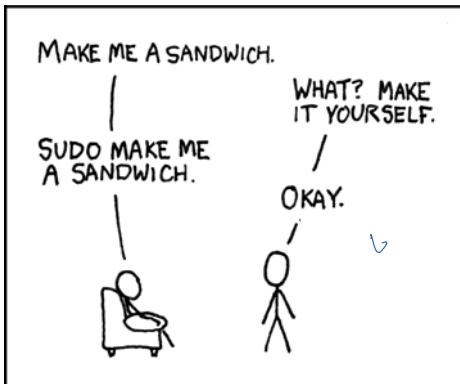


Chapter 4 - Intro to Fedora Linux

Monday, February 2, 2015 12:05 AM

Chapter 4 Objectives

- Log into the Fedora Desktop ✓
- Modify background settings ✓
- Use the File Manager ✓
- Understand the usage of the titlebar ✓

- Understand to install & update software ✓
- Understand basic shell commands ✓
- Understand the man & info commands ✓

Outcomes

- This chapter takes us on a survey of a Linux System giving you a proper idea of what can be done with a Linux system. → GNU RMS
- Understand the layout of **Gnome 3** X
 - Currently most popular desktop environment
 - Very Mac like X
- Have some fun with our new found mastery

- Applies to Ubuntu and Redhat

System Privileges

- root vs. user vs. sudo
- Every system has 1 user with complete unlimited power
 - * Windows = Administrator
 - * Linux/Unix = root →
- Problem → 99% of time you don't need "root" power
 - In the army, soldiers don't carry guns on the base only when in combat



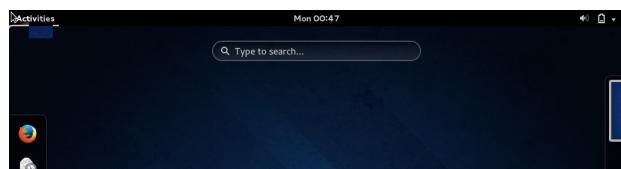
- Great Philosopher once said, "With great power comes great responsibility."
 - Ken Thompson designed **root** with himself in mind
 - Root is very dangerous
 - Let me show you
 - Login to your Fedora systems as "root"
 - type `rm -rf *`
 - What just happened?
 - Two options to mitigate this
 - See cartoon above **pseudo**
- 1980**
- sudo command is used to elevate you to root permission just per the execution of a command (Basically....)
 - `sudo yum install gedit`

