

Android Kali NetHunter 2024 Rootless Install

Rootless
NetHunter
Kali Linux
Rootless
Install
2024

Disclaimer

This document DOES NOT promote or encourage any illegal activities!

The content in this document is provided solely for educational purposes and to create awareness!



WARNING!

Requirements

1. A Physical Android Phone. You can do this install on an Android 12+ phone, I will show you how to mitigate the problems with Android 12+ Phantom Processes. See the link to the article below on GitHub on how Android monitors and kills forked child processes of apps when they use too much of the CPU. <https://github.com/termux/termux-app/issues/2366>

The screenshot shows a GitHub comment from a user named 'agnostic-apollo' posted on October 30, 2021. The comment discusses a mechanism in Android 12 that monitors forked child processes started by apps and kills them if they consume too much CPU when the app is in the background. The comment is displayed in a light gray box with a dark gray header containing the user's profile picture, name, and timestamp.

agnostic-apollo commented on 30 Oct 2021 • edited

Member ...

Android 12 via 15755084 and updated via 5706277f has added a mechanism to monitor forked child processes started by apps and kills them if they consume too much CPU if app is in background.



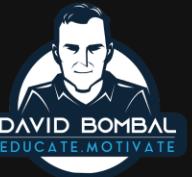
Android Kali NetHunter Rootless Install

1. You will need to install Termux. You can get Termux from the F-Droid store or from their GitHub repo using one of the following links (In the demo we use GitHub):

- <https://f-droid.org/packages/com.termux/>
- <https://github.com/termux/termux-app/releases>

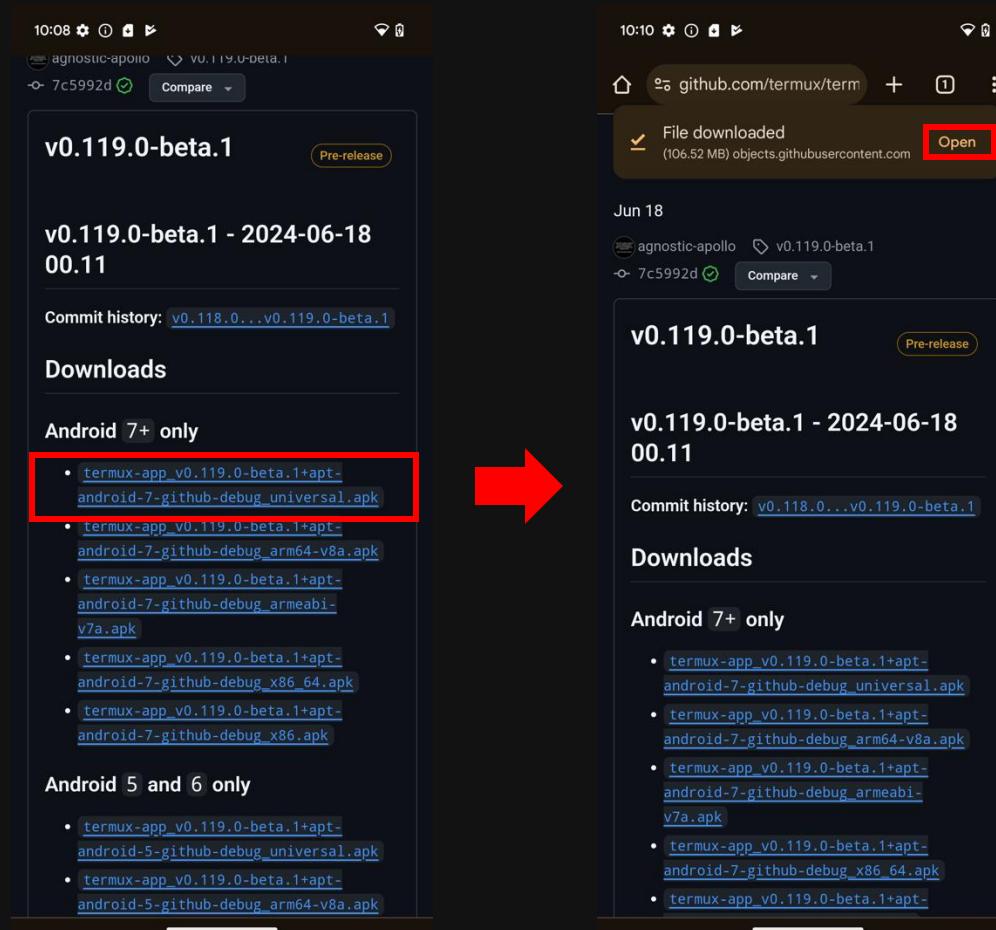
Take note that the official Termux Wiki and Termux GitHub pages indicates that you should not install the outdated version hosted on the Google Play Store.

2. Download the latest Termux version at the time of writing it is termux-app_v0.119.0-beta.1+apt-android-7-github-debug_universal.apk from the GitHub link above.

