



# Optimizing KALI Linux

By

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- This course is for education and awareness only. The information and tools mentioned in it should not be used for other than these purposes as it is illegal to examine any network without written permission from the network administrator.
- Taking care of information security awareness is not a luxury, but it has become a necessity in order to be safe from falling victim to cybercrime.

# Optimizing KALI Linux

01- Introduction

02- Installing KALI Linux

03- Optimizing KALI Linux

# Optimizing KALI Linux

- Kali Linux has over 600 pre-installed tools and packages.
- There are some basic tasks that must be performed before starting to use the system to improve performance and overcome some common problems such as the Full screen problem.

# 1. Enable “root” superuser

*Root (Linux) = Administrator (Windows)*

## The temporary way

➤ `sudo`

➤ `sudo su`

## The permanent way

➤ `passwd root`

*Logout then Login*

## 2. Add a standard user

➤ `useradd -m moamen2`

➤ `passwd moamen2`

Add user to `sudo` group

➤ `usermod -a -G sudo moamen2`

➤ `chsh -s /bin/bash moamen2`

### 3. Check network, connection between VMs and Internet

➤ `ifconfig` (Check Network)

`ifconfig eth0 down --- ifconfig eth0 up`

➤ `ping 8.8.8.8` (Check Internet)

➤ `ping 10.0.0.7` (Check Connection between VMs)

Change **DNS**

➤ `echo "nameserver 8.8.8.8" > /etc/resolv.conf`



## 4. Fix Device not managed error – wired network

➤ leafpad /etc/NetworkManager/NetworkManager.conf

**Set** managed=true

## 5. Fix default repositories

➤ `leafpad /etc/apt/sources.list`

**Add the following configuration lines**

**## Regular repositories**

**`deb http://http.kali.org/kali kali main non-free contrib`**

**## Source repositories**

**`deb-src http://http.kali.org/kali kali main non-free contrib`**

## 6. Update, Upgrade, Dist-Upgrade

Clean apt cache. Update applications list. Upgrade applications.

Upgrade distribution. Repair (if problems). Autoremove.

- `apt-get clean && apt-get update && apt-get upgrade -y && apt-get dist-upgrade -y`
- `dpkg --configure -a`
- `apt-get autoremove`
- `apt update`
- `apt-get update --fix-missing`

## 7. Add permanent alias

Alias make your life easier.

Alias = command

- `leafpad .zshrc` (for old versions use: `leafpad .bashrc`)
- `alias cls='clear'`
- `alias updatesystem='apt-get clean && apt-get update && apt-get upgrade -y && apt-get dist-upgrade -y'`

## 8. Install *Lazykali* script

The Lazy Script is designed to help many users to save time and work.

- `git clone https://github.com/arismelachroinos/lscript.git`
- `cd lscript`
- `chmod +x install.sh`      OR      `sudo bash ./install.sh`
- `./install.sh`

## 9. Install TOR browser

*Tor* is free software and an open network that helps you defend against traffic analysis, and it prevents the sites you visit from learning your physical location.

➤ `apt install -y torbrowser-launcher`

## **10.Speed up you KALI Linux**

**Clean your system and free disk space.**

➤ **apt-get install bleachbit**

## 11.Switch between *Bash* and *Zsh*

Zsh is a new shell in Kali from version Kali 2020.3

Zsh has a color customization, z- command, Auto completion and Auto correction.

➤ `chsh -s /bin/bash`

➤ `chsh -s /bin/zsh`

OR

➤ `exec bash`

➤ `exec zsh`