INSTALL MOBILE SECURITY FRAMEWORK (MobSF)

1 Ubuntu

1.1 Install dependencies

root@ubuntu-1:~# apt-get install git

Python version 3.8-3.9

```
root@ubuntu-1:~# python3 -V
Python 3.8.10
root@ubuntu-1:~#
```

root@lam-G550JK:~# apt install python3-pip

root@ubuntu-1:~# python3 -m pip install --upgrade pip

root@ubuntu-1:~# pip3 --version

```
root@ubuntu-1:~/Mobile-Security-Framework-MobSF# pip3 --version
pip 20.0.2 from /usr/lib/python3/dist-packages/pip (python 3.8)
```

root@ubuntu-1:~# sudo apt-get install openjdk-8-jdk

root@ubuntu-1:~# java -version

```
root@ubuntu-1:~# java -version
openjdk version "1.8.0_352"
OpenJDK Runtime Environment (build 1.8.0_352-8u352-ga-1~20.04-b08)
OpenJDK 64-Bit Server VM (build 25.352-b08, mixed mode)
root@ubuntu-1:~#
```

root@lam-G550JK:~# sudo apt install python3-dev python3-venv python3-pip build-essential libffi-dev libssl-dev libxml2-dev libxslt1-dev libjpeg8-dev zlib1g-dev wkhtmltopdf

1.2 Install Virtual-box

root@lam-G550JK:~# sudo apt update

root@lam-G550JK:~# sudo apt install virtualbox

root@lam-G550JK:~# vboxmanage --version

```
root@lam-G550JK:~# vboxmanage --version
6.1.38_Ubuntur153438
root@lam-G550JK:~#
```

1.3 Install Genymotion

root@lam-G550JK:~# ./genymotion-3.3.3-linux_x64.bin
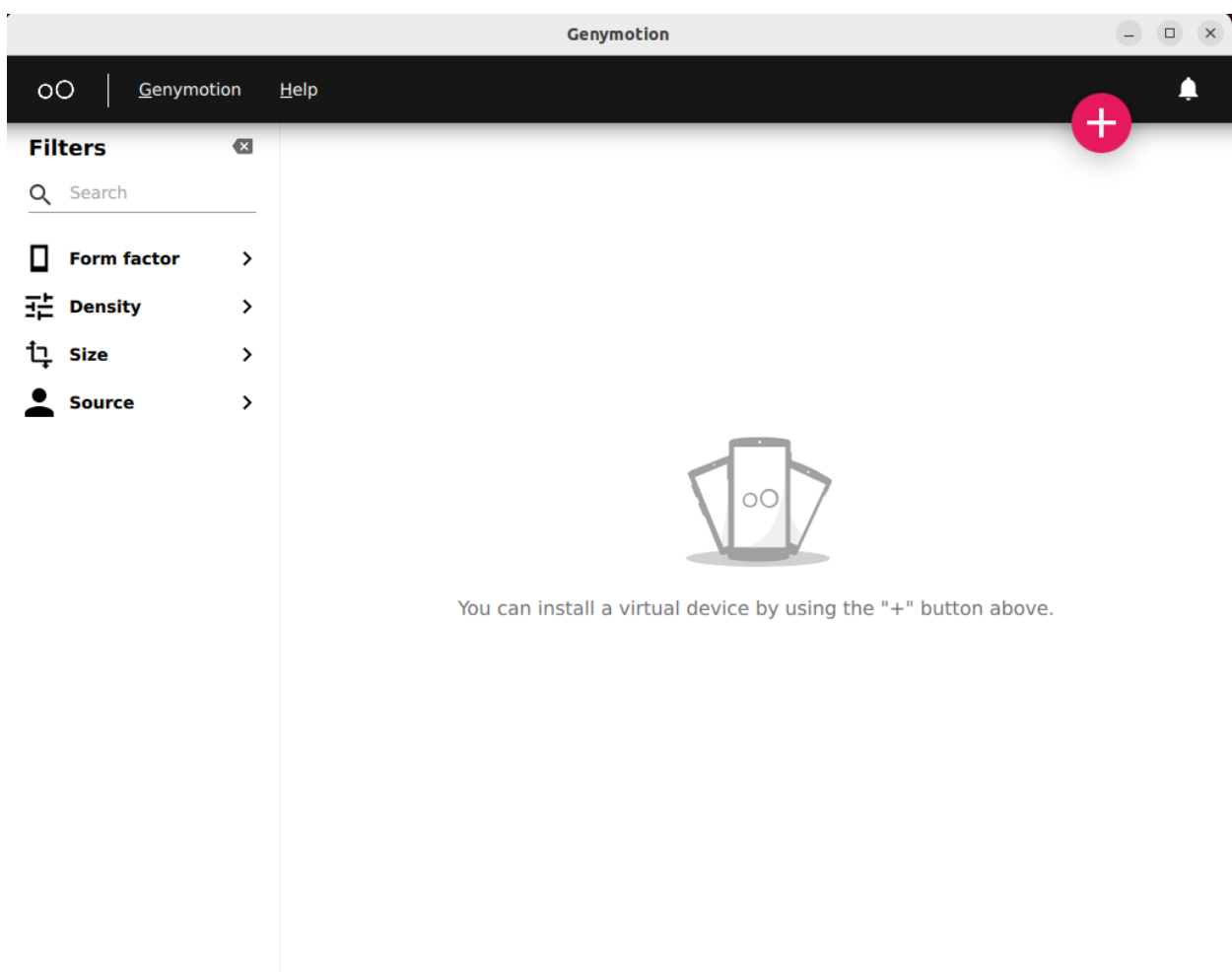
1.4 Install MOBSF and Run

