

## Lab - Install Additional Tools Using Katoolin3

### Overview –

In this lab, students will learn how to install all the available tools for Kali. Katoolin3 is a script that helps to install Kali Linux tools on a Linux distribution of your choice built using Ubuntu. This will allow us to use the penetration and forensic tools provided by the Kali Linux development team on our preferred Linux distribution.

This lab can be used to install Katoolin3 on any distribution running Ubuntu 20.04 LTS or greater. This includes Kali and the CSI Linux Analyst.

### Begin the lab!

Logon to Kali or your CSI Linux Analyst. Ensure you have your network adapter set for Internet access using NAT.

Ensure you have taken a most recent Snapshot of your current installation then, and only then, make sure your Kali is up to date.

```
apt-get update && apt-get upgrade && apt-get dist-upgrade
```

```
root@kali:~# apt-get update && apt-get upgrade && apt-get dist-upgrade
```

For CSI Linux Analyst, use the **powerup** command. –

Copy and paste the following commands one at a time into the terminal. Hit enter after each command:

Make sure you have enabled **[universe]** repository. This is for Kali only. CSI Linux has this repository already configured.

```
sudo add-apt-repository "deb http://archive.ubuntu.com/ubuntu  
$(lsb_release -sc) universe"
```

If after running the above syntax, you receive the following terminal output when trying to run an update or upgrade,

```
Reading package lists... Done  
E: The repository 'http://ftp.jp.debian.org/debian main Release' does not  
have a Release file.  
N: Updating from such a repository can't be done securely, and is therefore  
disabled by default.  
N: See apt-secure(8) manpage for repository creation and user configuration  
details.
```

Run the falling commands:

```
echo deb http://http.kali.org/kali kali-rolling main contrib non-free >  
/etc/apt/sources.list
```

```
apt-get update && apt-get upgrade && apt-get dist-upgrade
```

Clone the Katoolin3 GitHub repository using the command:

```
sudo git clone https://github.com/s-h-3-1-1/katoolin3
```

Go to the katoolin3 directory:

```
cd katoolin3/
```

Change the permissions to make Katoolin executable.

```
sudo chmod +x ./install.sh
```

Install Katoolin

```
sudo ./install.sh
```

If the program installed successfully, you would see the following message:

```
Executing: /tmp/apt-key-gpghome.r40wC90o2Q/gpg.1.sh -qq --keyserver  
pool.sks-keyservers.net --recv-keys ED444FF07D8D0BF6  
Successfully installed.  
Run it with 'sudo katoolin3'.
```

Launch the program

```
sudo katoolin3
```

The program opens.

```
KATOOLIN3
~~~~~{ Author: s-h-3-l-1 | Homepage: https://github.com/s-h-3-l-1 }~~~~~

Get:1 http://kali.cs.nctu.edu.tw/kali kali-rolling InRelease [30.5 kB]
Get:2 http://kali.cs.nctu.edu.tw/kali kali-rolling/main amd64 Packages [16.6 MB]
Get:3 http://kali.cs.nctu.edu.tw/kali kali-rolling/contrib amd64 Packages [101 kB]
Get:4 http://kali.cs.nctu.edu.tw/kali kali-rolling/non-free amd64 Packages [194 kB]
Fetched 17.0 MB in 42s (408 kB/s)
Reading package lists...

DISCLAIMER:
Don't update your packages, upgrade your system or
modify your package cache in any other way while
katoolin3 is still running!
```

To view what categories are currently available, type in the number 0.

```
Main Menu
0) View Categories
1) Install All
2) Uninstall All
3) Search repository
4) List installed packages
5) List not installed packages
6) Install Kali Menu
7) Uninstall old katoolin
8) Help
9) Exit

kat> 0

Select a Category
0) Exploitation Tools      8) Sniffing & Spoofing
1) Forensics Tools        9) Stress Testing
2) Hardware Hacking       10) Vulnerability Analysis
3) Information Gathering  11) Web Applications
4) Maintaining Access     12) Wireless Attacks
5) Password Attacks       13) HELP
6) Reporting Tools        14) BACK
7) Reverse Engineering

kat> 
```

When you open any category, Katoolin3 will show you all currently installed tools using the color **orange**.

In this example, I open the category for the forensic tools by typing in the number 1 at the prompt. Every tool highlighted in **orange** is already installed.

