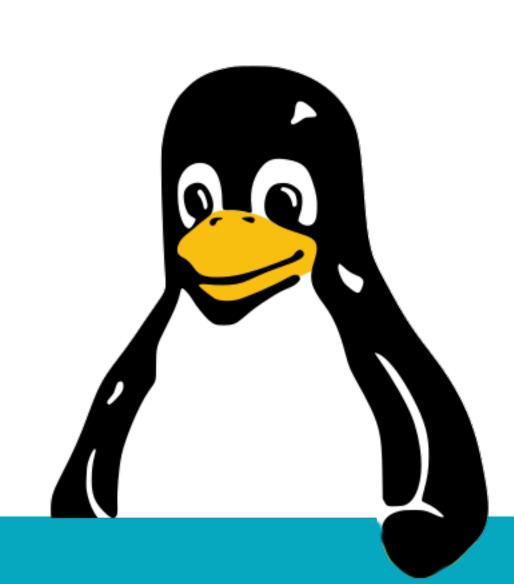# Linux, day 11

LAB: Job control

Assignment 1

- Create a small shell script "*~/at-test.sh*".

  – This should <u>append</u> "Hello!" to */tmp/at-test.txt.*

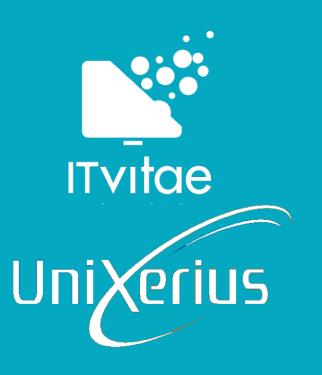 – It should also include the output of "*date*".

- Use *"at"* to run it in 1 minute.

- Use "*crontab*" to schedule it for every hour, always.
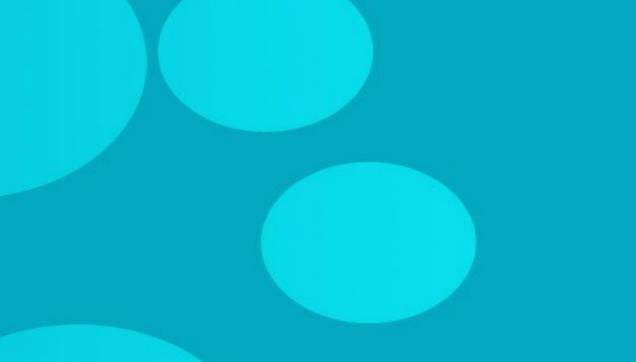
Assignment 2

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

- Using the instructions linked on slide 26:
  - Make *mysvc.sh* a systemd service that runs at reboot.
  - Prove that it works.

LAB: Archives, backups, etc.

