Linux, day 6

Objectives covered

Objective	Summary	Boek
1.3	Given a scenario, configure and verify network connection parameters	7
2.4	Given a scenario, manage services.	6
2.5	Summarize and explain server roles.	2

LAB: Linux networking

Assignment

- Add a second NIC to your VM (in Virtualbox).
  - You can put it in the NAT network.

- Bring the new NIC under NetworkManager control.

- Configure it using "*nmtui*".

Solution (RHEL)

- *sudo dmesg | grep -i network*

- *sudo nmcli device set eth1 managed yes*

- *sudo nmtui*

  - Set up the new device, similar to *eth0*.

  - Devices <u>names may differ</u>, like *enp0s3*.

Solution (Debian)

- *sudo vi /etc/netplan/00-installer-config.yml*
  # Should only contain these lines:
  network:
  version: 2
  renderer: NetworkManager

- *sudo netplan generate; sudo netplan apply*

- *sudo nmcli device set eth1 managed yes*

- *sudo ip link eth1 up; sudo nmtui*

What will we do today?

- ~~Recap~~

- ~~Linux networking~~

- Network services

- Configuring network services

- Closing: homework and Q&A

LAB: Configuring network services

Assignment

- Install the "*vsftpd*" package on Ubuntu.
  - On Fedora WS, the firewall will block you.
- Check for the latest changes (*ls -lrt*) in:
  - */lib/systemd/system/*
  - */etc/systemd/system/*
  - */etc/systemd/system/multi-user.target.wants/*

Assignment

- <u>Enable</u> the "*vsftpd*" service.
- Again, check for the latest changes (*ls -lrt*) in:
  - */lib/systemd/system/*
  - */etc/systemd/system/*
  - */etc/systemd/system/multi-user.target.wants/*
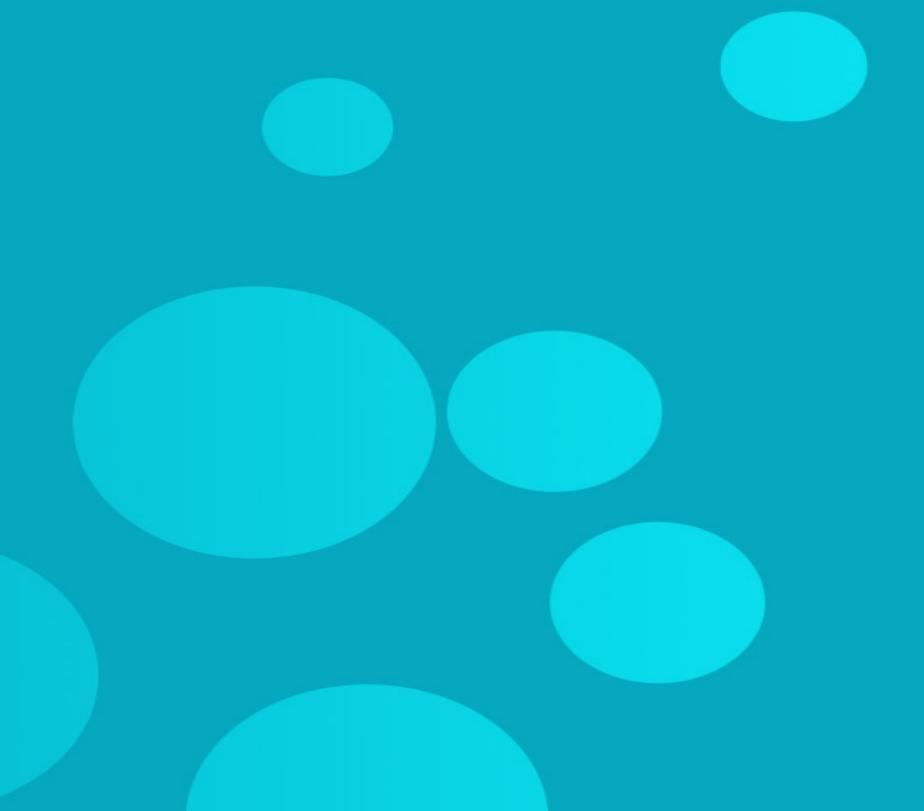
Assignment

- Check the status of the "*vsftpd*" service.

- Start the "*vsftpd*" service.

- Check the status of the "*vsftpd*" service again.

  – Can you FTP into the server?

- Finally, disable and mask the "*vsftpd*" service.

What will we do today?

- ~~Recap~~

- ~~Linux networking~~

- ~~Network services~~

- ~~Configuring network services~~

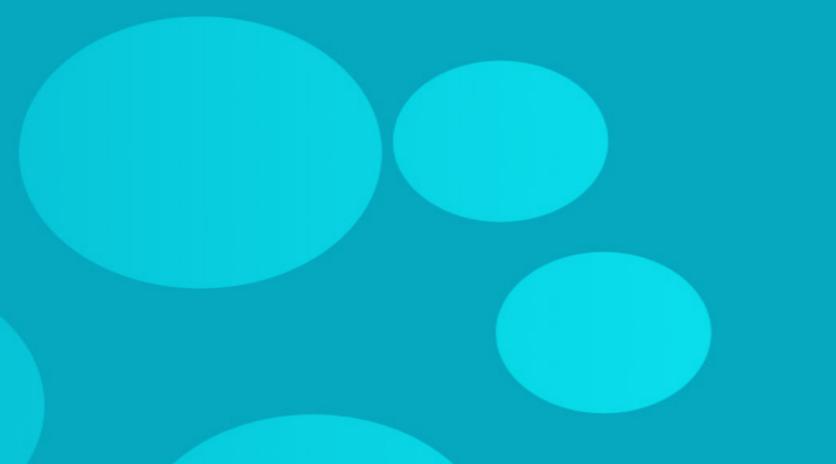- Closing: homework and Q&A

Closing

Homework

- Reading:
  - Chapter 5.
  - Chapter 6.
  - Chapter 14.

Homework

- Go do:
  - On Ubuntu, setup a *httpd* webserver.
  - Create a simple "index.html" to serve up.
  - Make sure you can browse to the site:
    - Both from your Fedora VM
    - <u>And</u> from your laptop (setup a port forward!)

Reference materials

Resources

- [ifconfig vs ip](ifconfig-vs-ip)

- [netplan vs networkmanager vs networkd](netplan-vs-networkmanager-vs-networkd)

- [Have a plan for netplan](have-a-plan-for-netplan)

- [Bonding with NetworkManager](bonding-with-networkmanager)

- [Bonding with configuration files](bonding-with-configuration-files)

- [Bridged network connections](bridged-network-connections)

Resources

- [Bug in Ubuntu and Network Manager](#)

- [Learning to love systemd](#)

- [SysVinit and systemd service mgt cheatsheet](#)

Resources

- Does Not Compute:
  - [Let's look at some big, expensive servers.](#)
  - [Let's check out a blade server (32 CPUs).](#)
- Others:
  - [Inside a Google data center](#)
  - [Rackmount server anatomy 101](#)