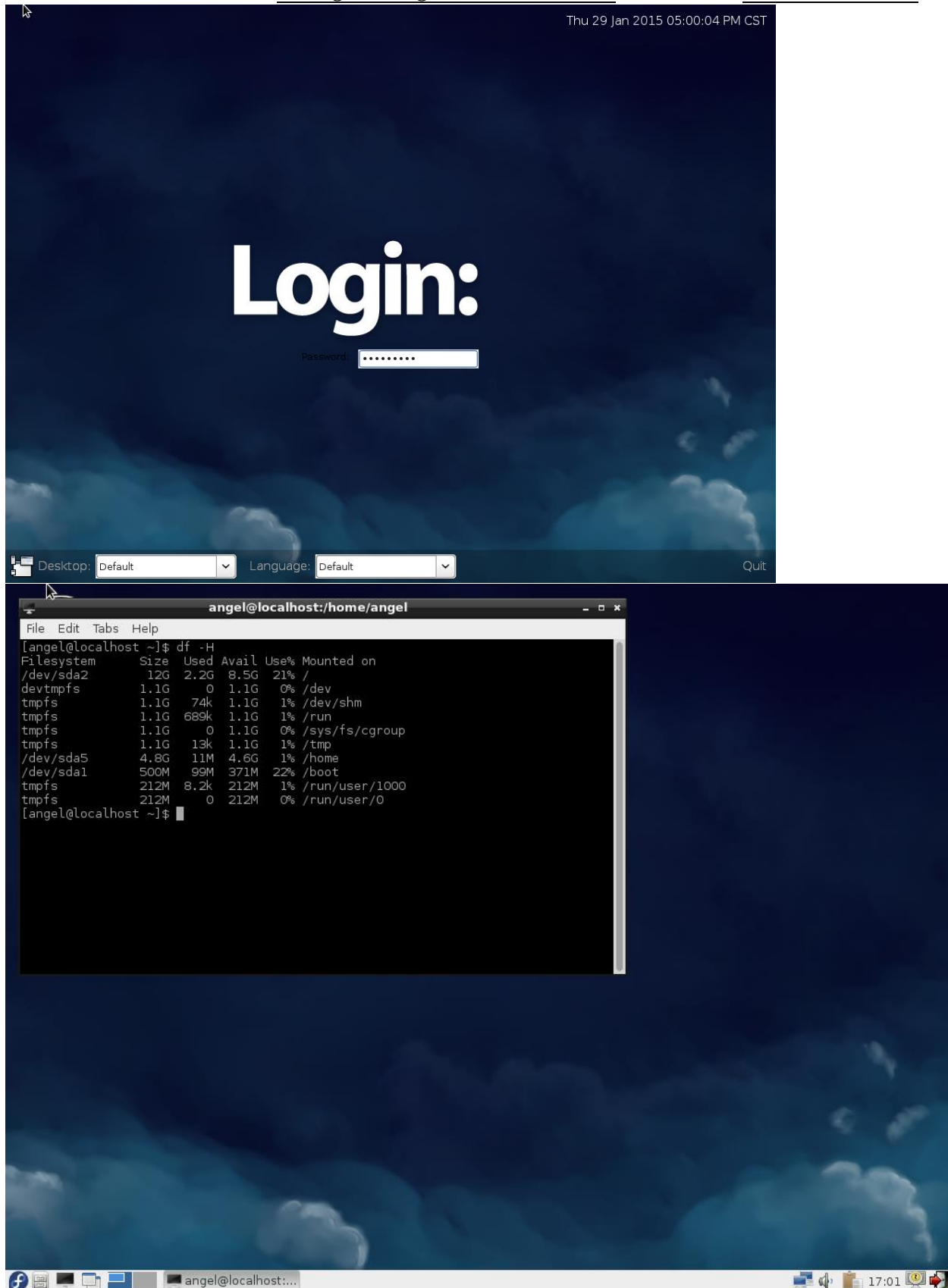
• Mint Ubuntu



