MOBILE PENETRATION TESTING MANUAL

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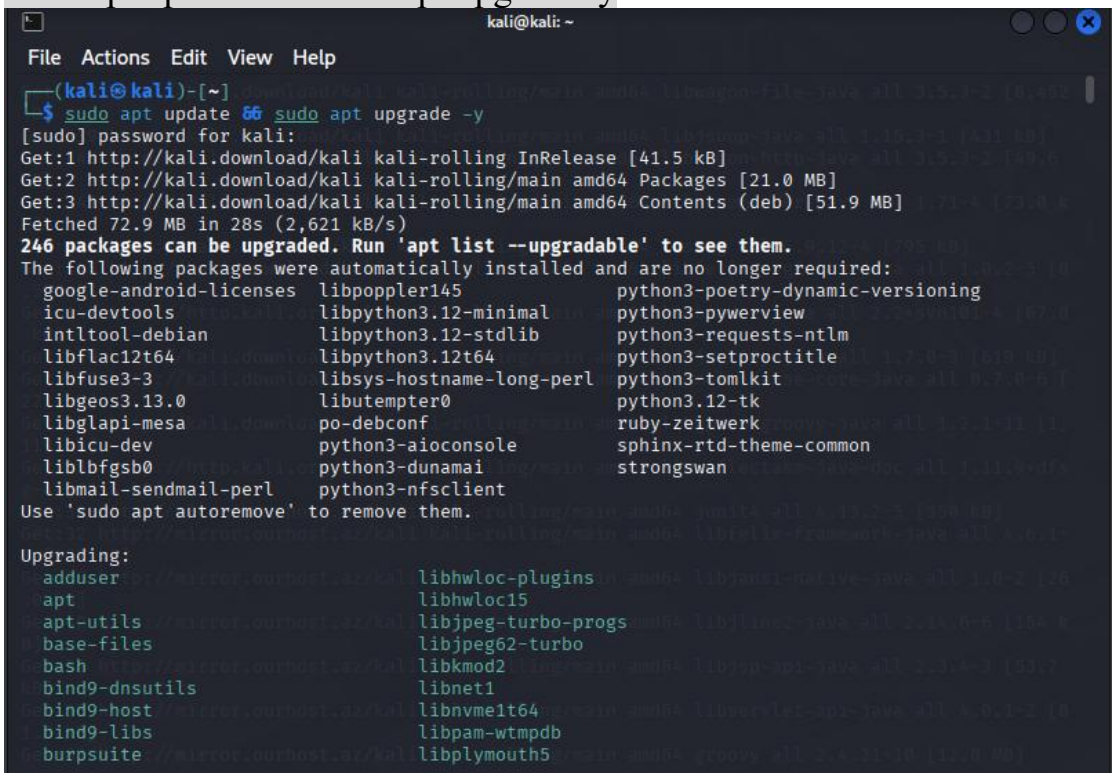
Android Penetration Testing with MobSF — Professional Manual

Prerequisites

- ✅ OS: Kali Linux (latest rolling release recommended)
- ✅ Permissions: sudo access
- ✅ Internet connection

This command updates the package list and upgrades all installed packages to their latest versions — **best practice before any installation**.

Sudo apt update && sudo apt upgrade -y



This installs the official docker.io package from Kali's repositories.

sudo apt install docker.io -y

```
┌──(kali㉿kali)-[~]
└─$ sudo apt install docker.io -y

[sudo] password for kali:
docker.io is already the newest version (26.1.5+dfsg1-9+b6).
The following packages were automatically installed and are no longer required:
  google-android-licenses  libpoppler145              python3-poetry-dynamic-versioning
  icu-devtools             libpython3.12-minimal      python3-pywerview
  intltool-debian          libpython3.12-stdlib       python3-requests-ntlm
  libflac12t64             libpython3.12t64           python3-setproctitle
  libfuse3-3               libsys-hostname-long-perl  python3-tomlkit
  libgeos3.13.0            libutempter0               python3.12-tk
  libglapi-mesa            po-debconf                 ruby-zeitwerk
  libicu-dev               python3-aioconsole         sphinx-rtd-theme-common
  liblbfgsb0               python3-dunamai            strongswan
  libmail-sendmail-perl    python3-nfsclient
Use 'sudo apt autoremove' to remove them.

Summary:
  Upgrading: 0, Installing: 0, Removing: 0, Not Upgrading: 7
```

enable: ensures Docker starts on system boot.
start: launches Docker service for immediate use
sudo systemctl enable docker

sudo systemctl start docker

```
┌──(kali㉿kali)-[~]
└─$ sudo systemctl enable docker
sudo systemctl start docker

Synchronizing state of docker.service with SysV service script with /usr/lib/systemd/systemd-sy
sv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable docker
```