root@ubuntu-1:~# git clone https://github.com/MobSF/Mobile-Security-Framework-MobSF.git

```
root@ubuntu-1:~# git clone https://github.com/MobSF/Mobile-Security-Framework-MobSF.git
Cloning into 'Mobile-Security-Framework-MobSF'...
remote: Enumerating objects: 18761, done.
remote: Counting objects: 100% (44/44), done.
remote: Compressing objects: 100% (34/34), done.
remote: Total 18761 (delta 17), reused 23 (delta 10), pack-reused 18717
Receiving objects: 100% (18761/18761), 1.23 GiB | 1.87 MiB/s, done.
Resolving deltas: 100% (9316/9316), done.
root@ubuntu-1:~# ls -al
total 36
drwx------   7 root root 4096 Feb 24 12:10 .
drwxr-xr-x 19 root root 4096 Feb 24 11:18 ..
-rw-r--r--   1 root root 3106 Dec  5  2019 .bashrc
drwx------   2 root root 4096 Feb 24 11:35 .cache
drwxr-xr-x   3 root root 4096 Feb 24 11:28 .local
drwxr-xr-x   7 root root 4096 Feb 24 12:22 Mobile-Security-Framework-MobSF
-rw-r--r--   1 root root  161 Dec  5  2019 .profile
drwx------   3 root root 4096 Feb 24 11:20 snap
drwx------   2 root root 4096 Feb 24 11:20 .ssh
root@ubuntu-1:~# 
```

