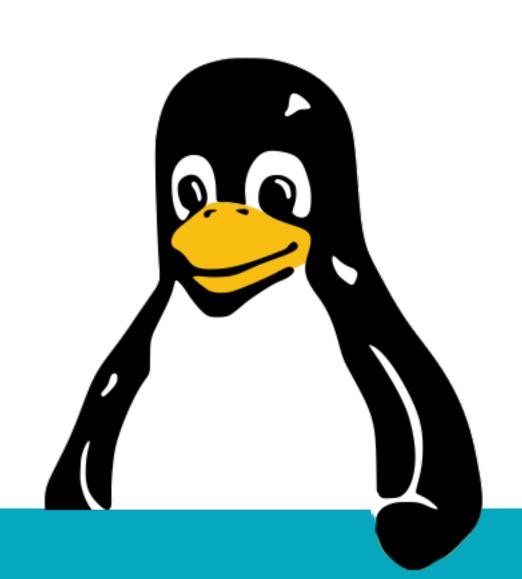
Linux, day 11



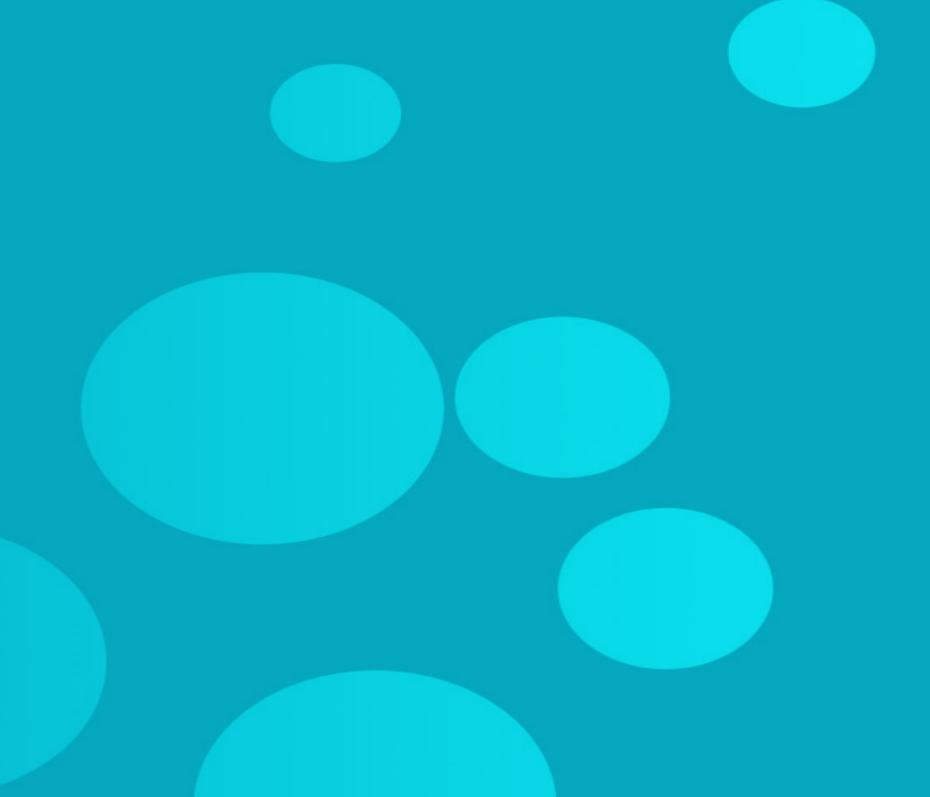


Objectives covered

Objective	Summary	Boek
1.1	Device types and hardware	23
1.2	File compression and backups	12
1.4	Process management	21
1.4	Scheduling	26

LAB: Job control





- Create a small shell script "~/at-test.sh".
 - This should append "Hello!" to /tmp/at-test.txt.
 - It should also include the output of "date".

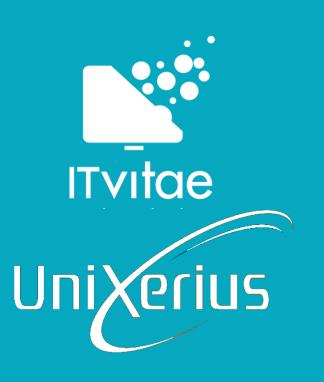
- Use "at" to run it in 1 minute.
- Use "crontab" to schedule it for every minute.

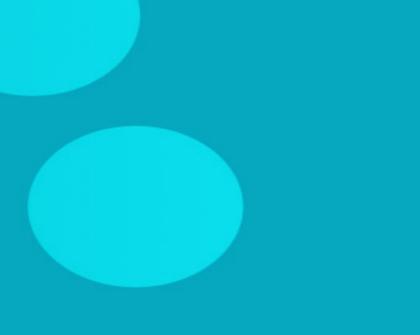
- Create a small shell script /opt/mysvc.sh
 - This should write into /var/log/mysvc.log
 - First test it manually.

- Use this: Create a simple systemd service unit.
 - Make mysvc.sh a systemd service that runs at reboot.
 - Prove that it works.