```

Select a Category
0) Exploitation Tools      8) Sniffing & Spoofing
1) Forensics Tools        9) Stress Testing
2) Hardware Hacking       10) Vulnerability Analysis
3) Information Gathering  11) Web Applications
4) Maintaining Access     12) Wireless Attacks
5) Password Attacks       13) HELP
6) Reporting Tools        14) BACK
7) Reverse Engineering

kat> 1

Select a Package
0) Bulk Extractor  12) Pdf Parser
1) Capstone Tool   13) pdfid
2) chntpw          14) Distorm3
3) dc3dd           15) Capstone
4) ddrescue        16) Distorm3
5) dumpzilla       17) regripper
6) extundelete     18) volatility
7) foremost        19) xplico
8) galleta         20) ALL
9) guymager        21) HELP
10) Libdistorm3 3  22) BACK
11) p0f

kat> 

```

Multiple tools can be installed at one time by typing in the number of the number, a comma, and the next number.

```

Select a Package
0) Bulk Extractor  12) Pdf Parser
1) Capstone Tool   13) pdfid
2) chntpw          14) Distorm3
3) dc3dd           15) Capstone
4) ddrescue        16) Distorm3
5) dumpzilla       17) regripper
6) extundelete     18) volatility
7) foremost        19) xplico
8) galleta         20) ALL
9) guymager        21) HELP
10) Libdistorm3 3  22) BACK
11) p0f

kat> 1, 4, 5, 19 

```

## Update Katoolin3

Katoolin3 comes with an update script.

Go to the directory where you have cloned Katoolin3:

```
$ cd katoolin3/
```

Make the update script executable:

```
$ chmod +x ./update.sh
```

Run the update script to update Katoolin3 to obtain latest available version.

```
$ sudo ./update.sh
```

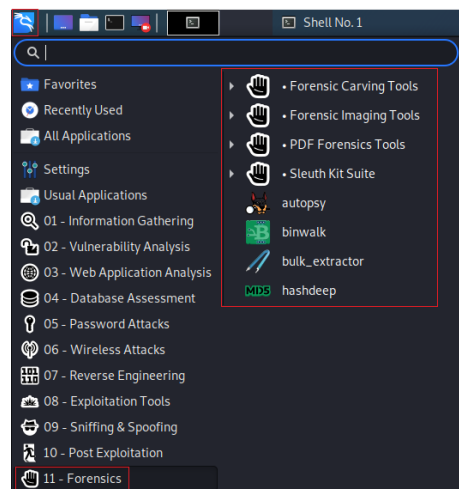
If you would like to install all the tools that are available for installation, first make sure your kali or CSI Linux installation has enough dynamic disk space, and the location of the virtual disks can handle the additional tools.

From the main menu of Katoolin3, at the prompt, type the number 1 and allow all 300 plus tools to install.

```
Main Menu
0) View Categories
1) Install All
2) Uninstall All
3) Search repository
4) List installed packages
5) List not installed packages
6) Install Kali Menu
7) Uninstall old katoolin
8) Help
9) Exit

kat> 
```

You can check your application menu to see what tools have added to each category.



## Summary –

Katoolin3 offers several improvements over katoolin, as listed below.

- Katoolin3 is ported to **Python 3**. Katoolin is written in Python 2.x.
- It provides up-to-date packages. The old katoolin uses an outdated package list.

- The old katoolin breaks if a package isn't available in the repositories anymore. Katoolin3 detects the missing packages and simply ignores them.
- Unlike old Katoolin, it is possible to remove all packages installed by Katoolin3. You can remove packages individually or all at once.
- Some users have complained that they can't update or upgrade their Ubuntu OS after installing the old Katoolin. This issue has been addressed and fixed in the newer Katoolin3 version. The upgrade won't break your system, because the Kali repositories only get enabled during the runtime of katoolin3.
- The old katoolin modifies and even deletes important system configuration files. These potentially dangerous operations have been changed in Katoolin3.
- It is difficult to add new packages to package list in the old Katoolin. Not anymore! Maintaining the package list just got better and a lot easier with Katoolin3.

End of the lab!