Confirms Docker is installed correctly.
docker --version

```
┌──(kali㉿kali)-[~]
└─$ docker --version

Docker version 26.1.5+dfsg1, build a72d7cd
```

Downloads the latest **official MobSF image** from DockerHub.
sudo docker pull opensecurity/mobile-security-framework-mobsf:latest

```
┌──(kali㉿kali)-[~]
└─$ sudo docker pull opensecurity/mobile-security-framework-mobsf:latest

latest: Pulling from opensecurity/mobile-security-framework-mobsf
Digest: sha256:7dcccb98e0c036ba751270edd3dcc81a30b21a7fb20f834d6198078b54265992
Status: Image is up to date for opensecurity/mobile-security-framework-mobsf:latest
docker.io/opensecurity/mobile-security-framework-mobsf:latest
```

✅ Corrected Explanation:

-it: interactive terminal

--rm: auto-remove container after exit

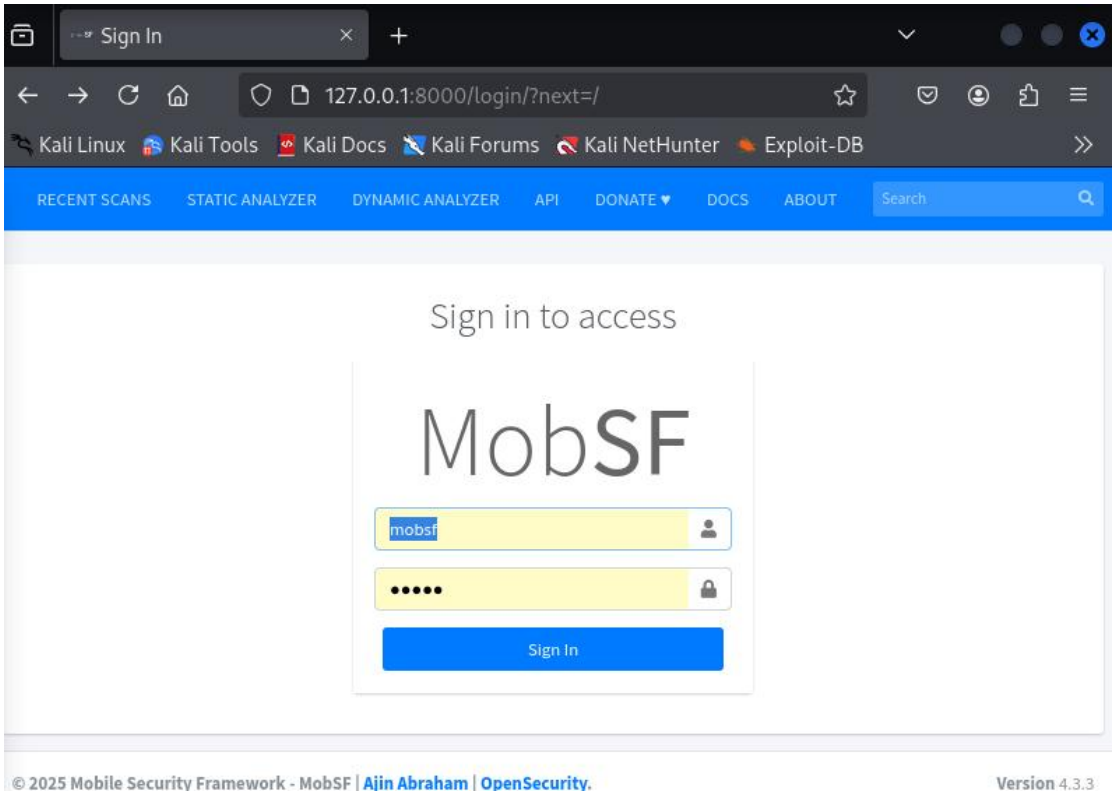
-p 8000:8000: maps MobSF's port 8000 to localhost

This starts MobSF **temporarily**. Close the terminal = stops MobSF.

sudo docker run -it --rm -p 8000:8000 opensecurity/mobile-security-framework-mobsf:latest

