

# Lab 4 OSRFramework

## Homework Objectives

**PLAGIARISM WILL NOT BE TOLERATED AND WILL RESULT IN 0**

Upon completion of this lab, you will be able to perform the following:

- Use Kali Linux Terminal Emulator and command line interface;
- Install applications using APT (Advanced Package Tool);
- Install OSRFramework;
- Use OSRFramework to perform OSINT (Open Source Intelligence) tasks;

## Lab Materials

- Kali Linux;

## Lab Instructions

- Start Kali Linux VM;
- Open Terminal Emulator;
- Use CLI (Command-line interface) to install ethical hacking tools;
- Enter your name and student ID above (Example: Boris Loza - bloza);
- Answer questions and add screenshots into the corresponding textboxes;
- Save the file on your computer for future reference;
- Save the file again as a “.pdf” file;
- Submit the PDF file for grading.

## Part 1: OSRFramework Overview

OSRFramework (Open Source Research Framework) is a set of libraries developed by i3visio to perform Open Source Intelligence (OSINT) collection tasks. They include applications related to username checking, DNS lookups, information leaks research, deep web search, regular expressions extraction and many others.

Source: <https://github.com/i3visio/osrframework>

### Tools included in the OSRFramework package:

- 1) usufy.py – checks for a user profile in up to 290 different platforms;
- 2) mailfy.py – Check for the existence of a given mail;
- 3) searchfy.py – Performs a query on the platforms in OSRFramework;
- 4) domainfy.py – Checks for the existence of domains;
- 5) phonefy.py – Checks for the existence of a given series of phones;
- 6) entify.py – Use regular expressions to extract entities;

### Interfaces:

- 1) osrfconsole.py – Open Sources Research Framework console interface;
- 2) osrframework\_server.py – Open Sources Research Framework web interface

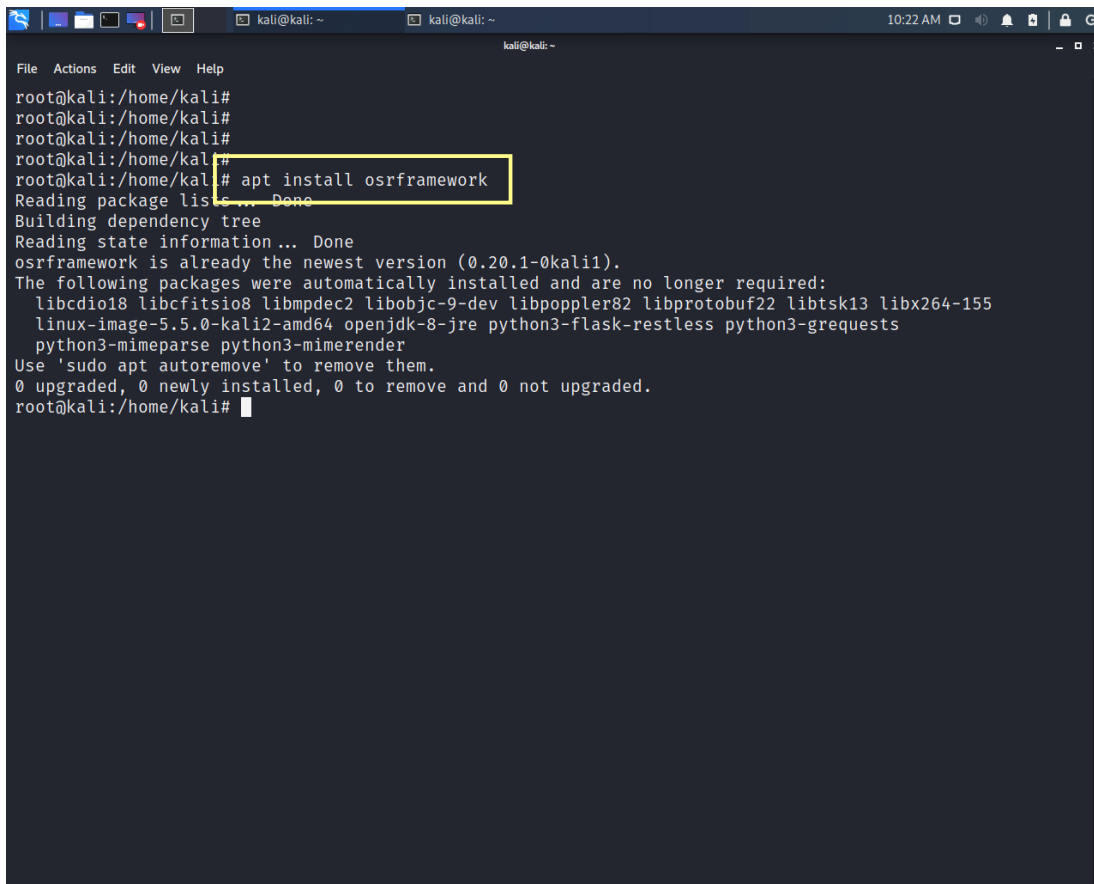
## Part 2: Installing OSRFramework

1. Login into *Kali Linux* with username:password – **kali:kali**
2. Open **Terminal Emulator** and type the following command, when prompted type the root password - *kali*:

```
sudo su
```