root@ubuntu-1:~# chmod -R 777 Mobile-Security-Framework-MobSF/

root@ubuntu-1:~# chmod -R 777 Mobile-Security-Framework-MobSF/*

root@ubuntu-1:~# cd Mobile-Security-Framework-MobSF/

```
root@ubuntu-1:~/Mobile-Security-Framework-MobSF# ls -al
total 144
drwxrwxrwx  7 root root  4096 Feb 24 12:22 .
drwx------  7 root root  4096 Feb 24 12:10 ..
-rwxrwxrwx  1 root root   777 Feb 24 12:22 docker-compose.yml
-rwxrwxrwx  1 root root  3028 Feb 24 12:22 Dockerfile
-rwxrwxrwx  1 root root   304 Feb 24 12:22 .dockerignore
drwxrwxrwx  8 root root  4096 Feb 24 12:22 .git
drwxrwxrwx  4 root root  4096 Feb 24 12:22 .github
-rwxrwxrwx  1 root root   966 Feb 24 12:22 .gitignore
-rwxrwxrwx  1 root root   133 Feb 24 12:22 .gitmodules
-rwxrwxrwx  1 root root 35134 Feb 24 12:22 LICENSE
drwxrwxrwx  2 root root  4096 Feb 24 12:22 LICENSES
-rwxrwxrwx  1 root root   563 Feb 24 12:22 manage.py
-rwxrwxrwx  1 root root   432 Feb 24 12:22 MANIFEST.in
drwxrwxrwx 10 root root  4096 Feb 24 12:22 mobsf
-rwxrwxrwx  1 root root   510 Feb 24 12:22 .pyup.yml
-rwxrwxrwx  1 root root 12676 Feb 24 12:22 README.md
-rwxrwxrwx  1 root root   646 Feb 24 12:22 requirements.txt
-rwxrwxrwx  1 root root   458 Feb 24 12:22 run.bat
-rwxrwxrwx  1 root root   952 Feb 24 12:22 run.sh
drwxrwxrwx  2 root root  4096 Feb 24 12:22 scripts
-rwxrwxrwx  1 root root  2531 Feb 24 12:22 setup.bat
-rwxrwxrwx  1 root root  1750 Feb 24 12:22 setup.py
-rwxrwxrwx  1 root root  2221 Feb 24 12:22 setup.sh
-rwxrwxrwx  1 root root    99 Feb 24 12:22 .sonarcloud.properties
-rwxrwxrwx  1 root root  1985 Feb 24 12:22 tox.ini
root@ubuntu-1:~/Mobile-Security-Framework-MobSF# 
```
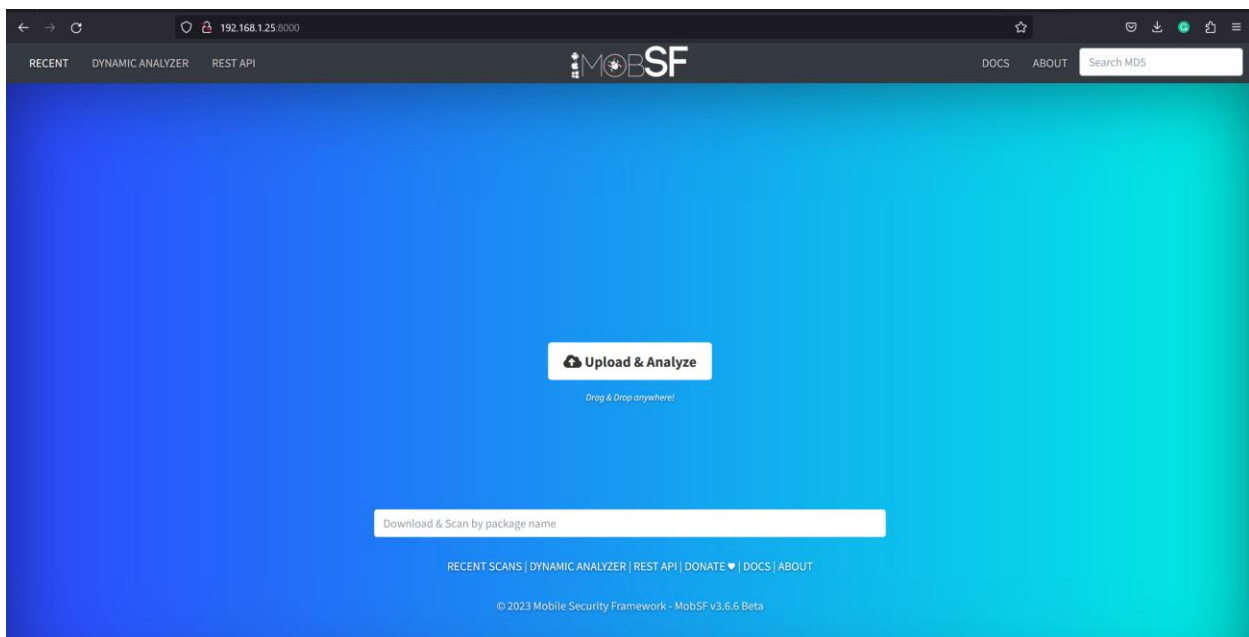
root@ubuntu-1:~/Mobile-Security-Framework-MobSF# ./setup.sh

```
[WARNING] 01/May/2023 11:16:54 - Dynamic Analysis related functions will not work.
Make sure a Genymotion Android VM/Android Studio Emulator is running before performing Dynamic Analysis.
No changes detected
[INFO] 01/May/2023 11:16:55 - Checking for Update.
[INFO] 01/May/2023 11:16:55 - No updates available.
[INFO] 01/May/2023 11:16:56 -

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[INFO] 01/May/2023 11:16:56 - Mobile Security Framework v3.6.6 Beta
REST API Key: fa81deec8c83e903fa85dab8e3e3a7b1f4ac191f2bf1ba984be01b14b9698e66
[INFO] 01/May/2023 11:16:56 - OS: Linux
[INFO] 01/May/2023 11:16:56 - Platform: Linux-5.19.0-40-generic-x86_64-with-glibc2.35
[INFO] 01/May/2023 11:16:56 - Dist: ubuntu 22.04 Jammy Jellyfish
[INFO] 01/May/2023 11:16:56 - MobSF Basic Environment Check
[WARNING] 01/May/2023 11:16:56 - Dynamic Analysis related functions will not work.
Make sure a Genymotion Android VM/Android Studio Emulator is running before performing Dynamic Analysis.
No changes detected in app 'StaticAnalyzer'
[INFO] 01/May/2023 11:16:56 - Checking for Update.
[INFO] 01/May/2023 11:16:56 - No updates available.
[INFO] 01/May/2023 11:16:57 -

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[INFO] 01/May/2023 11:16:57 - Mobile Security Framework v3.6.6 Beta
REST API Key: fa81deec8c83e903fa85dab8e3e3a7b1f4ac191f2bf1ba984be01b14b9698e66
[INFO] 01/May/2023 11:16:57 - OS: Linux
[INFO] 01/May/2023 11:16:57 - Platform: Linux-5.19.0-40-generic-x86_64-with-glibc2.35
[INFO] 01/May/2023 11:16:57 - Dist: ubuntu 22.04 Jammy Jellyfish
[INFO] 01/May/2023 11:16:57 - MobSF Basic Environment Check
[WARNING] 01/May/2023 11:16:57 - Dynamic Analysis related functions will not work.
Make sure a Genymotion Android VM/Android Studio Emulator is running before performing Dynamic Analysis.
Operations to perform:
  Apply all migrations: StaticAnalyzer, auth, contenttypes, sessions
Running migrations:
  No migrations to apply.
[INFO] 01/May/2023 11:16:57 - Checking for Update.
[INFO] 01/May/2023 11:16:58 - No updates available.
wkhtmltopdf 0.12.6
[INSTALL] Installation Complete
```