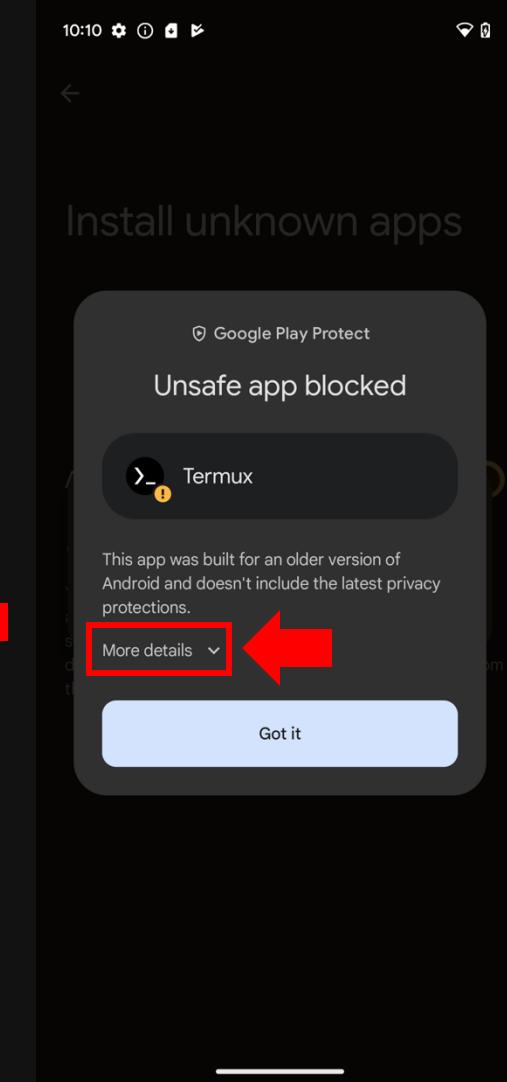
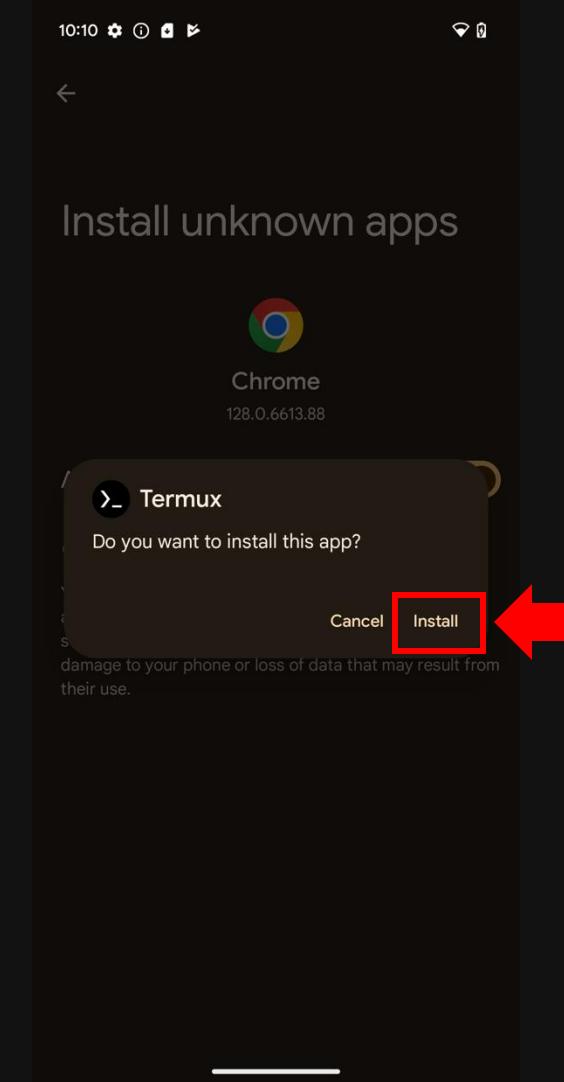
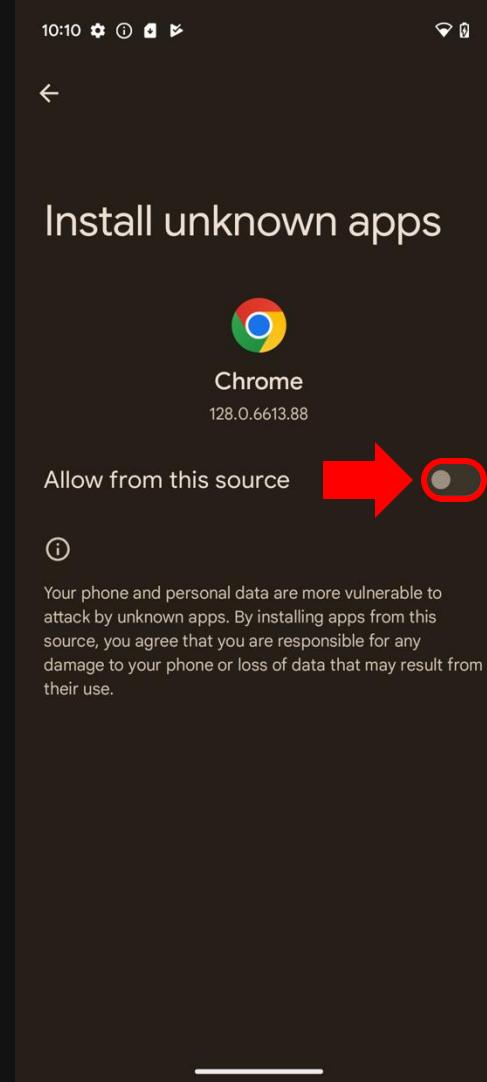
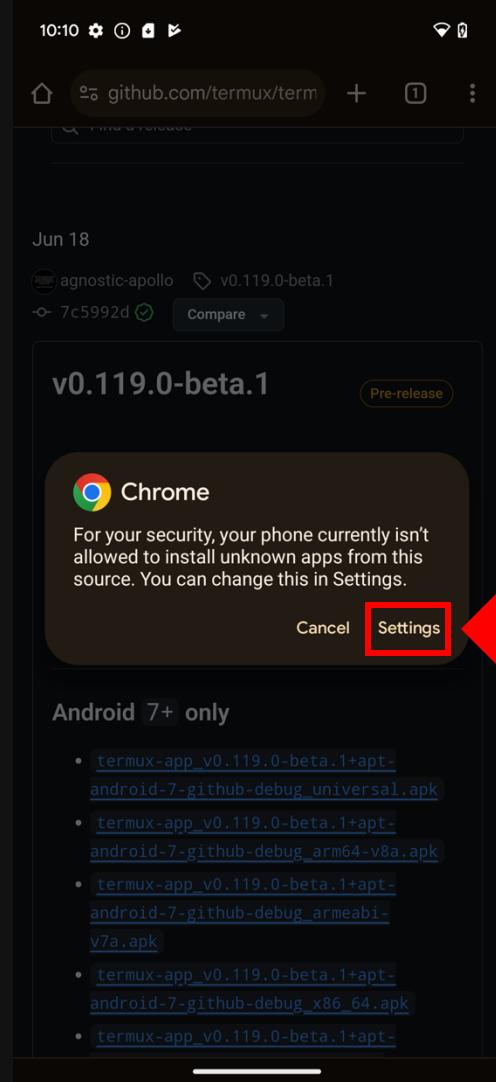