3. You will become a **root** user – the superuser. Be careful when you work as a superuser! Root user is the most powerful UNIX user. Working as a root user is not recommended but, in this exercise, it is much easier to work as a root user. Note that your prompt has changed to “**#**” (root user), instead of “**\$**” (regular user).
4. Type the following command to install OSRFramework:

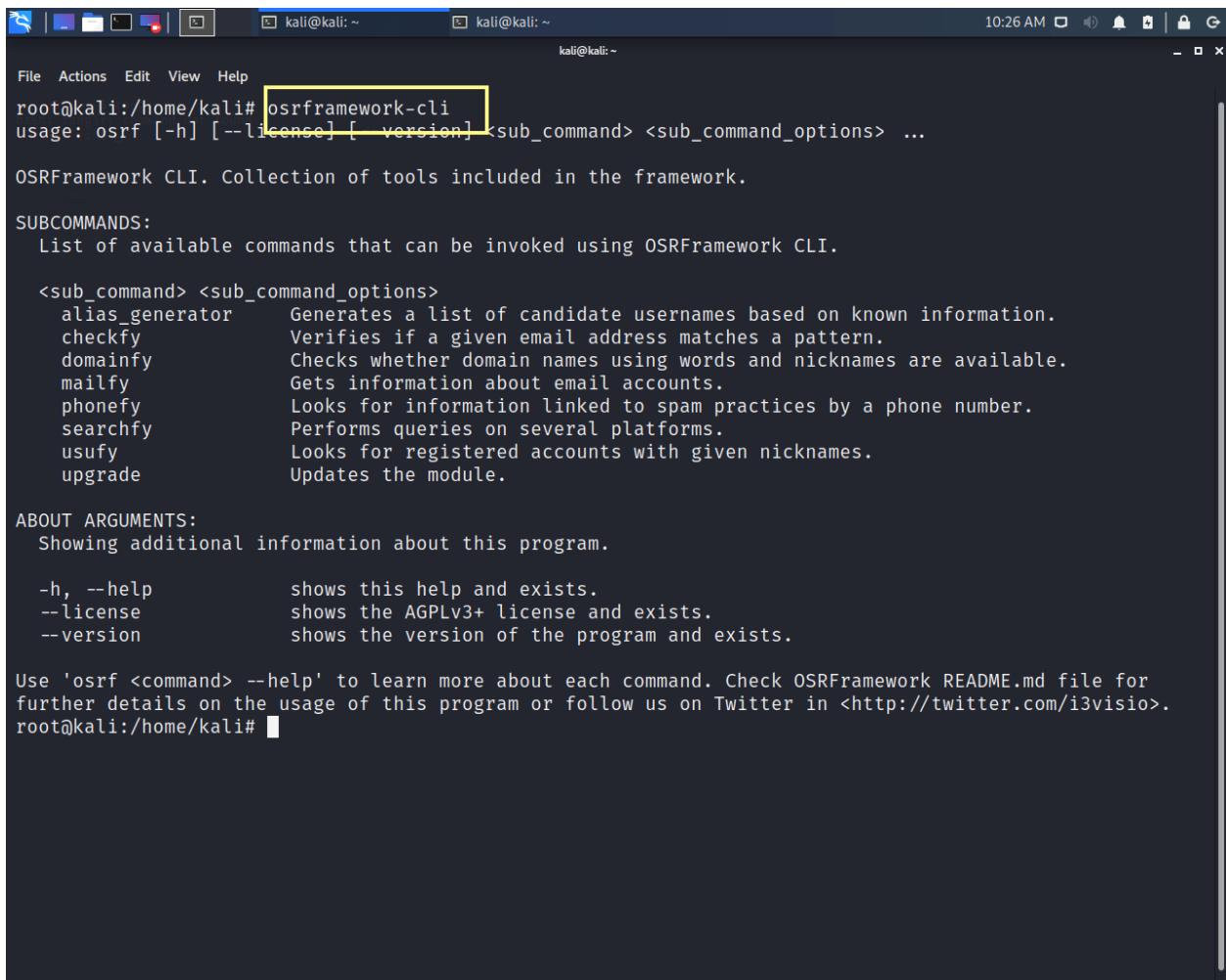
```
apt install osrframework
```

A terminal window on a Kali Linux system. The window title is "kali@kali: ~". The prompt is "root@kali:/home/kali#". The command "apt install osrframework" is entered and highlighted with a yellow box. The output shows that the package is already installed and lists several packages that were automatically installed and are no longer required. The prompt returns to "root@kali:/home/kali#".

```
File Actions Edit View Help
root@kali:/home/kali#
root@kali:/home/kali#
root@kali:/home/kali#
root@kali:/home/kali#
root@kali:/home/kali# apt install osrframework
Reading package lists... Done
Building dependency tree
Reading state information... Done
osrframework is already the newest version (0.20.1-0kali1).
The following packages were automatically installed and are no longer required:
  libcdio18 libcfitsio8 libmpdec2 libobjc-9-dev libpoppler82 libprotobuf22 libtsk13 libx264-155
  linux-image-5.5.0-kali2-amd64 openjdk-8-jre python3-flask-restless python3-grequests
  python3-mimeparse python3-mimerender
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
root@kali:/home/kali#
```