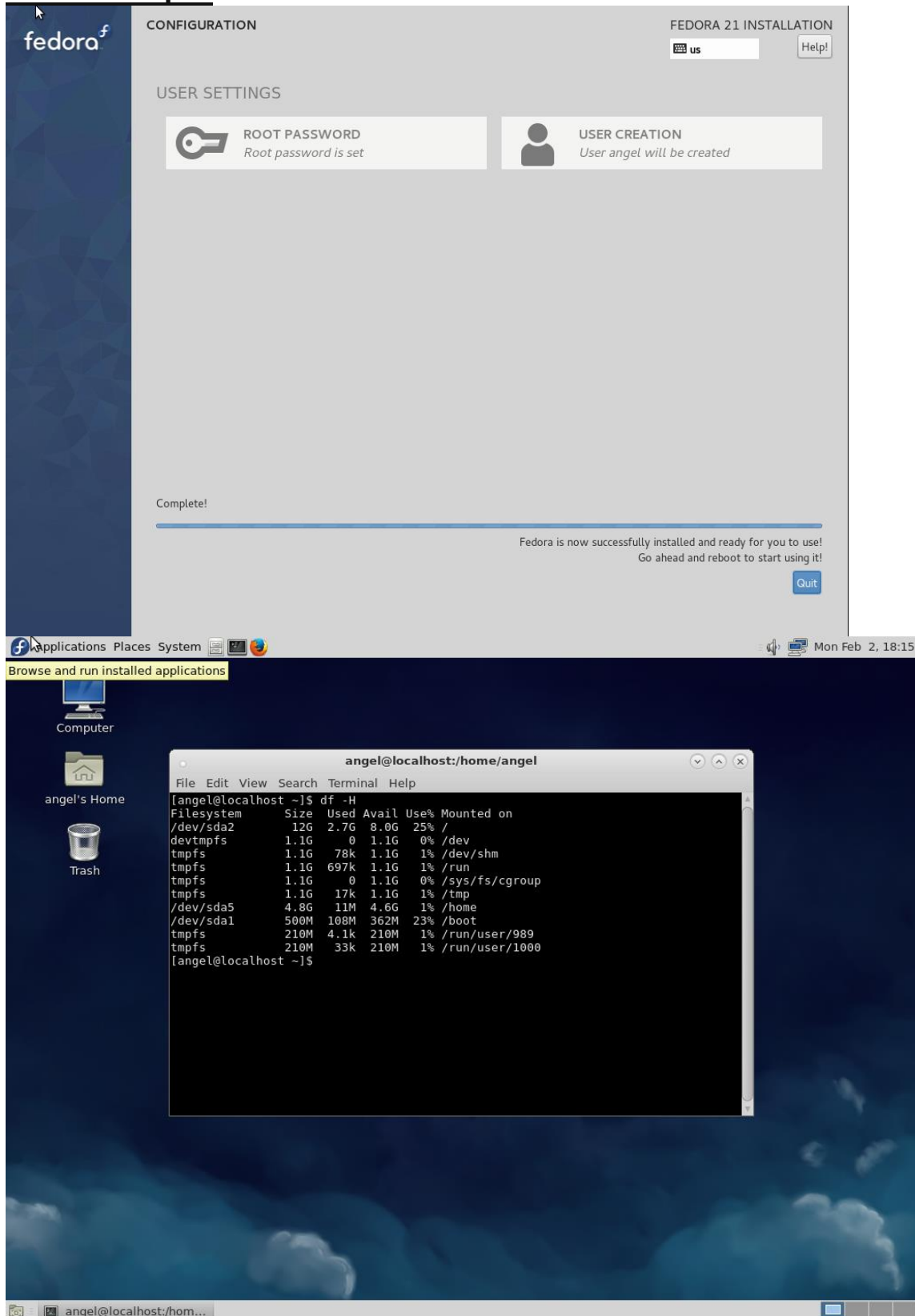


- Any 2 of the Fedora 21 spins  
LXDE:



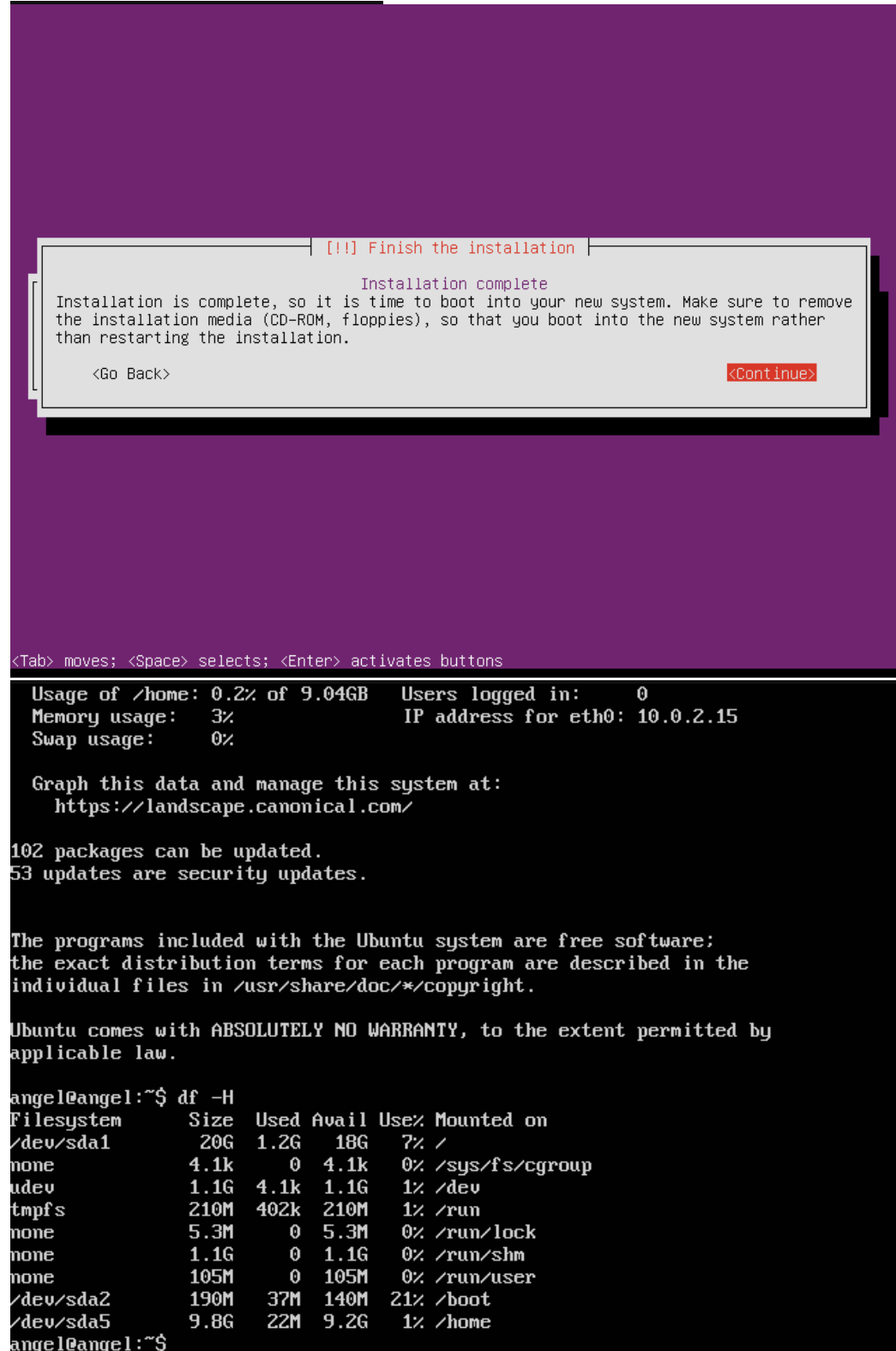




**MATE Compiz:**

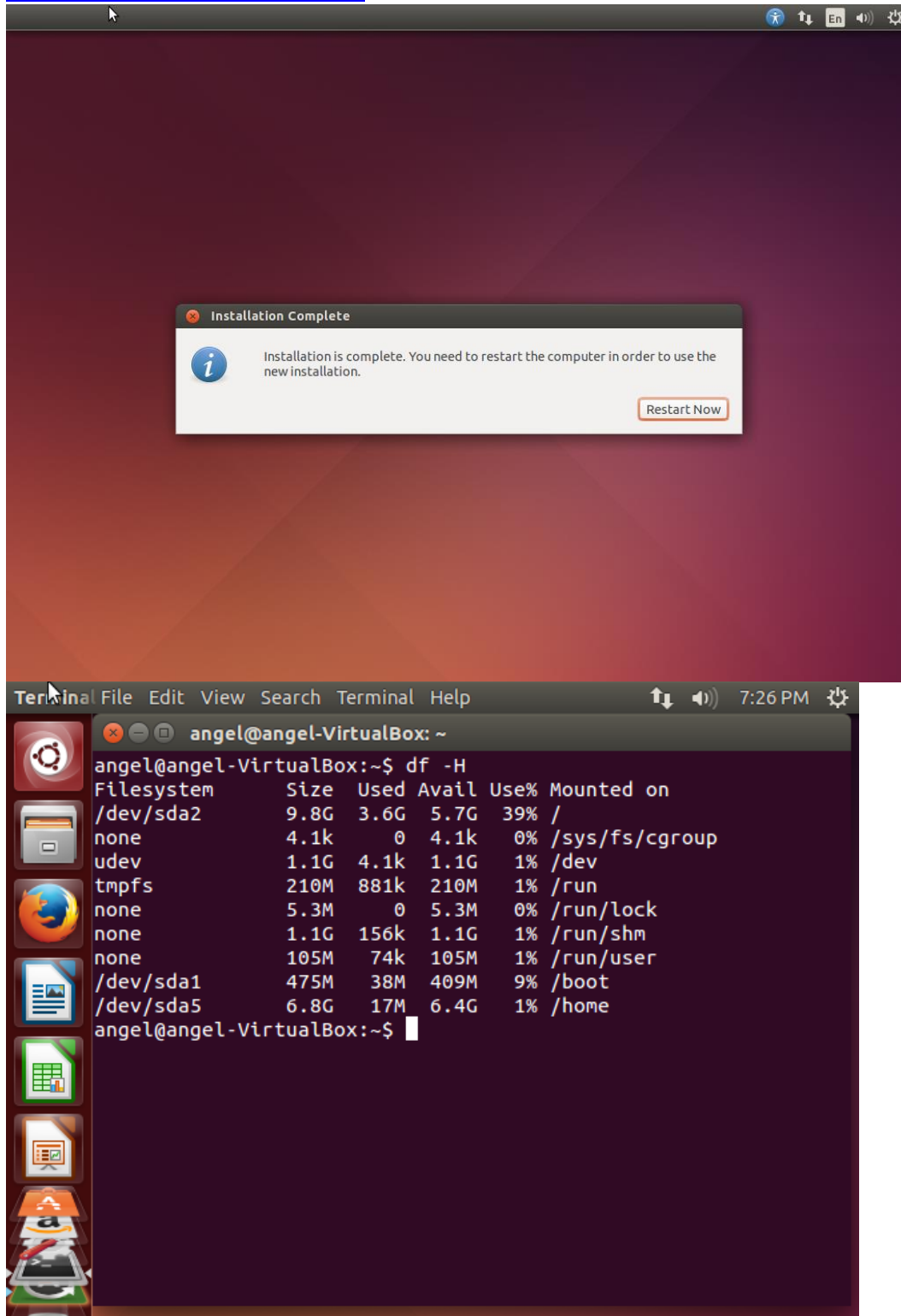
- **Ubuntu Server**


<http://ubuntuserverguide.com/2013/02/manual-disk-partition-guide-for-ubuntu-server-edition.html>



• **Ubuntu Desktop 14.10**

<http://askubuntu.com/questions/343268/how-to-use-manual-partitioning-during-installation/343352#343352>



• Debian

The image shows the Debian installation completion screen. At the top, the Debian logo is visible. Below it, the text "Finish the installation" is displayed. A message box with an information icon states: "Installation complete. Installation is complete, so it is time to boot into your new system. Make sure to remove the installation media (CD-ROM, floppies), so that you boot into the new system rather than restarting the installation." At the bottom of the message box are "Go Back" and "Continue" buttons. Below the message box is a "Screenshot" button.

