

Introduction to Linux by a newbie

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So what is Linux?



- A “Unix-like” operating system
 - Unix developed by AT&T
- The Linux kernel
 - Linus Torvalds
 - Layer between hardware and applications
- GNU/Linux
 - GNU Project
 - Richard Stallman & FSF

Distros?



- Linux distributions
 - Many many versions
 - Developed by different people
 - Come with different default software
- www.distrowatch.com

Ways to use Linux

- Live CD
 - Allows you to try it out
- Dual booting
 - Allows you to run multiple Operating Systems
- Virtual Machine
 - Allows you to run Linux while in your current Operating System
- Installing it as your main OS

Some Linux basics

- Linux is a Unix-like OS
 - Root
 - Users
- Everything is a file
 - File permissions
 - Partitions

Using Linux

- Usually really simple
- Downloading new software
 - Software Management GUI
 - Package manager from terminal
- Personal Computer
 - Has all your basic programs you need
- Server
 - LAMP (Linux, Apache, MySQL, and PHP)

Software

- Desktop environment
 - Many choices and usually easy to change
 - Popular ones are Gnome and KDE
- Internet browsers
 - Firefox /Ice Weasel
 - Chromium
 - Many others
- Office
 - LibreOffice

More Software

- Playing music and video
 - VLC player
 - Banshee
- Image editor
 - GIMP(GNU Image Manipulation Program)
- Chat clients
 - Pidgin
 - Empathy
 - Skype

Terminal basics

- Found in all distros
- Different shells

- BASH
- ZSH
- KSH
- TCSH

- Commands

- Many have options to change behavior
- Man pages `man <command name>`



```
Terminal
File Edit View Search Terminal Help
erik@Yuki ~ $ cowsay "Hello World"
< Hello World >
-----
      \      ^__^
         (oo)\_______
            (__)\       )\/\
                ||----w |
                ||     ||

erik@Yuki ~ $
```

Terminal basics cont.

- Case sensitive
 - Foobar.txt is not the same as FOOBAR.txt
- Hidden files or folders
 - Denoted with a . in front of the name
 - Example `.viminfo`
- . and ..
 - . represents the current directory
 - .. represents the parent directory

commands

- The `ls` command
 - List all files in the current directory
 - Use `ls -a` to see hidden files and folders
 - For another directory `ls <directory path>`
- The `cd` command
 - Change the current directory
 - Example: `cd Documents`
- The `mkdir` command
 - Creates a new folder
 - Example: `mkdir Games`

More commands

- The `mv` command
 - Moves a file from one location to another
 - Can also be used to rename a file or folder
 - Example: `mv foobar.txt Documents/`
- The `cp` command
 - Copies a file from one location to another
 - Similar to how the `mv` command works
 - Example: `cp Documents/foobar.txt Games`

Even more commands

- The `rm` command
 - Removes a file
 - Example: `rm foobar.txt`
 - Use `rmdir` to remove empty directories
 - Or use `rm -R` to recursively remove all files in a directory and the directory itself
- Useful information
 - <http://www.commandlinefu.com>
 - Linux Phrasebook by Scott Granneman

Any questions?

- contact me at eedro001@fiu.edu
- Visit plug.cs.fiu.edu
- Join the irc chat room found on the site
 - Plug.cs.fiu.edu
 - Channel #chat
- PLUG office at ECS 280C