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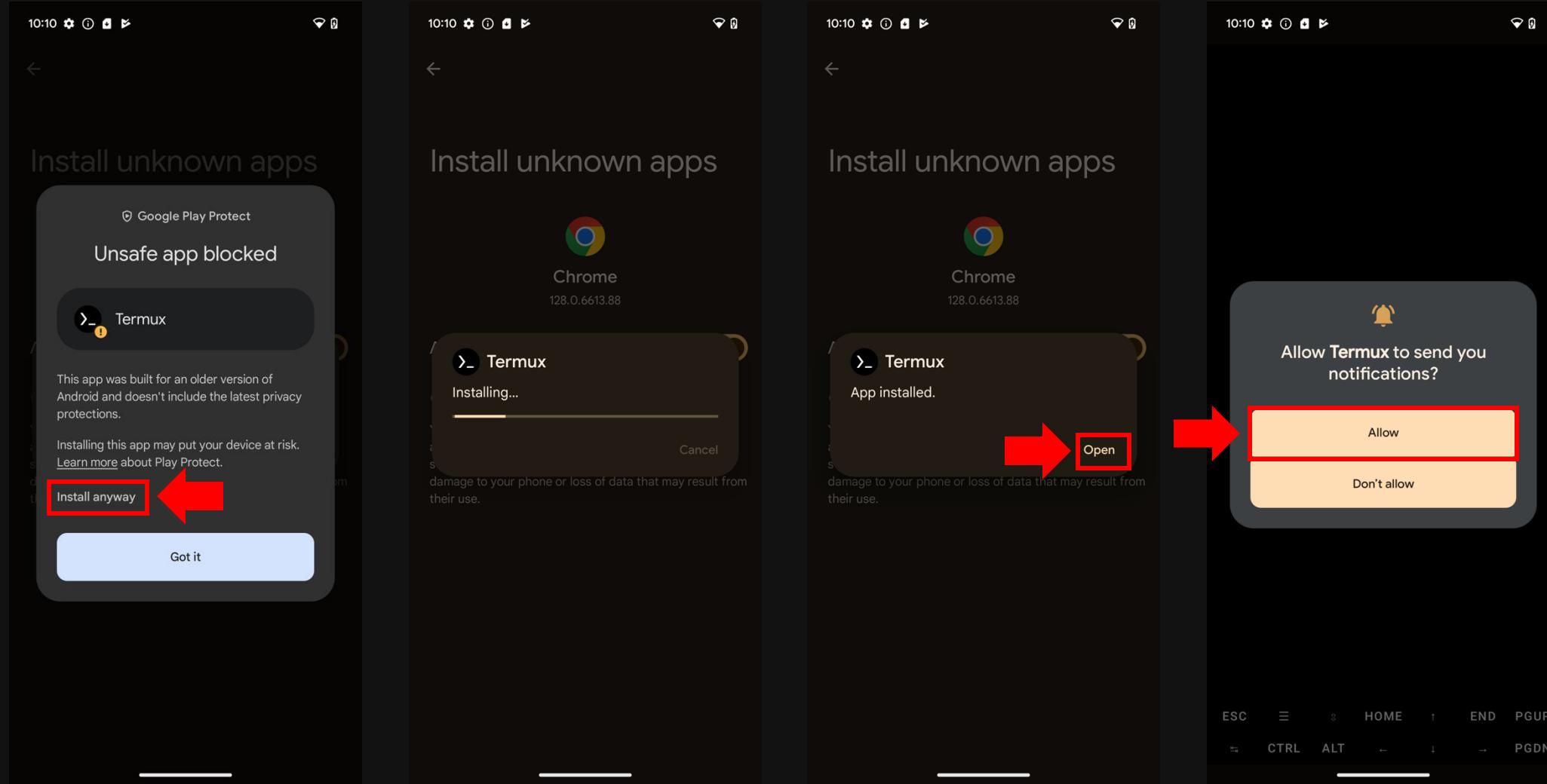
3. Open and Install the downloaded APK file. Press on Install and then Open.



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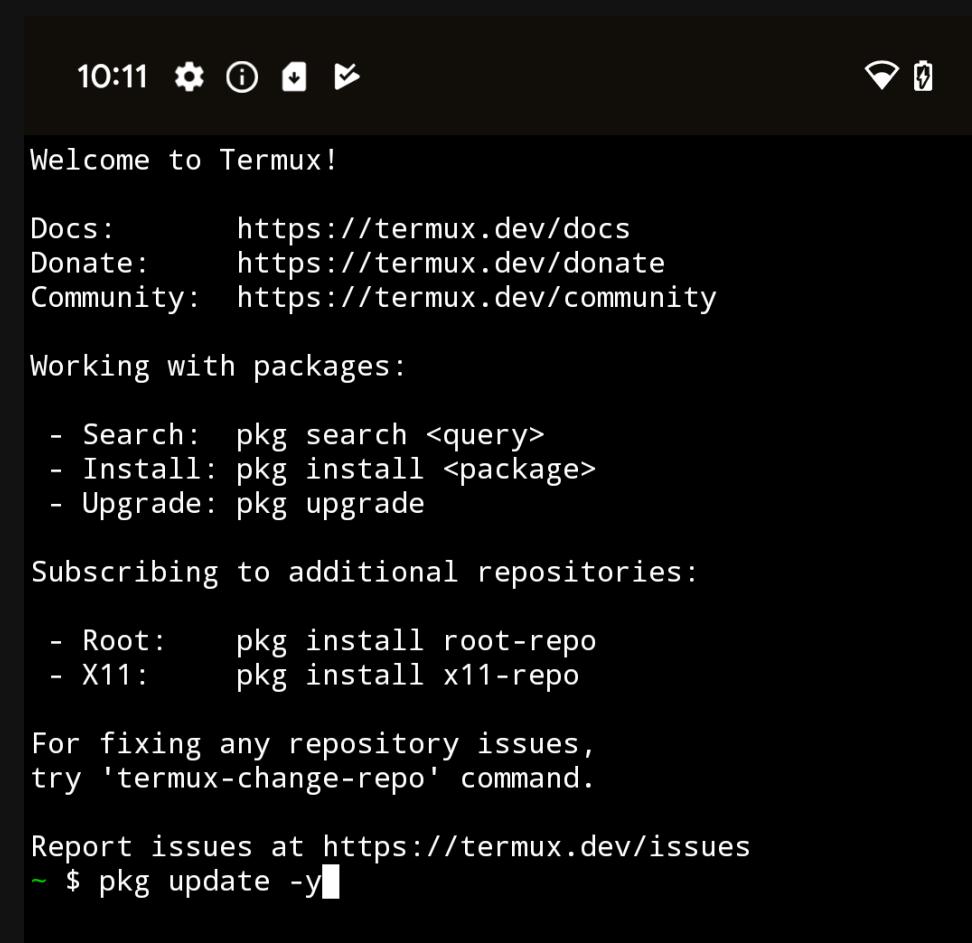