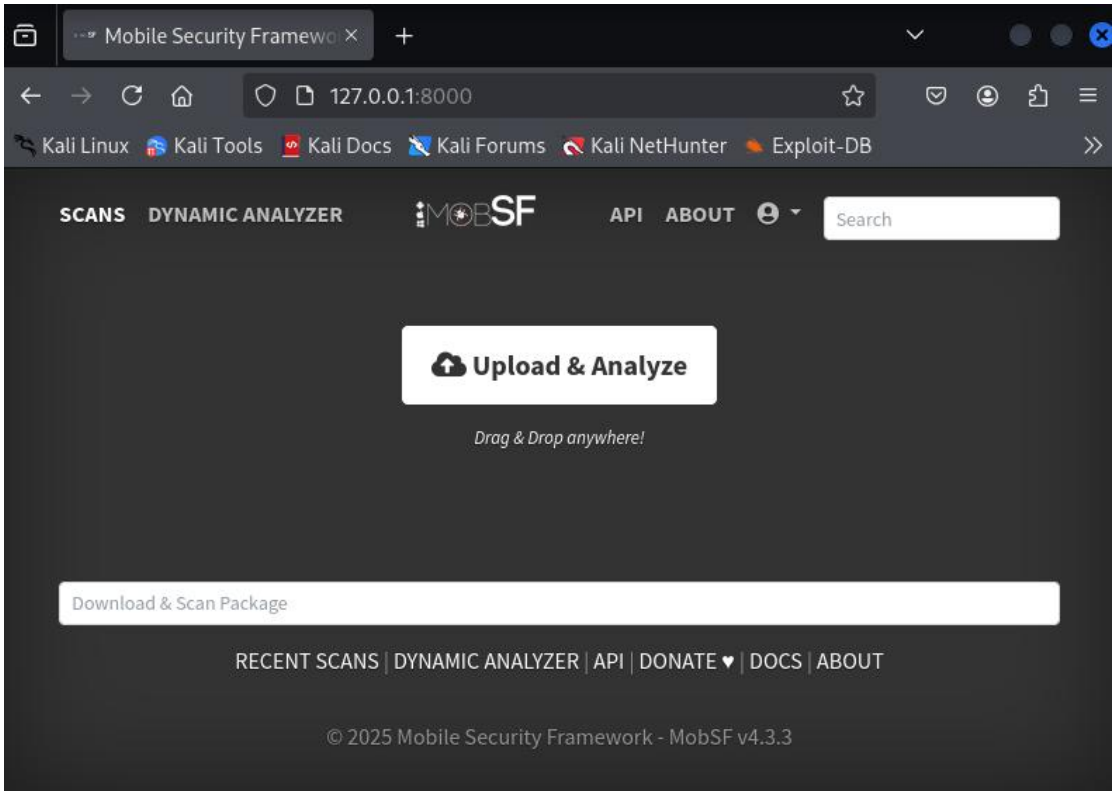
```
┌──(kali㉿kali)-[~]
└─$ sudo docker run -it --rm -p 8000:8000 opensecurity/mobile-security-framework-mobsf:latest

[INFO] 28/May/2025 12:55:27 - JADX is already installed at /home/mobsf/.MobSF/tools/jadx/jadx-1
.5.0
[INFO] 28/May/2025 12:55:27 - Loading User config from: /home/mobsf/.MobSF/config.py
[INFO] 28/May/2025 12:55:31 -

[INFO] 28/May/2025 12:55:31 - Author: Ajin Abraham | opensecurity.in
[INFO] 28/May/2025 12:55:31 - Mobile Security Framework v4.3.3
REST API Key: 21215d4206d36c0015b3a2df304e57d72fefebee01ab74ff2d53b67948333db3
Default Credentials: mobsf/mobsf
[INFO] 28/May/2025 12:55:31 - OS Environment: Linux (debian 12 bookworm) Linux-6.12.25-amd64-x8
6_64-with-glibc2.36
[INFO] 28/May/2025 12:55:31 - CPU Cores: 2, Threads: 2, RAM: 5.10 GB
[INFO] 28/May/2025 12:55:31 - MobSF Basic Environment Check
No changes detected
[INFO] 28/May/2025 12:55:33 - Checking for Update.
[INFO] 28/May/2025 12:55:33 - No updates available.
[INFO] 28/May/2025 12:55:38 - Loading User config from: /home/mobsf/.MobSF/config.py
[INFO] 28/May/2025 12:55:40 -
```