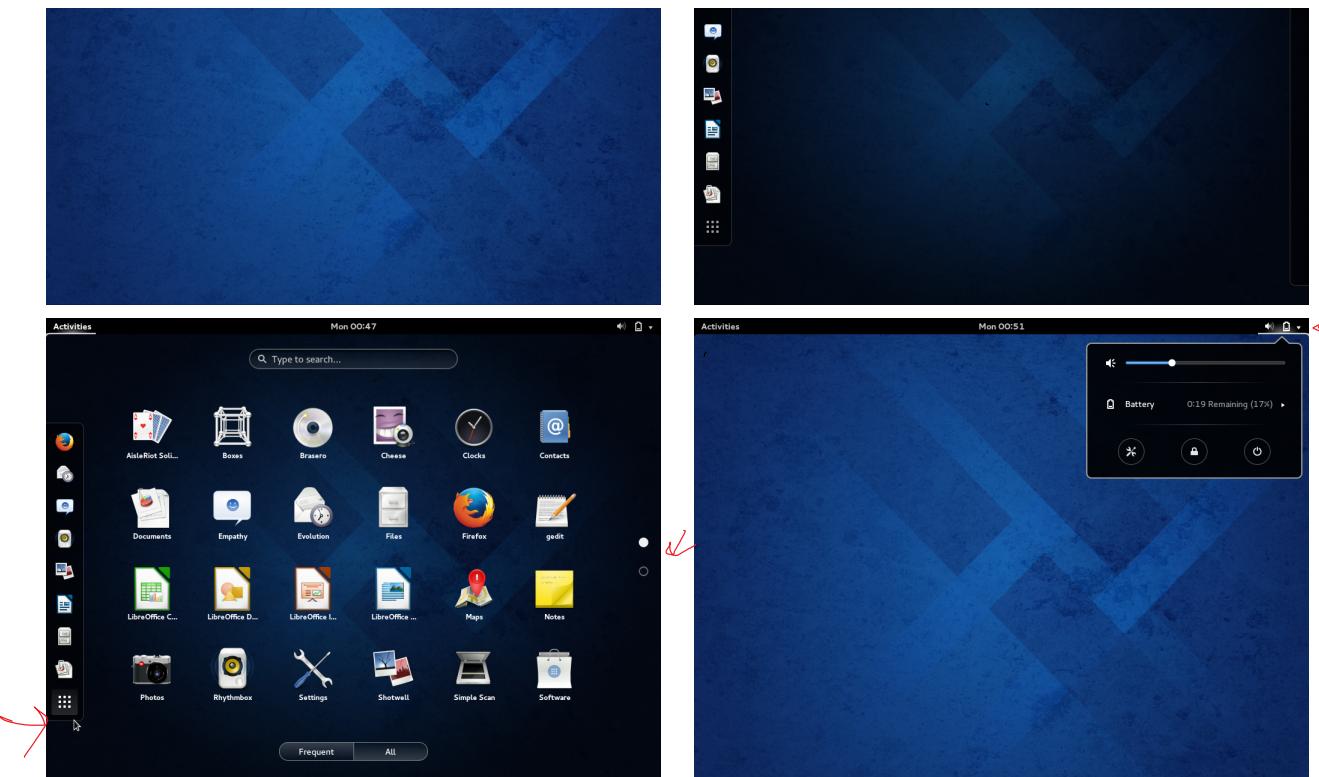
Logging In

- When Fedora launches you are presented with **gdm** (Gnome Display Manager)
- Here you can change your desktop session too...
 - more on that later.

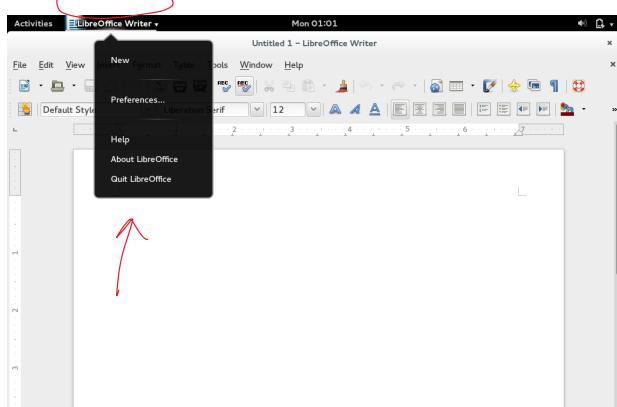
GNOME 3

- All Fedora distros from version 15 on run GNOME 3
- Ubuntu runs something called Unity.
 - But can run GNOME 3
- Screenshots





- Some people really hated GNOME 3 from GNOME 2
 - gnome-tweak-tool released so you can make 3 look like 2.
- GNOME 3 allows for multi-desktops
 - Virtual
 - Allows you to cluster programs together
 - Games on 1, music on 2, development on 3
 - All accessible via alt-tab
 - Mouse < keyboard ↗
- Each GNOME 3 Application has a preference / context menu settings.