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4. Enter the following command: `pkg update -y`



10:11 ⚙️ ⓘ ⏺ 🔋

Welcome to Termux!

Docs: <https://termux.dev/docs>
Donate: <https://termux.dev/donate>
Community: <https://termux.dev/community>

Working with packages:

- Search: `pkg search <query>`
- Install: `pkg install <package>`
- Upgrade: `pkg upgrade`

Subscribing to additional repositories:

- Root: `pkg install root-repo`
- X11: `pkg install x11-repo`

For fixing any repository issues,
try '`termux-change-repo`' command.

Report issues at <https://termux.dev/issues>

```
~ $ pkg update -y
```



Android Kali NetHunter Rootless Install

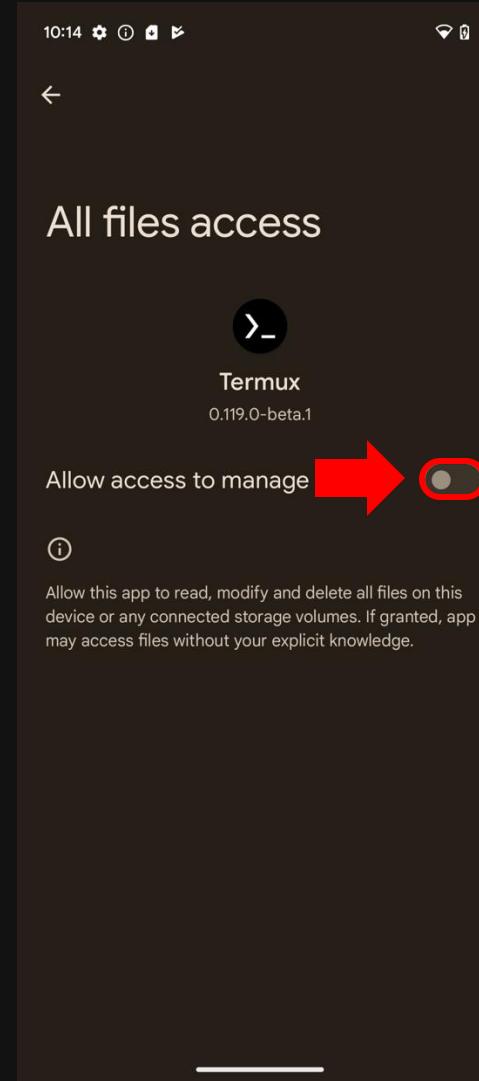
5. Enter the following command: **termux-setup-storage**
 - In order to have shared storage you need to give Termux storage access permission.
Doesn't give access to external connected storage devices.



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```
10:14 ⚙️ ⓘ 🔍 🌐 🔋

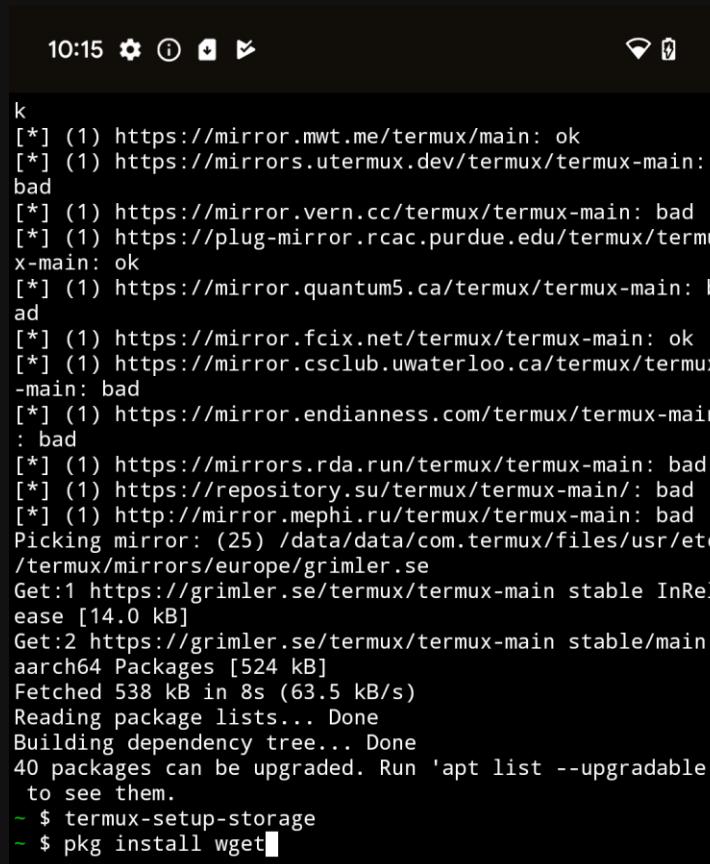
[*] (1) https://termux.danyael.xyz/termux/termux-main: ok
[*] (1) https://mirror.mwt.me/termux/main: ok
[*] (1) https://mirrors.utermux.dev/termux/termux-main: bad
[*] (1) https://mirror.vern.cc/termux/termux-main: bad
[*] (1) https://plug-mirror.rcac.purdue.edu/termux/termux-main: ok
[*] (1) https://mirror.quantum5.ca/termux/termux-main: bad
[*] (1) https://mirror.fcix.net/termux/termux-main: ok
[*] (1) https://mirror.csclub.uwaterloo.ca/termux/termux-main: bad
[*] (1) https://mirror.endianness.com/termux/termux-main: bad
[*] (1) https://mirrors.rda.run/termux/termux-main: bad
[*] (1) https://repository.su/termux/termux-main/: bad
[*] (1) http://mirror.mephi.ru/termux/termux-main: bad
Picking mirror: (25) /data/data/com.termux/files/usr/etc/termux/mirrors/europe/grimler.se
Get:1 https://grimler.se/termux/termux-main stable InRelease [14.0 kB]
Get:2 https://grimler.se/termux/termux-main stable/main aarch64 Packages [524 kB]
Fetched 538 kB in 8s (63.5 kB/s)
Reading package lists... Done
Building dependency tree... Done
40 packages can be upgraded. Run 'apt list --upgradable' to see them.
~ $ termux-setup-storage
```



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7. Install wget and when you're asked Do you want to continue, press Y and Enter.

