

CSCI 2461, Computer Networking 3 - Linux

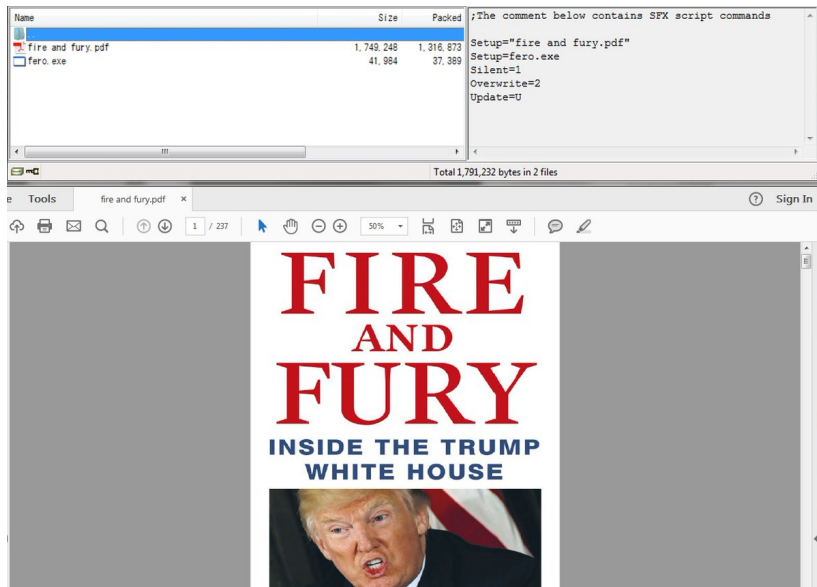
Week 03 (Rev. 0)

Wednesday, January 24, 2018

○	Introduction	Lab Time	GitHub	Devices (How Linux Works, Chapter 3)	Lab	Homework	Ciao!
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Introduction

eBook Piracy



Due Homework

How was your experience with Chapter 2, Navigation, and writing your BASH scripts?

- HLW Ch 2 commands put into scripts
- Week 2 Lab [Linux Command.org](#) “Learning the Shell”

What are page tables?

How Cache Works

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Lab Time

Opening Lab Time

We're going to open up class today by working on your scripts, and if you haven't already you'll submit your assignment on D2L.

Open How Linux Works to Chapter 2 and apply all of the commands from Chapter 2 in a script.

Use [Linux Command.org](https://linuxcommand.org/writing-shell-scripts/) "Writing Shell Scripts" as a reference.

How Linux Works, Chapter 2 (Basic Shell Commands)

- echo, cat
- ls, cp, mv, touch
- echo “Hello World” > hello.txt
- cat hello.txt

How Linux Works, Chapter 2 (Directories)

- cd, mkdir, rmdir
- Globbing (*)

How Linux Works, Chapter 2 (Files)

- grep, less, pwd
- diff, file, locate
- head, tail, sort
- dot files

How Linux Works, Chapter 2 (Environment Variables)

- `echo $PATH`
- `STUFF=blah; export STUFF; echo $STUFF`
- `set`
- `set STUFF2=blaher; echo $STUFF2`

How Linux Works, Chapter 2 (Special Characters, pg23)

- man bash
- search for “control operators”
 - /control

How Linux Works, Chapter 2 (Intermediate)

- Text Editors (vi, nano)
- man pages
- man -k *keyword*
- man 5 passwd
- info

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GitHub

Introduction

Open GitHub Guides

- Open Understanding the GitHub Flow
- Try Git

GitHub Hello World

- Complete [Hello World!](#)
- Complete [Getting Started with GitHub Pages](#)
- Homework: Read [Git Handbook](#)

Introduction

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Lab Time

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GitHub

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Devices (How Linux Works, Chapter 3)

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GitHub Cheat Sheet

GitHub Cheat Sheet

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Devices (How Linux Works, Chapter 3)

How Linux Works, Chapter 3 (Device Files, pg46)

- Open [Debian Linux Devices](#)
- `echo blah blah > /dev/null`
- `cd /dev; ls -l`

How Linux Works, Chapter 3 (sysfs device path)

- blkid; lsblk
- find /sys | grep sd | less
- ls -l /dev /dev/mapper | grep '^b'
- ls /proc/partitions

How Linux Works, Chapter 3 (dd)

- `cd ~; pwd; dd if=/dev/zero of=./empty.file bs=1M count=1`
- `hexdump empty.file`

How Linux Works, Chapter 3 (Device Names)

- `dmesg | grep sd`
- Read [TLDP HowTo Partition](#)

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Lab

Ending Lab

Use the rest of the class time to:

- Ask questions.
- Start your homework.
- Work through [LinuxCommand.org](https://linuxcommand.org)
- Prepare your Chapter 3 shell scripts to [Upload to D2L](#)
- Talk about your script, talk to a peer about their script.

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Homework

Lab

- Write an executable shell script applying How Linux Works Chapter 3 material, submit to Discussion on D2L
- Review a peers script in D2L [Discussions](#), and submit both yours and theirs to [Assignments](#) in plain text before next Tuesday.

Reference LinuxCommand.org's [Writing Shell Scripts](#) as needed.

Reading

- Read the [Linux Filesystem Hierarchy Standard](#)
- Review the [Linux Standard Base](#)
- Read “How Linux Works” Chapter 3 and write a script to apply the material
- Read and review peer scripts in D2L Discussions

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Ciao!