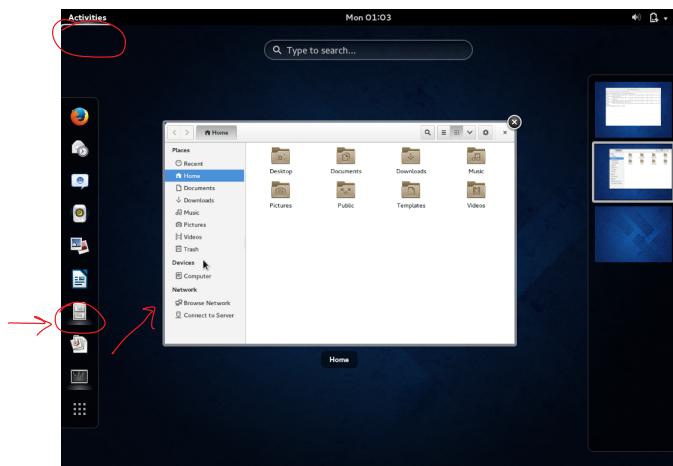




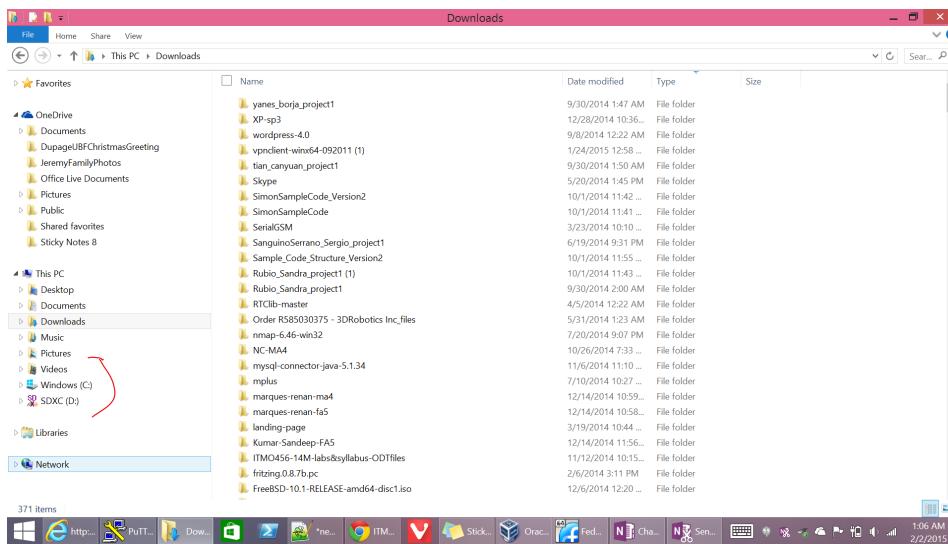
- File Manager → Nautilus



extra credit if you can tell me who is captain
or

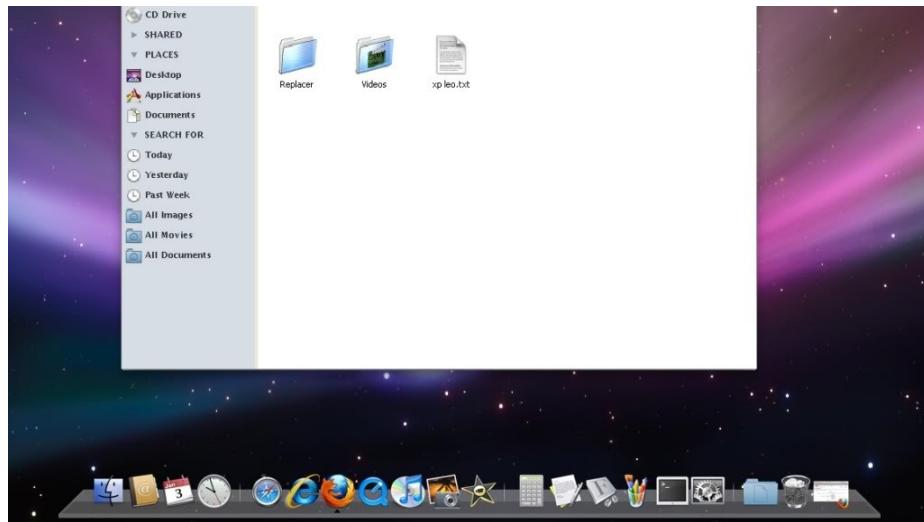


Windows -



MAC -





- To which does it seem similar? Why do you think?