angel@angel: ~

```
File Edit View Search Terminal Help
angel@angel:~$ df -H
Filesystem                Size      Used Avail Use% Mounted on
udev                     11M           0   11M   0% /dev
tmpfs                    212M        635k   211M   1% /tmp
un                         9.9G        3.9G   5.5G  42% /
/dev/disk/by-uuid/0c0bb355-4831-485d-9006-3f40053500f8 9.9G        3.9G   5.5G  42% /
tmpfs                    5.3M           0   5.3M   0% /run/lock
tmpfs                    791M        230k   791M   1% /run/shm
/dev/sda1                 484M        29M   430M   7% /boot
/dev/sda5                 6.9G       154M   6.4G   3% /home
angel@angel:~$
```

## Part III

## • FreeBSD

FreeBSD Installer

```
+-----Complete-----+
| Installation of FreeBSD |
| complete! Would you like |
| to reboot into the      |
| installed system now?   |
+-----+
| <Reboot> <Live CD>      |
+-----+
```

FreeBSD Handbook: <https://www.FreeBSD.org/handbook/>  
FreeBSD FAQ: <https://www.FreeBSD.org/faq/>  
Questions List: <https://lists.FreeBSD.org/mailman/listinfo/freebsd-questions/>  
FreeBSD Forums: <https://forums.FreeBSD.org/>

Documents installed with the system are in the `/usr/local/share/doc/freebsd/` directory, or can be installed later with: `pkg install en-freebsd-doc`  
For other languages, replace "en" with a language code like `de` or `fr`.

Show the version of FreeBSD installed: `freebsd-version ; uname -a`  
Please include that output and any error messages when posting questions.  
Introduction to manual pages: `man man`  
FreeBSD directory layout: `man hier`

Edit `/etc/motd` to change this login announcement.

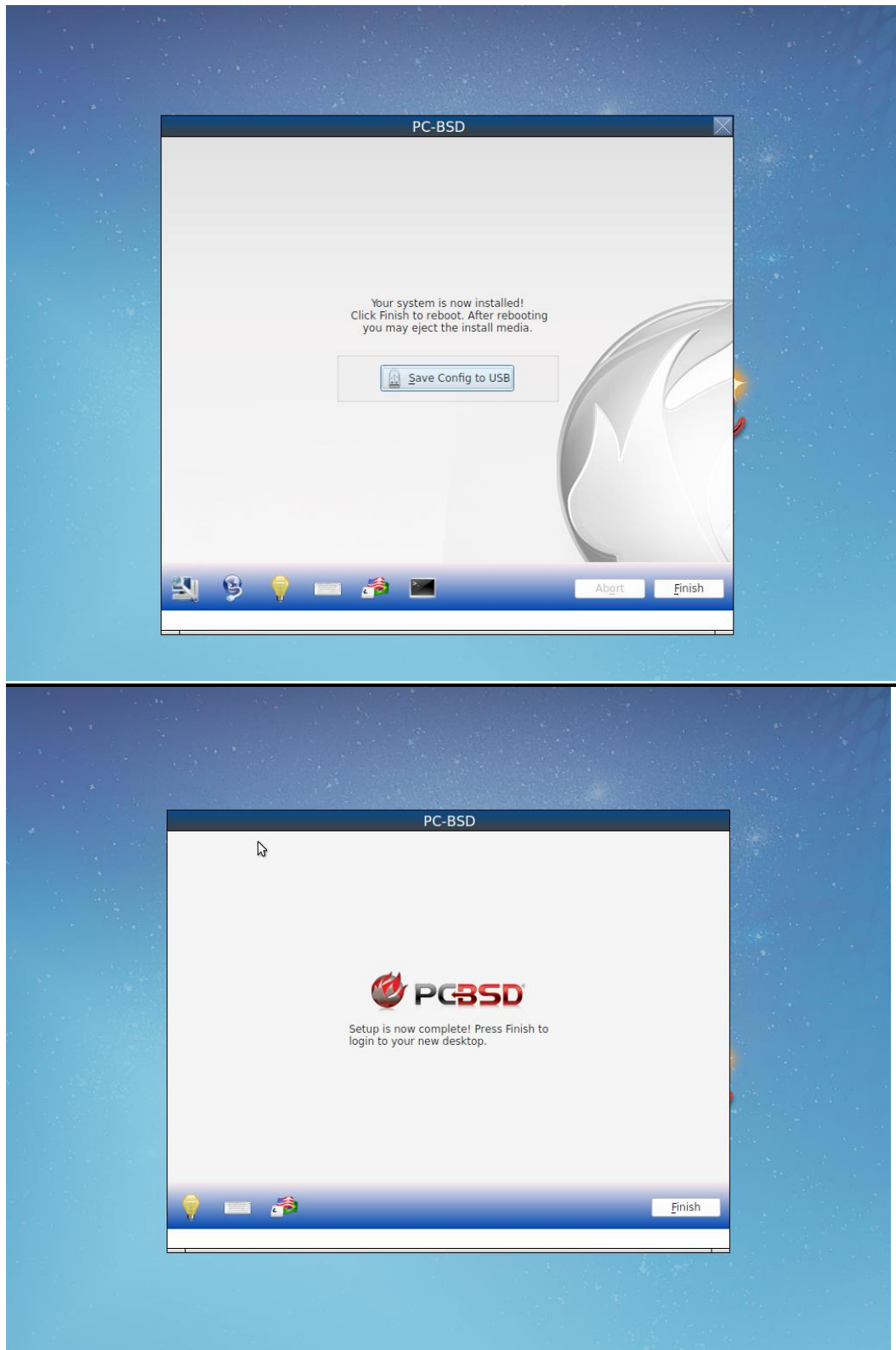
In order to support national characters for European languages in tools like `less` without creating other nationalisation aspects, set the environment variable `LC_ALL` to `'en_US.ISO8859-1'`.