```
pkg install wget
```



The screenshot shows a Termux terminal window on an Android device. The status bar at the top indicates the time is 10:15 and shows signal strength and battery level. The terminal window displays the command 'pkg install wget' followed by its execution output. The output shows the package manager checking multiple mirrors for 'termux-main' and selecting 'grimler.se' as the mirror. It then lists packages to be downloaded, including 'termux-setup-storage' and 'wget'. The process includes fetching files, reading package lists, building dependency trees, and upgrading 40 packages.

```
10:15 🚨 ⓘ 🔋 🔍

k
[*] (1) https://mirror.mwt.me/termux/main: ok
[*] (1) https://mirrors.upermox.dev/termux/termux-main:
bad
[*] (1) https://mirror.vern.cc/termux/termux-main: bad
[*] (1) https://plug-mirror.rcac.purdue.edu/termux/termu
x-main: ok
[*] (1) https://mirror.quantum5.ca/termux/termux-main: b
ad
[*] (1) https://mirror.fcix.net/termux/termux-main: ok
[*] (1) https://mirror.csclub.uwaterloo.ca/termux/termux
-main: bad
[*] (1) https://mirror.endianness.com/termux/termux-main
: bad
[*] (1) https://mirrors.rda.run/termux/termux-main: bad
[*] (1) https://repository.su/termux/termux-main/: bad
[*] (1) http://mirror.mephi.ru/termux/termux-main: bad
Picking mirror: (25) /data/data/com.termux/files/usr/etc
/termux/mirrors/europe/grimler.se
Get:1 https://grimler.se/termux/termux-main stable InRel
ease [14.0 kB]
Get:2 https://grimler.se/termux/termux-main stable/main
aarch64 Packages [524 kB]
Fetched 538 kB in 8s (63.5 kB/s)
Reading package lists... Done
Building dependency tree... Done
40 packages can be upgraded. Run 'apt list --upgradable'
to see them.
- $ termux-setup-storage
- $ pkg install wget
```



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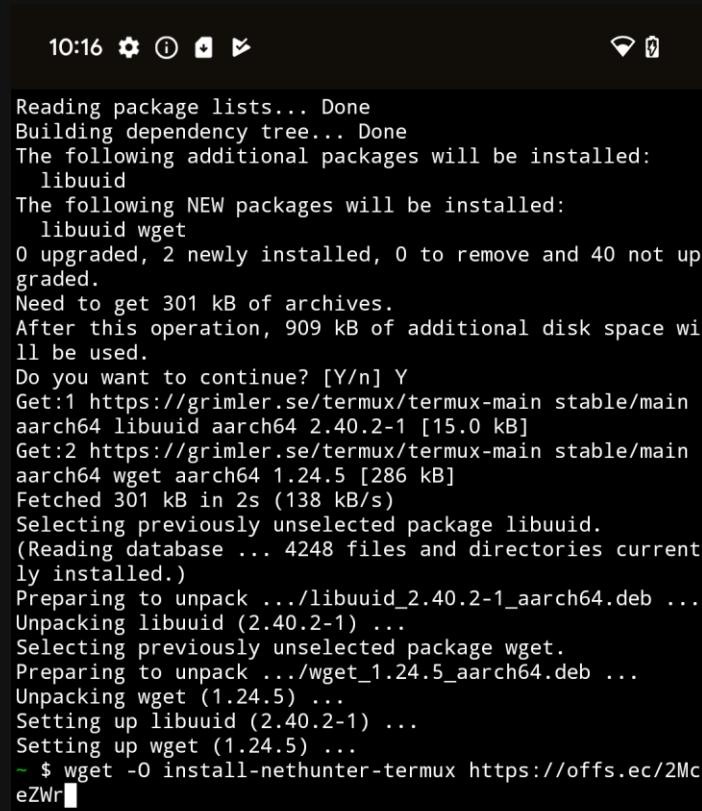
8. When you get asked to “Do you want to continue” press Y and Enter.



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9. Download the NetHunter install file. **Ensure that you enter the correct address.**