root@lam-G550JK:~/Mobile-Security-Framework-MobSF# ./run.sh 0.0.0.0:8000

```
root@lam-G550JK:~/Mobile-Security-Framework-MobSF# ./run.sh 0.0.0.0:8000
[2023-05-01 14:13:22 +0200] [45940] [INFO] Starting gunicorn 20.1.0
[2023-05-01 14:13:22 +0200] [45940] [INFO] Listening at: http://0.0.0.0:8000 (45940)
[2023-05-01 14:13:22 +0200] [45940] [INFO] Using worker: gthread
[2023-05-01 14:13:22 +0200] [45941] [INFO] Booting worker with pid: 45941
[INFO] 01/May/2023 12:19:57 -

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[INFO] 01/May/2023 12:19:57 - Mobile Security Framework v3.6.6 Beta
REST API Key: fa81deec8c83e903fa85dab8e3e3a7b1f4ac191f2bf1ba984be01b14b9698e66
[INFO] 01/May/2023 12:19:57 - OS: Linux
[INFO] 01/May/2023 12:19:57 - Platform: Linux-5.19.0-40-generic-x86_64-with-glibc2.35
[INFO] 01/May/2023 12:19:57 - Dist: ubuntu 22.04 Jammy Jellyfish
[INFO] 01/May/2023 12:19:57 - MobSF Basic Environment Check
[WARNING] 01/May/2023 12:19:57 - Dynamic Analysis related functions will not work.
Make sure a Genymotion Android VM/Android Studio Emulator is running before performing Dynamic Analysis.
[INFO] 01/May/2023 12:19:57 - Checking for Update.
[INFO] 01/May/2023 12:19:57 - No updates available.
```