Assignment 1

- Make a *zip*ped *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/home.tgz /home/tess/
$ cd /home; tar zcf /tmp/home.tgz tess/
$ cd ~; tar zcf /tmp/home.tgz ./*.*
```

Assignment 2

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

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

Assignment 3

- 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

Practicing scripting

- PluralSight's has a great scripting class.
  - ["Creating shell scripts in Enterprise Linux"](#)

- U of Cambridge has a [set of short scripting exercises](#).

- TLDP also has [short scripting exercises](#).

Practicing for real

- [CertDepot.net has daily Linux tasks.](http://CertDepot.net)
  - Targeted at the RHCSA exam, so above Linux+.
  - That's okay! Instead of 10-20 minutes,
  - Take a whole day for each task!

- Research! Test! Build! And take notes!

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 also has RHCSA prep-exams.

- Linux Foundation has LFCS practice questions.

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.
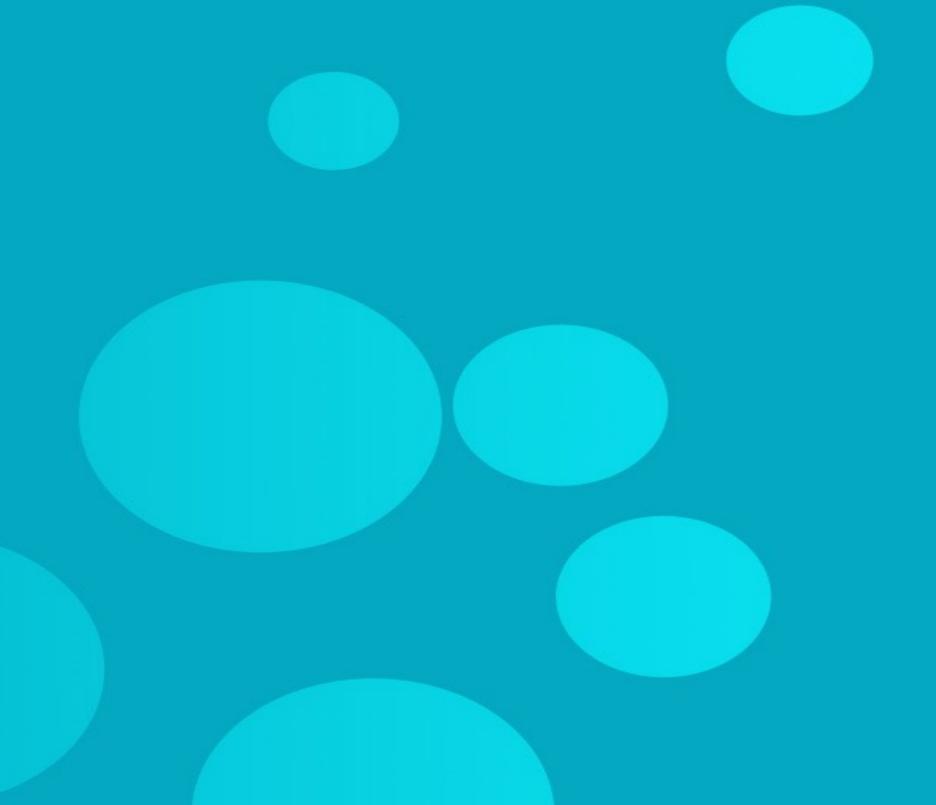 - It has a lot of cool exercises and labs.

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.

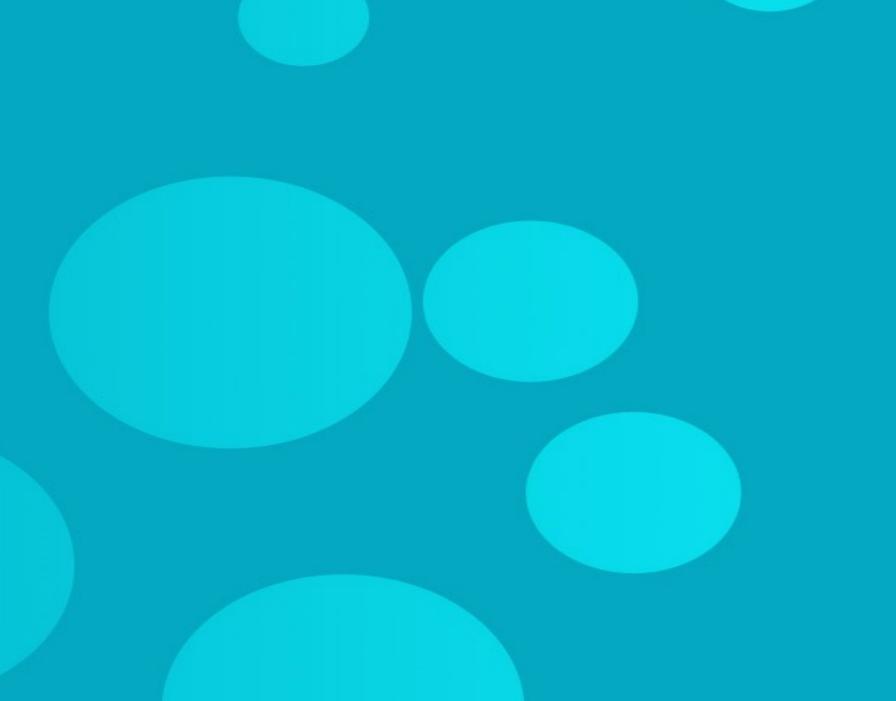# Closing

Homework

- 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

Resources

- [Sending signal to processes](#)

- [Create a simple systemd service unit.](#)

- [crontab.guru](#)

- [How to write basic udev rules](#)

- [An introduction to udev](#)

- [Why use cpio for initramfs](#)

Resources

- [Why switch to XZ from gzip/bzip2](#)

- [How to use rsync](#)

- [PluralSight learning path for XK0-004](#)

- [Creating shell scripts in Enterprise Linux](#)

- [Small set of scripting exercises](#) (U of C)

- [More scripting exercises](#) (TLDP)

- [CertDepot.net daily Linux tasks.](#)

Resources

- [Linux Upskill Challenge](#)

- [KodeKloud Engineer](#)

- [Exercism.org](#), with Bash exercises

- [Sander van Vugt's RHCSA practice tests](#)

- [Linux Foundation's LFCS practice questions](#)