```
 wget -O install-nethunter-termux https://offs.ec/2MceZWr
```



The screenshot shows a Termux terminal window with a black background and white text. At the top, there's a status bar with icons for signal strength, battery level, and time (10:16). Below the status bar, the terminal displays the following text:

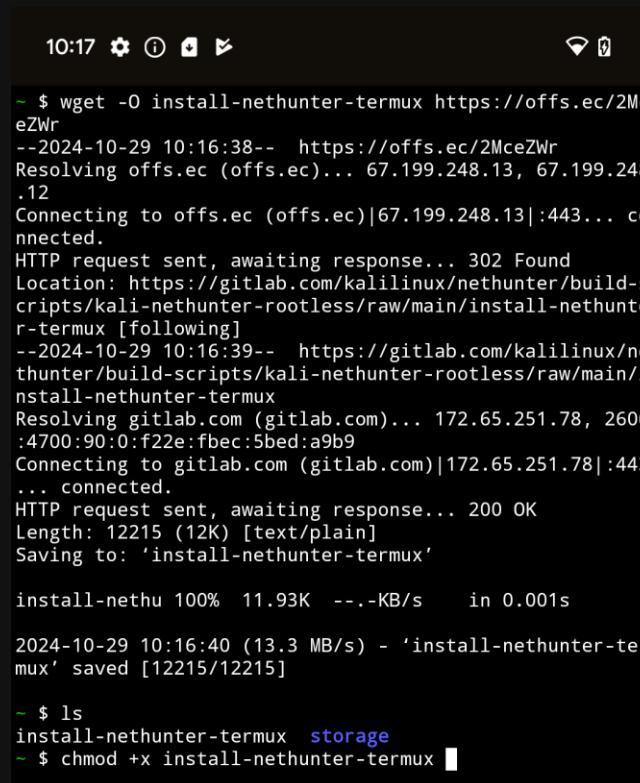
```
Reading package lists... Done
Building dependency tree... Done
The following additional packages will be installed:
  libuuid
The following NEW packages will be installed:
  libuuid wget
0 upgraded, 2 newly installed, 0 to remove and 40 not up
graded.
Need to get 301 kB of archives.
After this operation, 909 kB of additional disk space wi
ll be used.
Do you want to continue? [Y/n] Y
Get:1 https://grimler.se/termux/termux-main stable/main
  aarch64 libuuid aarch64 2.40.2-1 [15.0 kB]
Get:2 https://grimler.se/termux/termux-main stable/main
  aarch64 wget aarch64 1.24.5 [286 kB]
Fetched 301 kB in 2s (138 kB/s)
Selecting previously unselected package libuuid.
(Reading database ... 4248 files and directories current
ly installed.)
Preparing to unpack .../libuuid_2.40.2-1_aarch64.deb ...
Unpacking libuuid (2.40.2-1) ...
Selecting previously unselected package wget.
Preparing to unpack .../wget_1.24.5_aarch64.deb ...
Unpacking wget (1.24.5) ...
Setting up libuuid (2.40.2-1) ...
Setting up wget (1.24.5) ...
$ wget -O install-nethunter-termux https://offs.ec/2Mc
eZWr
```



Android Kali NetHunter Rootless Install

10. Change the permissions so that you can execute the file:

```
chmod +x install-nethunter-termux
```



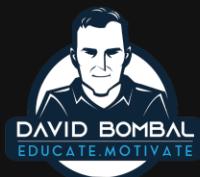
The screenshot shows a Termux terminal window with a black background and white text. At the top, it displays the time as 10:17 and various system icons. The main area of the terminal shows the command \$ wget -O install-nethunter-termux https://offs.ec/2McEZWr being run. The output of the wget command is displayed, showing the download of the script from a GitLab repository. Once the download is complete, the user runs the command \$ chmod +x install-nethunter-termux to give the script execute permissions.

```
10:17 🌐 ⓘ 📡 🔍
$ wget -O install-nethunter-termux https://offs.ec/2McEZWr
--2024-10-29 10:16:38-- https://offs.ec/2McEZWr
Resolving offs.ec (offs.ec)... 67.199.248.13, 67.199.248.12
Connecting to offs.ec (offs.ec)|67.199.248.13|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://gitlab.com/kalilinux/nethunter/build-scripts/kali-nethunter-rootless/raw/main/install-nethunter-termux [following]
--2024-10-29 10:16:39-- https://gitlab.com/kalilinux/nethunter/build-scripts/kali-nethunter-rootless/raw/main/install-nethunter-termux
Resolving gitlab.com (gitlab.com)... 172.65.251.78, 2606:4700:90::f22e:fbec:5bed:a9b9
Connecting to gitlab.com (gitlab.com)|172.65.251.78|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 12215 (12K) [text/plain]
Saving to: 'install-nethunter-termux'

install-nethu 100% 11.93K ---KB/s   in 0.001s

2024-10-29 10:16:40 (13.3 MB/s) - 'install-nethunter-termux' saved [12215/12215]

$ ls
install-nethunter-termux  storage
$ chmod +x install-nethunter-termux
```



Android Kali NetHunter Rootless Install

11. Type the following command to execute the downloaded install file:

./install-nethunter-termux



Android Kali NetHunter Rootless Install

12. Enter the image that you want to install. We are going to install 1.

```
10:17 🔍 ⓘ 🔋 🔋

#####
##          ##
## 88      a8P      db      88      88  ##
## 88      .88'     d88b    88      88  ##
## 88      88'     d8 '8b   88      88  ##
## 88 d88     d8'  '8b   88      88  ##
## 8888'88.    d8YaaaaY8b 88      88  ##
## 88P      Y8b     d8'.....'8b 88      88  ##
## 88      '88.    d8'     '8b  88      88  ##
## 88      Y8b d8'     '8b  8888888888 88  ##
##          ##
##### ##### NetHunter #####
[*] Checking device architecture ...
[1] NetHunter ARM64 (full)
[2] NetHunter ARM64 (minimal)
[3] NetHunter ARM64 (nano)
Enter the image you want to install: [REDACTED]
```

