

Simple Checks:

check password policy

sudo chage -l username

check ufw

sudo service ufw status

sudo ufw status

check ssh

sudo service ssh status

show current os:

cat /etc/os-release

User & Password:

create new user

sudo adduser new_username

show password policy files

sudo nano /etc/pam.d/common-password

sudo nano /etc/login.defs

sudo nano /etc/sudoers

Groups:

check groups

getent group groupname

groups username

create group

sudo groupadd evaluating

assign user to group

sudo usermod -aG evaluating new_username

Hostname and partitions:

show hostname

hostnamectl

change hostname

sudo hostnamectl set-hostname new_hostname

server reboot

sudo reboot

show partitions

lsblk

Sudo:

check sudo

dpkg -l | grep sudo

assign to group sudo

sudo usermod -aG group username

show sudo log file

cd /var/log/sudo/sudo.log

UFW:

check ufw status

sudo service ufw status

sudo ufw status numbered

add port

sudo ufw allow 8080

delete port

sudo ufw delete 4

SSH:

check ssh (SecureShell)

sudo service ssh status

login ssh

ssh username@127.0.0.1 -p 4242

check port (Port 4242)

sudo nano /etc/ssh/sshd-config

Crons:

show monitoring script

cd /usr/local/bin && nano monitoring.sh

change crontab

sudo crontab -u root -e

start & stop cron

sudo service cron start/ stop

VM:

A VM is software that creates a virtual environment on your computer. It emulates hardware, allowing you to run an operating system within another isolated operating system. It's also useful for testing other software for educational purposes, a practice known as Sandboxing.

Difference:

CentOS has more stable versions, but it takes up to 5 years until a new update is released.

It is widely used in companies.

Debian is primarily created for users, provides more frequent updates but can be more unstable.

The software is more open and has a large community.

There is no limitation on what you can change.

Choice:

I chose Debian for learning in this project.

It requires an operating system that can be easily and extensively modified,

and I am not a company.

Aptitude / Apt / Apparmor:

Apt is a command-line tool that allows you to manage packages on Debian systems.

It helps with installing or modifying packages.

Aptitude offers a visual interface, provides more functions, and can suggest a solution if a conflict occurs while modifying or installing a new package.

Additionally, we can view changelogs of these packages, which is very useful if we need information about new dependencies, etc.

The use of AppArmor is important in environments with high priority, such as a server environment, and when performing services with potential security risks.

AppArmor can be considered as fundamental protection.

It serves as an additional layer of security by limiting the damage a compromised application can cause.

LVM:

LVM stands for Logical Volume Manager

and is a technology used in Debian and other Linux distributions.

With LVM, you can change the size of logical volumes without having to recreate partitions.

This is useful when storage requirements have changed.

`lvresize -L +5GB /dev/myvg/mylv`

Here, the size of the logical volume "mylv" in the volume group "myvg" is increased by 5 GB.