LAB: Archives, backups, etc.





- Make a zipped tar-archive of your home directory.
- SCP archive to the other VM and unpack in /tmp.
- Careful, these three <u>have different results!</u>

```
$ tar zcf /tmp/home1.tgz /home/tess/
$ cd /home; tar zcf /tmp/home2.tgz tess/
$ cd ~; tar zcf /tmp/home3.tgz ./
```

- Can you make a zip or gzip with:
 - All the .txt files in the /usr/share directory tree?

- Hint: combine the *find* command,
 - With an option of "zip" to read files from stdin.

- Use rsync to synchronize /var/www/,
 - From one VM to /tmp/www on the other.
 - Or to localhost:/tmp/www if you have one VM.

Be careful how you specify source and destination!

Practicing your Linux





"The end is nigh!"

- We are almost done covering the objectives.
- Six more classes and we will have...
 - Gone over the theory.
 - Done exercises in the labs.
 - Tackled practice questions.

Your time to shine!

- To really understand Linux, you need more.
 - What we have done scratches the surface.
 - Now you need practice!

- Two-pronged attack:
 - Theory and practical exercises.

Practicing theory

- The Sybex book offers flashcards and trial exams.
 - Use them to test your current score,
 - Or use them to "level up"! Research each question!

- Shawn Powers has a great YouTube channel.
 - Bash practice and a Linux+ course!

Practicing scripting

U of Cambridge has a <u>set of short scripting exercises</u>.

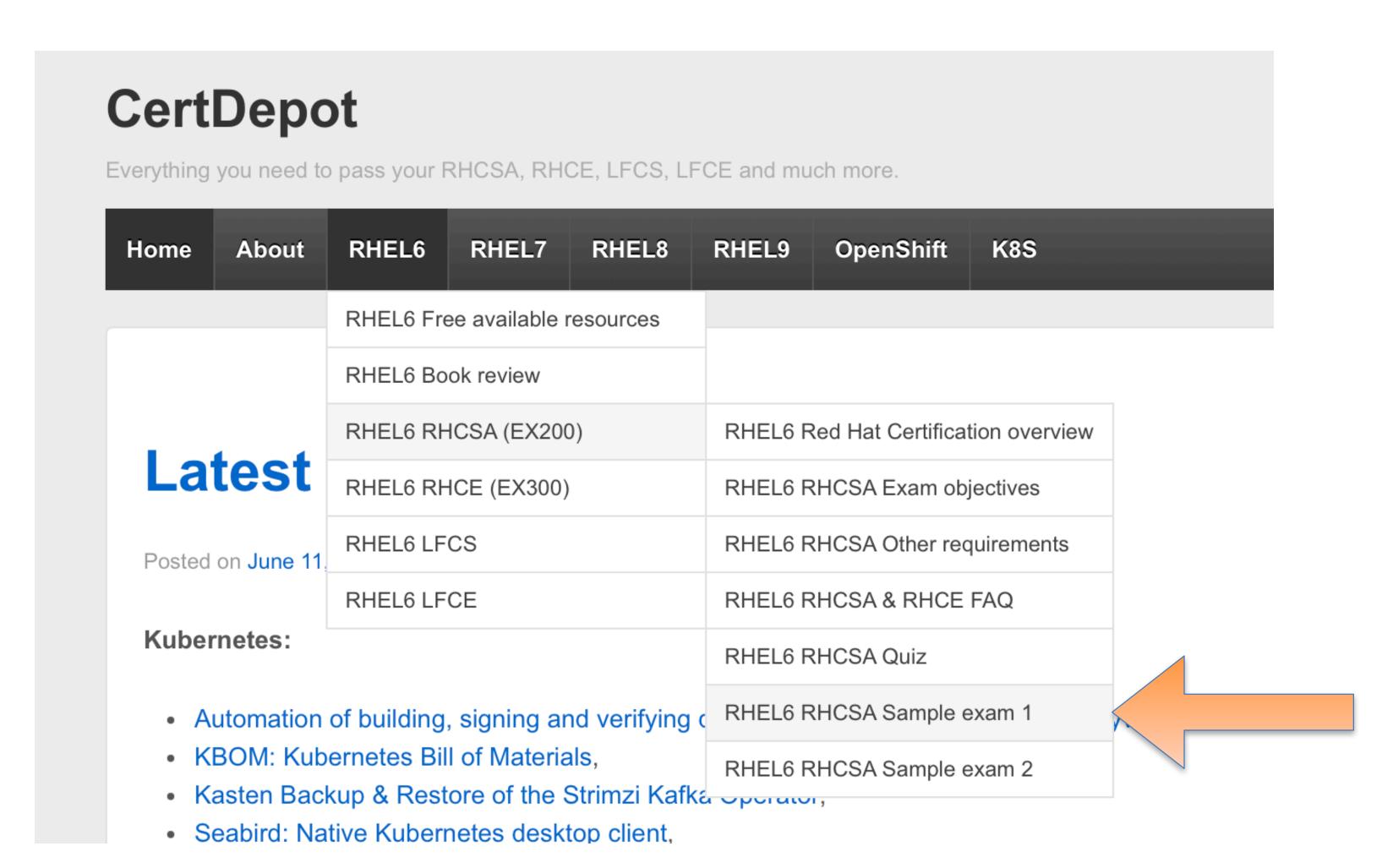
• TLDP also has short scripting exercises.