```
10:17 🔍 ⓘ 🔋 🔋

#####
##          ##
## 88      a8P      db      88      88  ##
## 88      .88'     d88b    88      88  ##
## 88      88'     d8 '8b   88      88  ##
## 88 d88     d8'  '8b   88      88  ##
## 8888'88.    d8YaaaaY8b 88      88  ##
## 88P      Y8b     d8'.....'8b 88      88  ##
## 88      '88.    d8'     '8b  88      88  ##
## 88      Y8b d8'     '8b  8888888888 88  ##
##          ##
##### ##### NetHunter #####
[*] Checking device architecture ...
[1] NetHunter ARM64 (full)
[2] NetHunter ARM64 (minimal)
[3] NetHunter ARM64 (nano)
Enter the image you want to install: 1 [REDACTED]
```



Android Kali NetHunter Rootless Install

13. The previous step will only download the file. So, we need to run the command

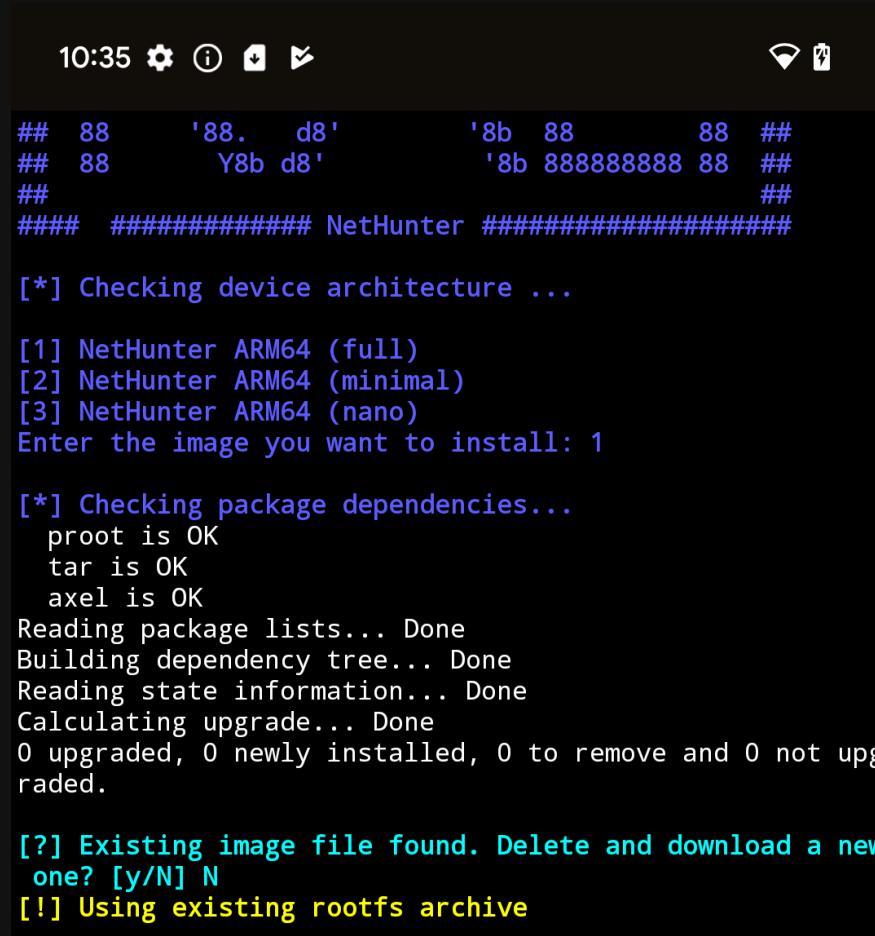
```
./install-nethunter-termux
```

again so that it install Kali Nethunter Lite.



Android Kali NetHunter Rootless Install

14. Press N when asked whether you want to Delete and download a new image file.



The screenshot shows a terminal window on an Android device. The top status bar indicates the time is 10:35 and shows connectivity and battery icons. The terminal output is as follows:

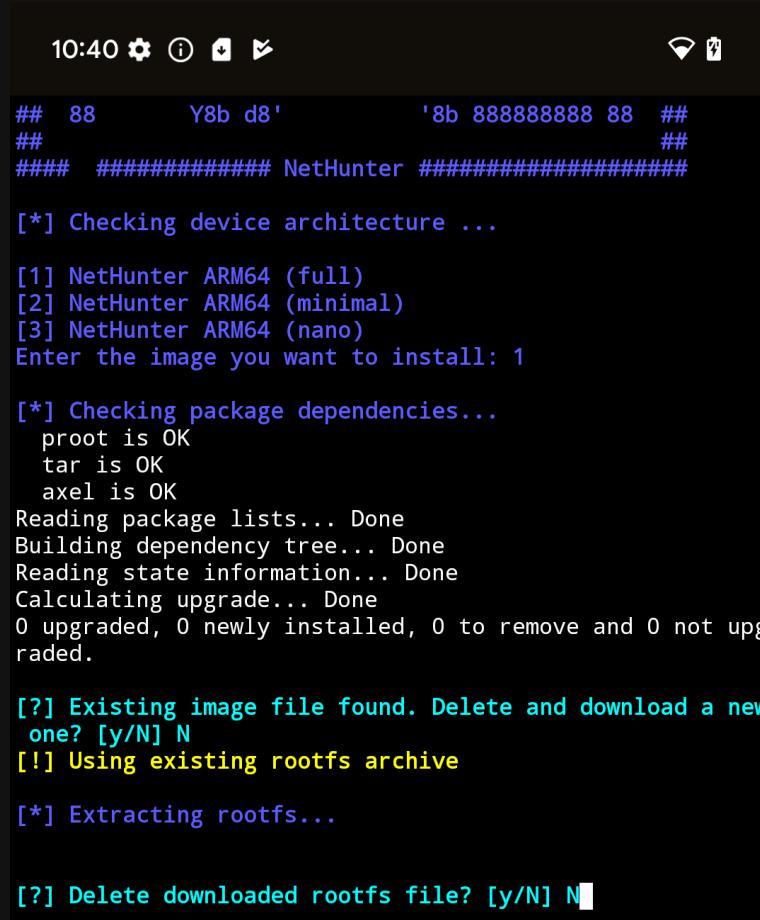
```
## 88      '88. d8'          '8b  88      88  ##
## 88      Y8b d8'          '8b 88888888 88  ##
##                      ##
##### ##### NetHunter #####
[*] Checking device architecture ...
[1] NetHunter ARM64 (full)
[2] NetHunter ARM64 (minimal)
[3] NetHunter ARM64 (nano)
Enter the image you want to install: 1
[*] Checking package dependencies...
    proot is OK
    tar is OK
    axel is OK
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

[?] Existing image file found. Delete and download a new one? [y/N] N
[!] Using existing rootfs archive
```



Android Kali NetHunter Rootless Install

15. The installation will take a while, when asked to delete rootfs, enter N.



10:40 🔍 ⓘ 📺 ⚡

```
## 88      Y8b d8'      '8b 88888888 88 ##
##                                     ##
#### ##### NetHunter #####
[*] Checking device architecture ...
[1] NetHunter ARM64 (full)
[2] NetHunter ARM64 (minimal)
[3] NetHunter ARM64 (nano)
Enter the image you want to install: 1

[*] Checking package dependencies...
    proot is OK
    tar is OK
    axel is OK
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

[?] Existing image file found. Delete and download a new one? [y/N] N
[!] Using existing rootfs archive

[*] Extracting rootfs...

