Ethical Hacking Environment Setup



SoftUni Team Technical Trainers







Software University

https://softuni.bg

Have a Questions?





#Cyber_Security

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System Requirements



- CPU => Core i5
- RAM => **16GB**
- GPU => n/a
- SSD => 256 GB



Software Requirements



Vmware Workstation Player:

https://www.vmware.com/products/workstationplayer/workstation-player-evaluation.html

Oracle VM VirtualBox: https://www.virtualbox.org/

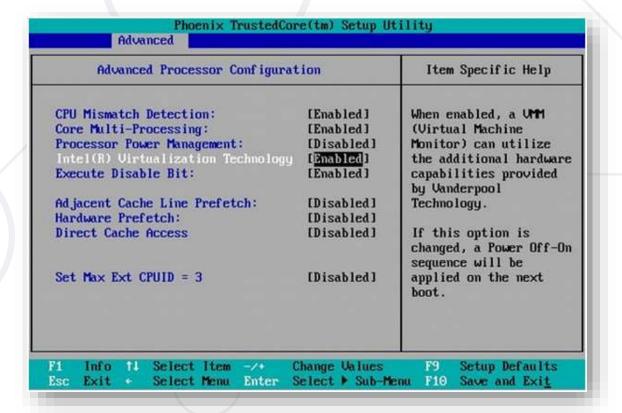




Enable Virtualization in Your BIOS



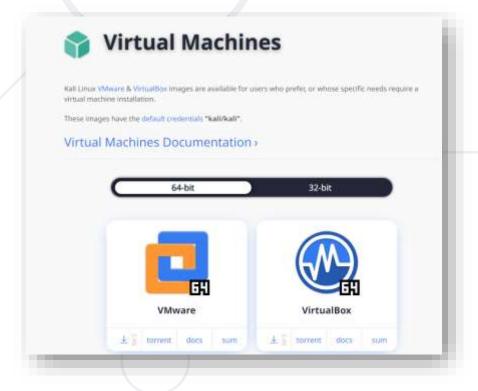
 This step differs from PC vendors, but generally what you need is to access the BIOS and enable the option that allows virtualization



Download Kali-Linux VM



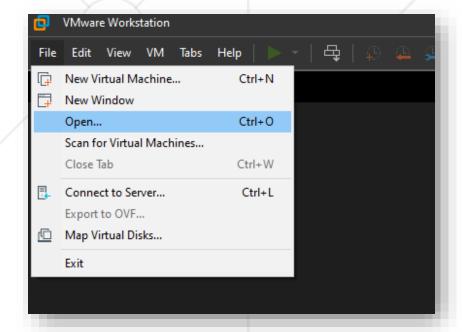
- Navigate to: https://www.kali.org/get-kali/#kali-virtual-machines
- Download VM depending on your virtualization software

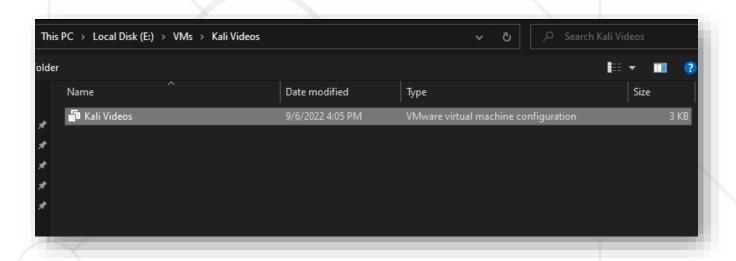


Open the Virtual Machine



- After it was downloaded, open your virtualization software and navigate to file>open
- Navigate to the downloaded vm directory and open the .vmx file