Practicing for real

- CertDepot.net has daily Linux tasks.
 - Targeted at the RHCSA exam, so above Linux+.
 - Research! Test! Build! And take notes!

Also: Red Hat has online labs!

Practicing for real





Want something tougher?

- CertDepot.net also has full practice exams!
 - A list of tasks to perform within a time frame.
 - They're a great source of exercises!

- There's also a great Github project with more tests.
- Sander van Vugt <u>also has RHCSA prep-exams</u>.
- Linux Foundation has <u>LFCS practice questions</u>.



More practice!

- KodeKloud Engineer is a gamified learning platform.
 - You're a Linux admin who needs to do tasks.

• Exercism.org, with Bash exercises

- Linux Upskill Challenge is a free, 30-day course.
 - It has a lot of cool exercises and labs.

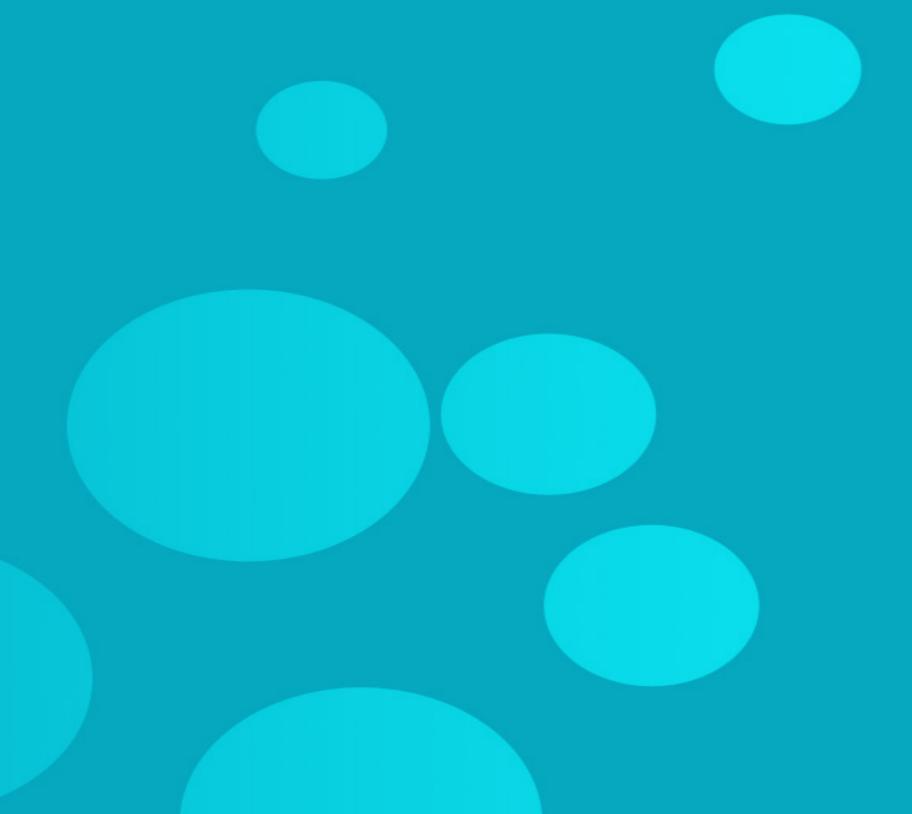


Weekly updates

- Please, do yourself a favor:
 - Do at least one CertDepot task each week.
 - Compile notes for yourself.
 - Send me a little report on what you did and how.

Closing





Homework

- Reading:
 - Chapter 9
 - Chapter 13
 - Chapter 17

Homework

- Go do:
 - Set up a nightly cron job.
 - This job should run rsync,
 - FROM your home directory on Fedora,
 - TO /data/homedir/ on the second VM.

Reference materials





- Sending signal to processes
- How to use tmux (and why it's better than screen)
- Create a simple systemd service unit.
- crontab.guru
- How to write basic udev rules
- An introduction to udev
- Why use cpio for initramfs



- Learning about systemd timers
- Cron, Anacron, Systemd and scheduling
- ArchWiki Systemd timers
- TTY demystified

- Why switch to XZ from gzip/bzip2
- How to use rsync
- PluralSight learning path for XK0-005
- Creating shell scripts in Enterprise Linux
- Small set of scripting exercises (U of C)
- More scripting exercises (TLDP)
- CertDepot.net daily Linux tasks.



- Linux Upskill Challenge
- KodeKloud Engineer
- Exercism.org, with Bash exercises
- Sander van Vugt's RHCSA practice tests
- Linux Foundation's LFCS practice questions
- RedHat online practice labs