1.5 Create MOBSF service

root@lam-G550JK:/etc/systemd# nano /etc/systemd/system/mobsf.service

[Unit]
Description=MOBSF service
After=multi-user.target
[Service]
Type=simple
Restart=always
RestartSec=1
User=root
WorkingDirectory=/root/Mobile-Security-Framework-MobSF/
ExecStart=/usr/bin/bash run.sh 0.0.0.0:8000
[Install]
WantedBy=multi-user.target

root@lam-G550JK:/etc/systemd# systemctl daemon-reload

root@lam-G550JK:/etc/systemd/system# systemctl enable mobsf.service

root@lam-G550JK:/etc/systemd/system# service mobsf start

root@lam-G550JK:/etc/systemd/system# service mobsf status

2 Fix

Install multiple python version
root@thanhlam-G550JK:~# apt update
root@thanhlam-G550JK:~# apt install software-properties-common
root@thanhlam-G550JK:~# add-apt-repository ppa:deadsnakes/ppa
root@thanhlam-G550JK:~# apt install python3.9

```
root@thanhlam-G550JK:~# python3.9 --version
Python 3.9.16
root@thanhlam-G550JK:~# python3 --version
Python 3.10.6
root@thanhlam-G550JK:~#
```

root@thanhlam-G550JK:~/Mobile-Security-Framework-MobSF# apt install python3.9-distutils
root@thanhlam-G550JK:~# ls -al /usr/bin/python*

```
root@thanhlam-G550JK:~# ls -al /usr/bin/python*
lrwxrwxrwx 1 root root       10 Thg 8  18  2022 /usr/bin/python3 -> python3.10
-rwxr-xr-x 1 root root 5921160 Thg 11 14 17:10 /usr/bin/python3.10
lrwxrwxrwx 1 root root       34 Thg 11 14 17:10 /usr/bin/python3.10-config -> x86_64-linux-gnu-python3.10-config
-rwxr-xr-x 1 root root 5303088 Thg 12  7 02:12 /usr/bin/python3.9
lrwxrwxrwx 1 root root       17 Thg 8  18  2022 /usr/bin/python3-config -> python3.10-config
-rwxr-xr-x 1 root root      960 Thg 1  25 09:29 /usr/bin/python3-futurize
-rwxr-xr-x 1 root root      964 Thg 1  25 09:29 /usr/bin/python3-pasteurize
root@thanhlam-G550JK:~#
```

root@thanhlam-G550JK:~# update-alternatives --install /usr/bin/python3 python3 /usr/bin/python3.10 1
root@thanhlam-G550JK:~# update-alternatives --install /usr/bin/python3 python3 /usr/bin/python3.9 2

```
root@thanhlam-G550JK:~# update-alternatives --install /usr/bin/python3 python3 /usr/bin/python3.10 1
update-alternatives: using /usr/bin/python3.10 to provide /usr/bin/python3 (python3) in auto mode
root@thanhlam-G550JK:~# update-alternatives --install /usr/bin/python3 python3 /usr/bin/python3.9 2
update-alternatives: using /usr/bin/python3.9 to provide /usr/bin/python3 (python3) in auto mode
root@thanhlam-G550JK:~#
```

root@thanhlam-G550JK:~# update-alternatives --config python3

```
root@thanhlam-G550JK:~# update-alternatives --config python3
There are 2 choices for the alternative python3 (providing /usr/bin/python3).

  Selection    Path                 Priority   Status
------------------------------------------------------------
* 0            /usr/bin/python3.9    2         auto mode
  1            /usr/bin/python3.10   1         manual mode
  2            /usr/bin/python3.9    2         manual mode

Press <enter> to keep the current choice[*], or type selection number: 2
root@thanhlam-G550JK:~#
```

```
root@thanhlam-G550JK:~# python3 --version
Python 3.9.16
root@thanhlam-G550JK:~#
```

root@thanhlam-G550JK:~/Mobile-Security-Framework-MobSF# apt-get --purge autoremove python3-pip
root@thanhlam-G550JK:~/Mobile-Security-Framework-MobSF# apt install python3-pip

3 Link

https://mobsf.github.io/docs/#/

https://github.com/MobSF/Mobile-Security-Framework-MobSF