EPITECH.

PARIS GRADUATE SCHOOL OF DIGITAL INNOVATION

Day 01

Kick-off

T5 - Networks and Systems Admin. Seminar

T-NSA-500

1.2

Welcome

Let’s go for 2 weeks of discovering the world of system administration

Reminder of the {EPITECH} important values during a pool:

- Good mood
- Mutual aid
- Communication
- No cheating ^^

SysAdmin

" The system administrator is the person responsible for configuring and managing a company’s entire infrastructure, including the hardware, software and operating systems needed to run the business. "

SysAdmin roles and responsibilities

- Configure and manage the company's infrastructure
- Manage user access and permissions to all systems and data
- Perform daily security backups and restores
- Manage all monitoring and alerts across the company's applications and infrastructure
- Problem solving and troubleshooting

Virtual Machine

VmWare

https://console.bocal.org

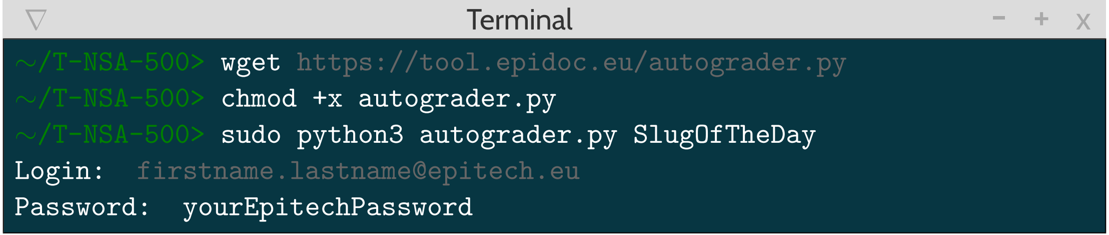
VirtualBox

https://www.virtualbox.org/

Correction of pool days

Auto-grader or Review with pedagogical staff

Auto-grader



```
~/T-NSA-500> wget https://tool.epidoc.eu/autograder.py
~/T-NSA-500> chmod +x autograder.py
~/T-NSA-500> sudo python3 autograder.py SlugOfTheDay
Login:  firstname.lastname@epitech.eu
Password:  yourEpitechPassword
```

And what are we doing today?

- Create a virtual machine
- Installing an OS
- Creating partitions
- Creating users and groups
- Install and configure SSH
- Fail2ban
- Firewall iptables

Users

Any entity (individual or particular program) that needs to interact with a UNIX system is authenticated on that computer by a user.

On any UNIX system, there is a superuser, usually called root, who has full authority over the system.

Important files :

- /etc/passwd
- /etc/shadow

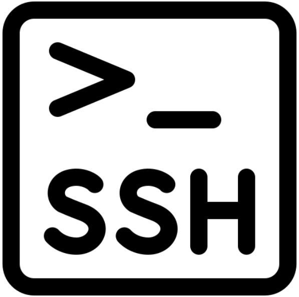
Groups

A UNIX user belongs to one or more groups.

Groups are used to bring users together to give them common rights.

Secure Shell

Remote administration protocol allowing users to control their remote servers.



Firewall iptables

The IPTables Linux firewall is used to monitor incoming and outgoing traffic to a server and filter it according to user-defined rules to prevent anyone from accessing the system.

Using iptables, you can define rules that will only allow selected traffic to your server.

Questions

Do you have any questions?