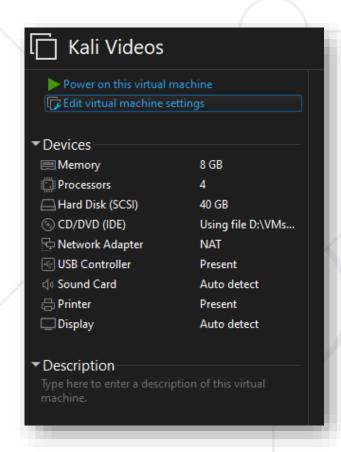


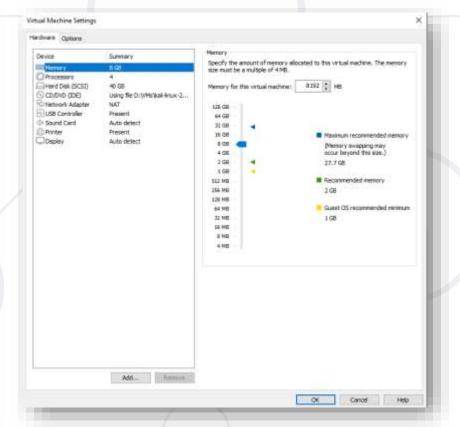


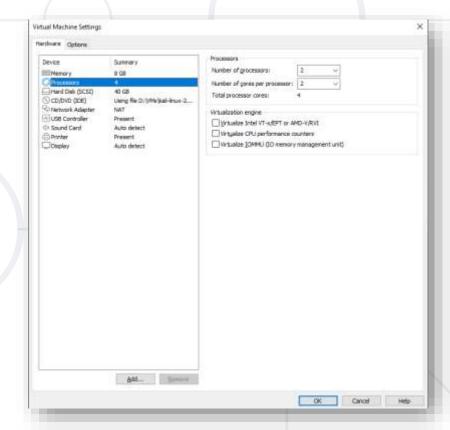
Edit VM Hardware, Based on Your System



Boost CPU, RAM and HDD if needed







Start the Virtual Machine



After it boots, the default login is kali:kali



Update



- Open terminal and type:
 - sudo apt-get update && sudo apt-get upgrade -y

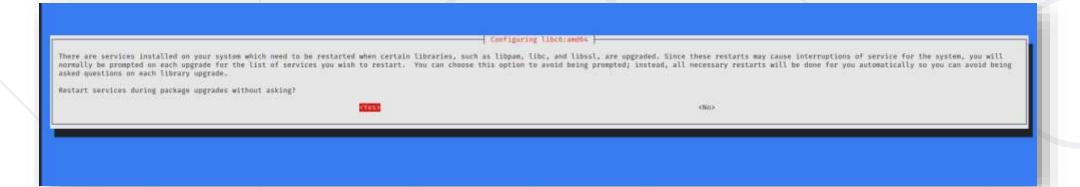


```
sudo ant-get update Mr sodo aut-get upgrade -y
Hit:1 http://downloads.metasploit.com/data/releases/metasploit-framework/apt lucid InRelease
Hit:2 http://mirrors.netix.net/kali kali-rolling InRelease
W: http://downloads.metasploit.com/data/releases/metasploit-framework/apt/dists/lucid/InRelease: Ney is stored in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details.
Reading package lists ... Done
Building dependency tree ... Done
Reading state information... Done
Calculating upgrade ... Done
The following packages were automatically installed and are no longer required:
   binutils-mingw-w64-i686 binutils-mingw-w64-x86-64 ettercap-common ettercap-graphical gcc-mingw-w64-i686-win32-runtime gcc-mingw-w64-x86-64-win32-runtime libaiol
    libapache2-mod-php libhttp-server-simple-perl libluajit-5.1-2 libluajit-5.2-common libpython3.9-minimal libpython3.9-stdlib libwacom-bin mingw-w64-common mingw-w64-i686-dev mingw-w64-x88-64-dev oracle-instantclient-basic
    python3-dataclasses-jsom python3-limiter python3-marshmallow-enum python3-mypy-extensions python3-grcode python3-responses python3-token-bucket python3-typing-inspect python3.9-minimal
    sphinx-rtd-theme-common
 Use 'sudo apt autoremove' to remove them.
 The following packages have been kept back:
   cherrytree cpp g++ gcc gstreamer1.0-plugins-bad kismet-capture-linux-bluetooth kismet-capture-nrf-51822 kismet-capture-nrf-52248 kismet-capture-nrf-mousejack kismet-capture-nxp-kw41z
    kismet-capture-rz-killerbee kismet-capture-ti-cc-2531 kismet-capture-ti-cc-2540 kismet-capture-ubertooth-one kismet-core libavfolter8 libavformat59 libavformat59 libavutil57 libgdal31 libgstreamer-plugies-bad1.8-0
    libpoppler-glib8 libpostproc56 libswresample3 libswresample4 libswscale6 libtiff5 libwacom-him python3-fonttools python3-joonschema telnet
  the following packages will be upgraded:
    admaita-icon-theme apparmor atfipd base-passwd bash bettercap blueman burpsuite busybox cifs-utils clang console-setup-linux cryptsetup-pin cryptsetup-initramfs dash dictionaries-common diffutils ethtool
    exiv2 firefox-esr gcc-12-base gdal-plugins gir1.2-gdkpixbuf-2.0 gir1.2-gtk-3.0 gir1.2-pango-1.0 gir1.2-pango-1.0 gir1.2-vte-2.91 gir1.2-webkit2-4.0 grub-common grub-pc grub-pc-bin grub2-common
    gtk-update-icon-cache leee-data intel-microcode ipp-usb kali-desktop-core kali-desktop-xfce kali-linux-core kali-tinux-firmware kali-menu keyboard-configuration kismet-capture-common kismet-logtools ldap-utils lib32gcc-s1
     lib32stdc++6 libapparmor1 libasum8 libasymcms0 libatomic1 libbsom-1.0-0 libc-bin libc-dev-bin libc-libm libc-dev libc6-i386 libcc1-0 libcdio-cdda2 libcdio-paramoia2 libcrypts+tup12 libcups2 libdaxctl1
   libdeconfclient@ libegl-mesa@ libegl1 libevdev2 libewf2 libewf2 libexiv2-27 libexporter-tiny-perl libgcc-12-dev libgcc-21 libgdbm-compat4 libgdbm5 libgdk-pixbuf2.0-0 libgdk-pixbuf2.0-common libgfortran5 libgl1 libgl1-mesa-dri libglapi-mesa libglib2.0-0 libglib2.0-0