Exercise → Open Firefox web browser

- ↳ navigate to <http://www.vivaldi.com>
- ↳ Download (but don't install the Fedora RPM)
- ↳ Open the File Manager
 - ↳ Browse to **Downloads** folder
 - Double click the package
 - ↳ follow install prompts

- GNOME 3 File Objects

- All files have right-click context menus

- Ownership
- Permissions
- Various settings

- System settings are accessed through (settings)

- gnome-control-center

- Date + Time

- Screen Resolution

- Usernames + Passwords

- etc, etc,



Help? <https://ask.fedoraproject.org/en/questions/>

The screenshot shows a web browser window with the URL <https://ask.fedoraproject.org/en/questions/>. The page displays a list of unanswered questions. The first question is about the Nautilus icon theme, with 1 answer and 2 views. The second question is about Linksys N300 USB wireless adaptor install!, with 1 answer and 30 views. The third question is about How to make bash use my \$XDG_CONFIG_HOME/.bash files?, with 1 answer and 30 views. The fourth question is about Problem opening sqlite.xz, with 1 answer and 1 view. The fifth question is about fedora 21: systemctl status vmware.service [Active: failed]?, with 1 answer and 0 views. The sixth question is about (Fedora 21) RPMFusion won't install, with 1 vote, 2 answers, and 324 views. The page also includes a 'Contributors' section with several user profiles.

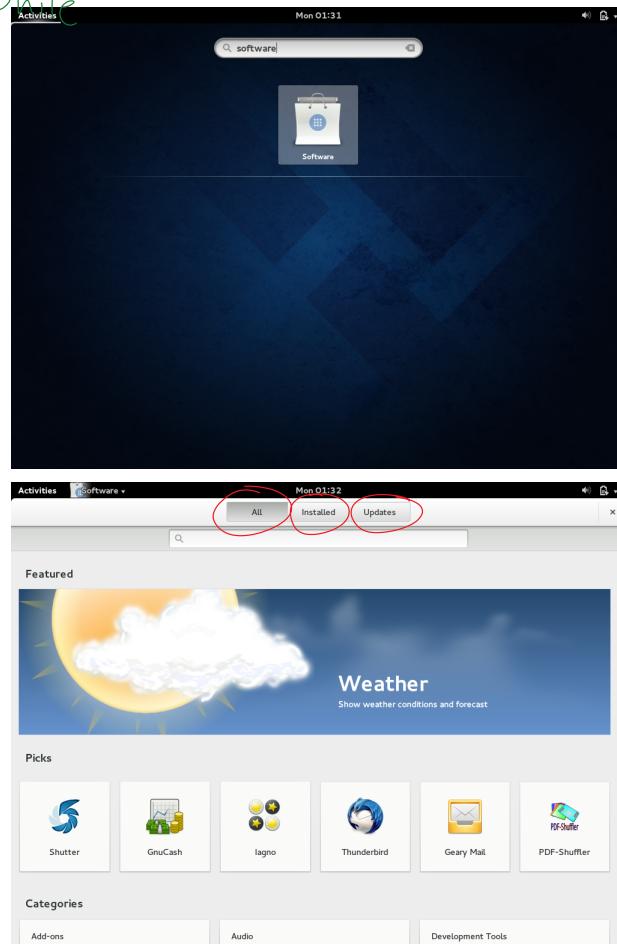
Updating, Installing, Removing Software

From Activities type "Software"

→ If a system has not been started in a long time
this process could take awhile

- In Fedora 20+ "Software" is the way going forward to manage all install/update and add/remove
- PackageKit is the low level service this is running on
- Book is a bit outdated