5. After the installation, type the following:

*osrframework-cli*



```
File Actions Edit View Help
root@kali:/home/kali# osrframework-cli
usage: osrf [-h] [--license] [--version] <sub_command> <sub_command_options> ...

OSRFramework CLI. Collection of tools included in the framework.

SUBCOMMANDS:
List of available commands that can be invoked using OSRFramework CLI.

<sub_command> <sub_command_options>
alias_generator    Generates a list of candidate usernames based on known information.
checkfy           Verifies if a given email address matches a pattern.
domainfy          Checks whether domain names using words and nicknames are available.
mailfy            Gets information about email accounts.
phonefy           Looks for information linked to spam practices by a phone number.
searchfy          Performs queries on several platforms.
usufy             Looks for registered accounts with given nicknames.
upgrade           Updates the module.

ABOUT ARGUMENTS:
Showing additional information about this program.

-h, --help        shows this help and exists.
--license         shows the AGPLv3+ license and exists.
--version         shows the version of the program and exists.

Use 'osrf <command> --help' to learn more about each command. Check OSRFramework README.md file for
further details on the usage of this program or follow us on Twitter in <http://twitter.com/i3visio>.
root@kali:/home/kali#
```

6. Read the list of available commands and what they do.

## Part 3: Working with OSRFramework

1. Review the list of the available commands.
2. Type the following command:

*usufy -h*

*usufy -n senecacollege*

3. Review the list of platforms to perform user profile search and the usage of this command.
4. Type the following and check the command syntax:

*usufy*

```
kali@kali: ~  
File Actions Edit View Help  
root@kali:/home/kali# usufy  
usage: usufy  
      (--info <action> | -b | -f <path_to_fuzzing_list> | -l <path_to_nick_list> | -n <nick> [<n  
ick> ... ] | --show_tags)  
      [-p <platform> [<platform> ... ]] [-t <tag> [<tag> ... ]] [-x <platform> [<platform> ... ]]  
      [--avoid_download] [--avoid_processing] [--fuzz_config <path_to_fuzz_list>]  
      [--nonvalid <not_valid_characters>] [-e <sum_ext> [<sum_ext> ... ]]  
      [-L <path_to_log_folder> [-o <path_to_output_folder>] [-w]  
      [-F <alternative_header_file>] [-T <num_threads>] [-h] [-v <verbosity>] [--version]  
usufy: error: one of the arguments --info -b/--benchmark -f/--fuzz -l/--list -n/--nicks --show_tags is  
required  
root@kali:/home/kali#
```

5. Type:

`usufy -n <your_username>`

For example, typing “`usufy -n borisloza`” will produce the following output:

URL	Username	Platform
https://www.canva.com/borisloza	borisloza	Canva
http://borisloza.blogspot.com.es/	borisloza	Blogspot
https://www.causes.com/borisloza	borisloza	Causes
http://www.bucketlistly.com/users/borisloza	borisloza	Bucketlistly
http://www.colourlovers.com/lover/borisloza	borisloza	Colourlovers
http://borisloza.carbonmade.com	borisloza	Carbonmade
https://forums.digitalspy.com/profile/discussions/borisloza	borisloza	Digitalspy
https://www.drupal.org/u/borisloza	borisloza	Drupal
https://site.douban.com/borisloza	borisloza	Douban
http://es.gravatar.com/borisloza.json	borisloza	Gravatar
https://www.freelancer.com/u/borisloza	borisloza	Freelancer
http://www.instagram.com/borisloza	borisloza	Instagram
https://mastodon.xyz/@borisloza	borisloza	MastodonXYZ
https://medium.com/@borisloza	borisloza	Medium
https://www.minds.com/borisloza	borisloza	Minds
http://perfil.mercadolibre.com.ar/borisloza	borisloza	MercadoLibre
http://www.meneame.net/user/borisloza	borisloza	Meneame
https://www.okcupid.com/profile/borisloza	borisloza	Okcupid

6. Take a screenshot of *usufy* command output, using **your own name** and insert it below.

7. *searchfy*: Search for the keyword in Facebook, GitHub, Instagram, Twitter, and YouTube.

\$ *searchfy* -q "senecacollege"

8. In your own words, why is OSINT useful?

9. Answer the following question:



**What does the *usufy* command do in OSRFramework?**

Try other commands:

*mailfy*: Identify the keyword and add the email domains to the end of the keyword,

*and automatically search in haveibeenpwned.com with an API call:*

*mailfy -n <your\_name>* (e.g. *mailfy -n johndaw*)

*domainfy -n senecacollege*

10. answer the following question:



**What does the *domainfy* command do in OSRFramework?**

#### **Part 4: Submit your Lab (Use the lab submission template)**



- Doublecheck all your answers.
- Save the file on your computer for future reference.
- Save the file again as a “.pdf” file.
- Submit the PDF file for grading.