In browser
http://127.0.0.1:8000/

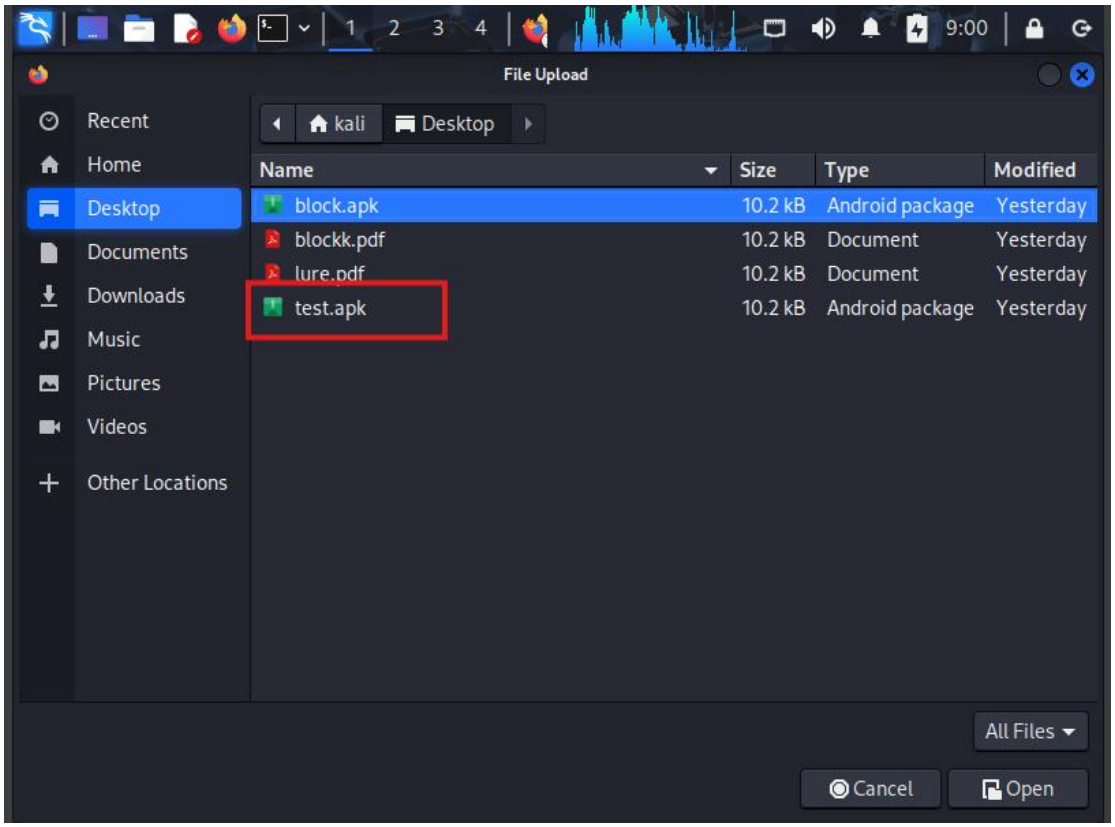


[username: mobsf](#)
[password: mobsf](#)

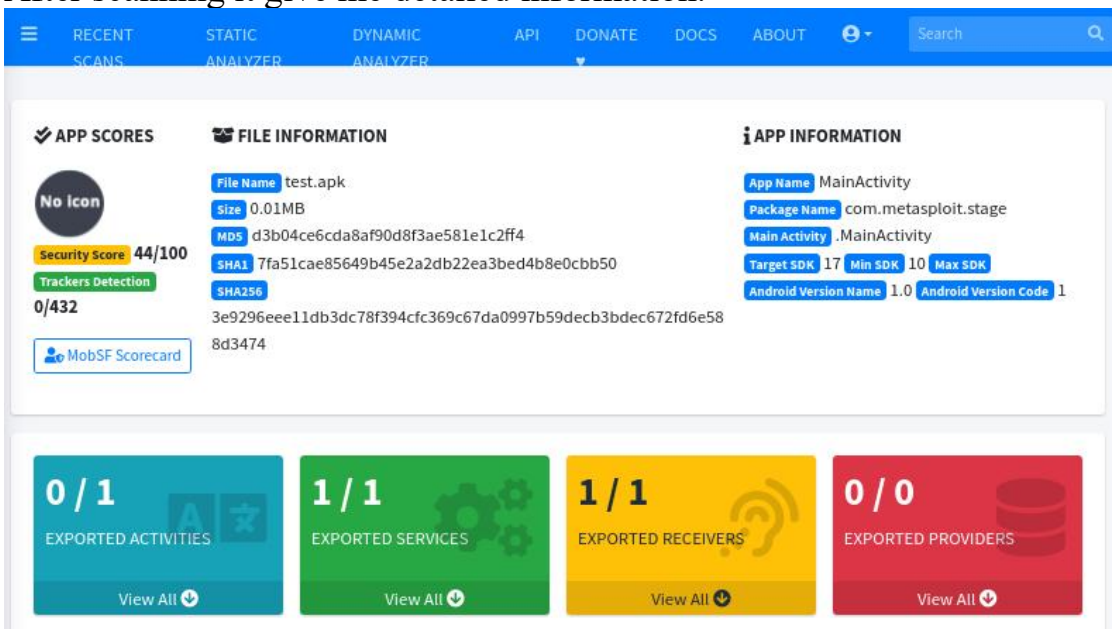
Explain what the APK is, what risks were found, and what each tab in the results means.



Now upload any apk file to scan



After scanning it give me detailed information.



Stop MobSF::

sudo docker stop mobsf

Start Mobsf

sudo docker start mobsf