- no gpk-application
- no gpk-prefs
- no gpk-update-viewer
- Let's try it
- Pick "ALL"
- ↳ OFFICE



↳ Click "GNUMERIC"

↳ Click "

^{Updates}

Install if you have them END of GNOME 3

↳

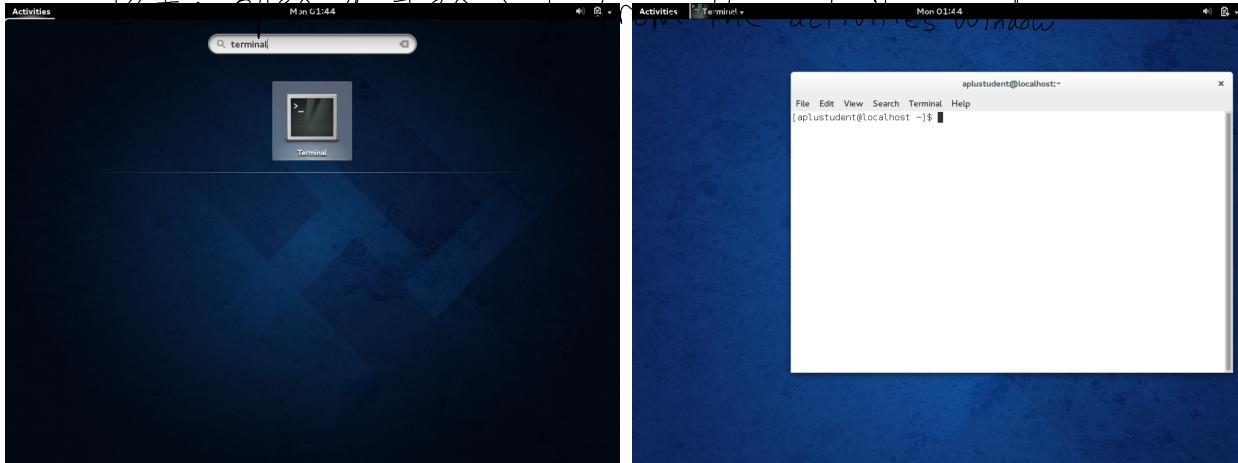
Installing

↳ Note Package Kit itself is just a fast front-end
for the command-line or CLI
called yum

↳ You can install everything we just did with

↳ yum on the Command-line.

↳ Let's open a terminal from the activities window



- (got preferences to set the color scheme to green on black...)

yum update

you get an error message:
You need to be root to perform this command

- Why? How to solve?

- Hint - See opening cartoon.

- Now try sudo yum update

- What happens?
H_{int} sudo yum group install xfce-desktop

- happens?

- Commandline tools
- Terms command-line, terminal, and shell are all the same
 - We will be doing all work on the terminal
 - Remember the command line was initially all there
 - really designed to function on the Unix/unixlike
 - There are a series of simple commands need to memorize.

These ls → list contents of a directory (list)

rm a cat → concatenate, display content of a file
 rm shell cp → copy
 rm → remove/delete
 echo → display into the shell
 date → show date and time
 touch → create a file or update its timestamp
 mv → Move or rename a file

How to determine usage?

Every shell command has a structure

× command options
 (flags) ↑ arguments
 optional

example ls -l /etc/apache2/conf how to pronounce
 Try it → ls -l this?

Manual Command (or man pages)

↳ Shows man CP

= options and features of a shell command.

man commands are still in the format that original UNIX created.

- There is updated tool called **info**

• try ^{an} info coreutils

Summary

have user

↳ Systems Root

accounts
privileges are needed for some operations

↳ As a matter principle
work as root.
: NEVER ↗ as

↳ Use **su** or **X sudo** command

Understand Desktop components

Understand /terminal

Understand basic commands options, and arguments

Understand help tools man & info

Questions?