    libmongoc-1,0-0 libmpg123-0 libmpg123-0 libmctl6 libmet-libidm-perl libmetcdf19 libmetcdf1
    libopengl@ libopenh264-6 libopenhpt@ libout123-@ libpam-modules li
    libpython3.10-dev libpython3.10-minimal libpython3.10-stdlib libquadmath0 libreadline8 libsasl2-wodules-db libsdl2-1.0-0 libsdl2-image-2.0-0 libsdl2-mixer-2.0-0 libsdl2-ttf-2.0-0 libsdl2-ttf-2
     libsoup-3.8-common libspeechd2 libssl3 libstdc++-12-dev libstdc++- libsyn123-0 libtext-wrapi18n-perl libtirpc-common libtirpc3 libtsan2 libubsan1 libudisks2-0 liburcu8 liburing2 libuv1-dev libvte-2.91-0
    libyte-2.91-common libyulkan1 libwacon-common libwacon9 libwebkit2gtk-4.0-37 libwebkit2gtk-4.1-0 libwpe-1.0-1 libww-mechanize-perl libxatracker2 libxfce4panel-2.0-4 libxml-twig-perl libxovctrl0 libyara9 libzng5 locales man-db
    mariadb-client-10.6 mariadb-client-core-10.6 mariadb-server-10.6 mariadb-server-core-10.6 mesa-vulkan-drivers metasploit-framework mpg123 mcat network-manager nfs-common nftables nmap open-vm-tools
    open-vm-lools-desktop openssl postgresql-14 postgresql-client-14 powermgmt-base powershell-empire publicsuffix python3-appdirs python3-censys python3-certifi python3-debian python3-distutils python3-distutils python3-distutils python3-appdirs
   python3-filelock python3-gdal python3-gi-calro python3-inportlib-metadata python3-kismetcapturefreaklabszigbee python3-kismetcapturertl433 python3-kismetcapturertladsb
    python3-kismetcapturertlamr python3-lb2to3 python3-matplotlib-inline python3-pygame python3-pygame python3-setproctitle python3-sortedcontainers python3-speechd python3-xmltodict python3.10
    python3.10-dev python3.10-minimal readline-common rsync rsyslog ruby-dev ruby-dev ruby-yajl runit-helper scalpel screen speech-dispatcher speech-dispatcher-audio-plugins speech-dispatcher-espeak-ng sqlitebrowser
    stunnel4 sudo thc-pptp-bruter theharvester tmux tree udisks2 unrar vim vim-common vim-runtime vim-tiny xfce4-panel xfce4-screenshooter xfdesktop4 xfdesktop4-data xserver-xorg-video-amdgpu xxd rsh
 263 upgraded, 0 newly installed, 0 to remove and 33 not upgraded.
Need to get 870 MB of archives.
After this operation, 5,180 kB disk space will be freed.
Get:1 http://downloads.metasploit.com/data/releases/metasploit-framework/apt lucid/main amd64 metasploit-framework amd64 6.2.17+20220906102617-1rapid7-1 [289 MB]
Get:2 http://mirrors.netix.net/kali kali-rolling/main and64 libc-li0n all 2,34-4 [876 kB]
Get:3 http://mirrors.netix.net/kali kali-rolling/main and64 locales all 2.34-4 [4,891 kB]
9% (3 locales 759 kB/4,091 kB 19%) [1 metasploit-framework 94,8 MB/289 MB 33%]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11.2 MB/s 1min 8s
```

Update



If you see this:



Chose "Yes" by clicking Tab

Download Seclists



- Open terminal and:
 - cd /opt/ (or any other directory of your choice)
 - run "sudo git clone https://github.com/danielmiessler/SecLists"

```
(kali@ kali)-[~]
$ cd /opt

(kali@ kali)-[/opt]
$ sudo git clone https://github.com/danielmiessler/SecLists.git
```

Unpack rockyou



- Open terminal and:
 - Navigate to /usr/share/wordlists
 - run "sudo gzip –d rockyou.txt.gz"

```
(kali@ kali)-[/opt]
$ cd /usr/share/wordlists

(kali@ kali)-[/usr/share/wordlists]
$ sudo gzip -d rockyou.txt.gz
```



Questions?



















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