hong@hong:~ % `df -H`

Filesystem	Size	Used	Avail	Capacity	Mounted on
<code>/dev/ada0p2</code>	2.1G	1.7G	212M	89%	<code>/</code>
<code>devfs</code>	1.0k	1.0k	0B	100%	<code>/dev</code>
<code>/dev/ada0p4</code>	2.1G	20M	1.9G	1%	<code>/var</code>
<code>/dev/ada0p5</code>	10G	34M	9.5G	0%	<code>/tem</code>

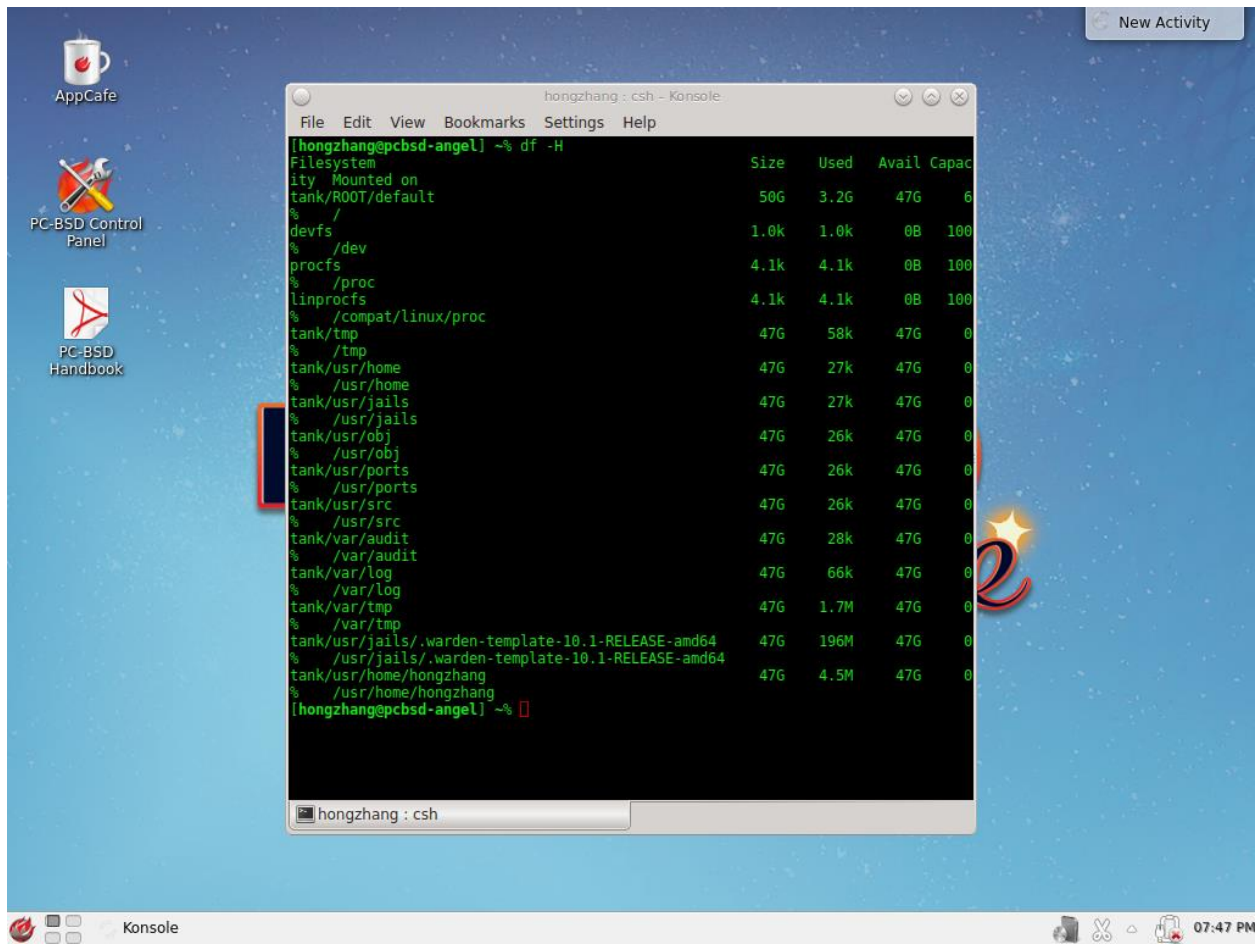
hong@hong:~ %

- PC-BSD





Because PC-BSD uses ZFS as the file system, it cannot do partition and use dual-boot. If we need to do partitions, we need to use Parted Magic to do. Hence, I give up and do not do it.



The screenshot shows a PC-BSD desktop with a blue background. On the left, there are icons for 'AppCafe', 'PC-BSD Control Panel', and 'PC-BSD Handbook'. A terminal window titled 'hongzhang : csh - Konsole' is open in the center, displaying the output of the 'df -H' command. The output is a table showing disk space usage for various filesystems. A red box highlights the 'tank/usr/home' entry in the table. A red starburst graphic is visible on the right side of the terminal window. The bottom of the screen shows a taskbar with icons for 'Konsole' and the time '07:47 PM'.

```
File Edit View Bookmarks Settings Help
[hongzhang@pcbsd-angel] ~% df -H
Filesystem                                Size  Used Avail Capac
ity Mounted on
tank/ROOT/default                        50G   3.2G   47G    6
% /
devfs                                    1.0k   1.0k    0B   100
% /dev
procfs                                    4.1k   4.1k    0B   100
% /proc
linprocfs                                4.1k   4.1k    0B   100
% /compat/linux/proc
tank/tmp                                 47G    58k   47G    0
% /tmp
tank/usr/home                           47G    27k   47G    0
% /usr/home
tank/usr/jails                           47G    27k   47G    0
% /usr/jails
tank/usr/obj                             47G    26k   47G    0
% /usr/obj
tank/usr/ports                           47G    26k   47G    0
% /usr/ports
tank/usr/src                             47G    26k   47G    0
% /usr/src
tank/var/audit                           47G    28k   47G    0
% /var/audit
tank/var/log                             47G    66k   47G    0
% /var/log
tank/var/tmp                             47G    1.7M   47G    0
% /var/tmp
tank/usr/jails/.warden-template-10.1-RELEASE-amd64 47G   196M   47G    0
% /usr/jails/.warden-template-10.1-RELEASE-amd64
tank/usr/home/hongzhang                  47G    4.5M   47G    0
% /usr/home/hongzhang
[hongzhang@pcbsd-angel] ~% █
```