[?] Delete downloaded rootfs file? [y/N] N
```



Android Kali NetHunter Rootless Install

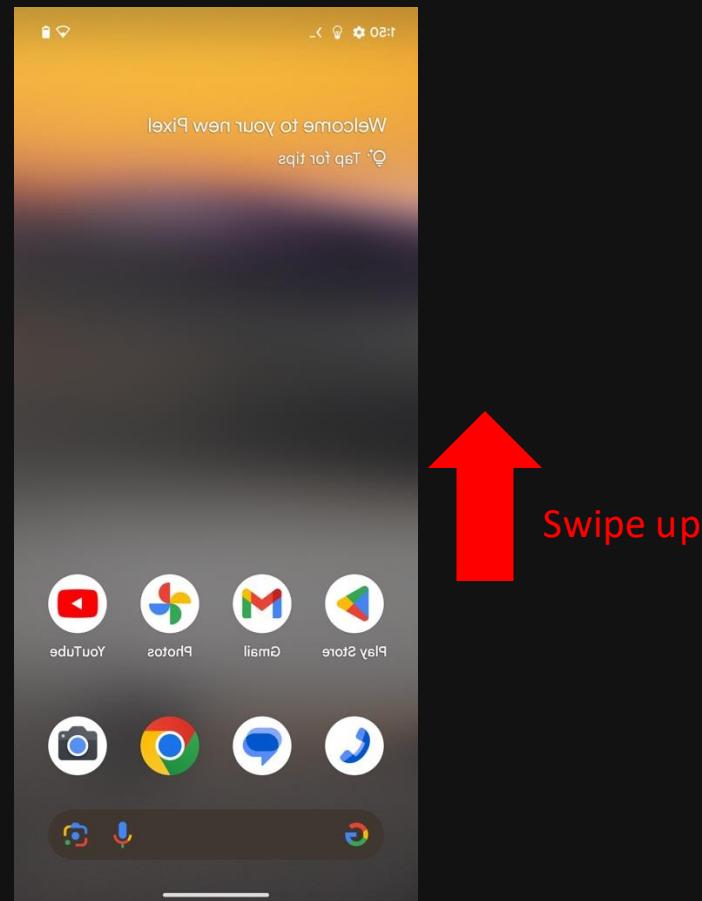
16. To start Kali NetHunter you can use the following commands:

- To start the CLI `nethunter`
- To setup the NetHunter KeX password `nethunter kex passwd`
- To start NetHunter KeX (Password will be set on first startup) `nethunter kex`
- To stop the NetHunter KeX GUI `nethunter kex stop`
- To run NetHunter as root `nethunter -r`
- You replace `nethunter` with `nh` in all these commands. `nh`



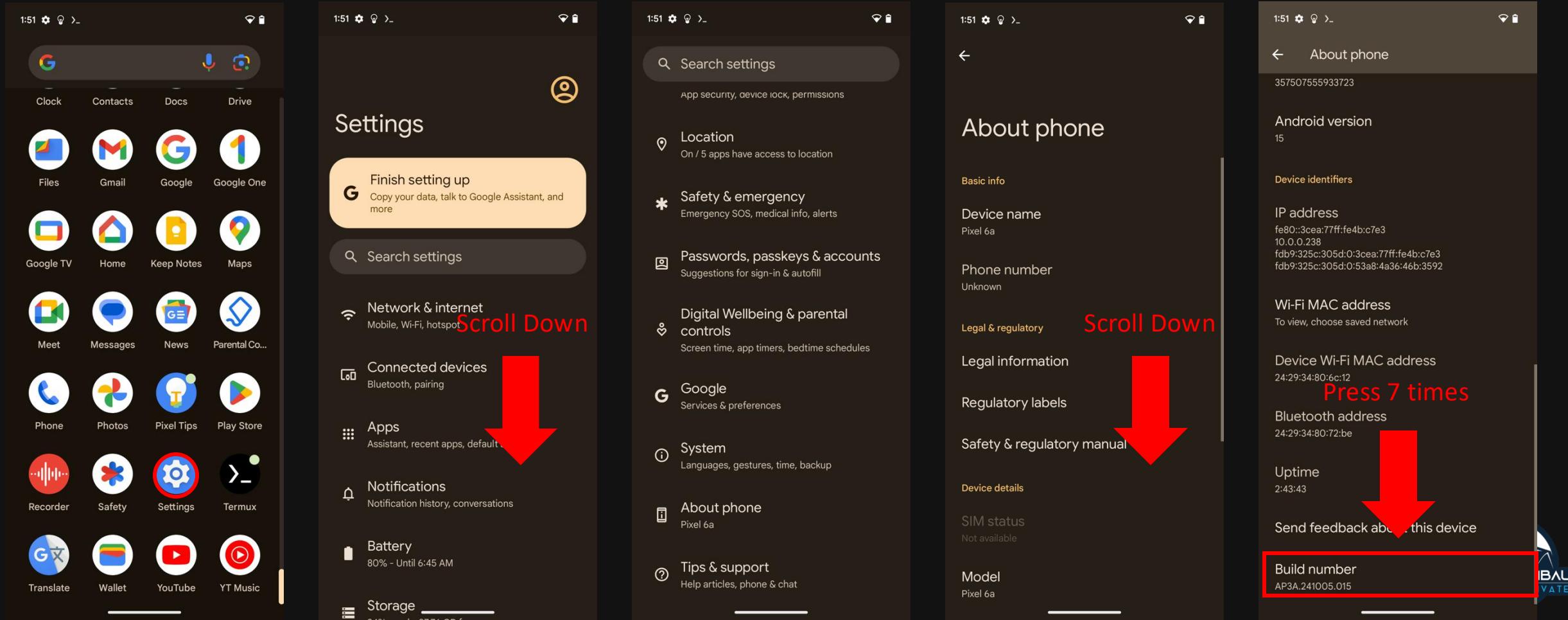
Android Kali NetHunter Rootless Install – Stop killing of child processes

1. Swipe up to see all the applications.



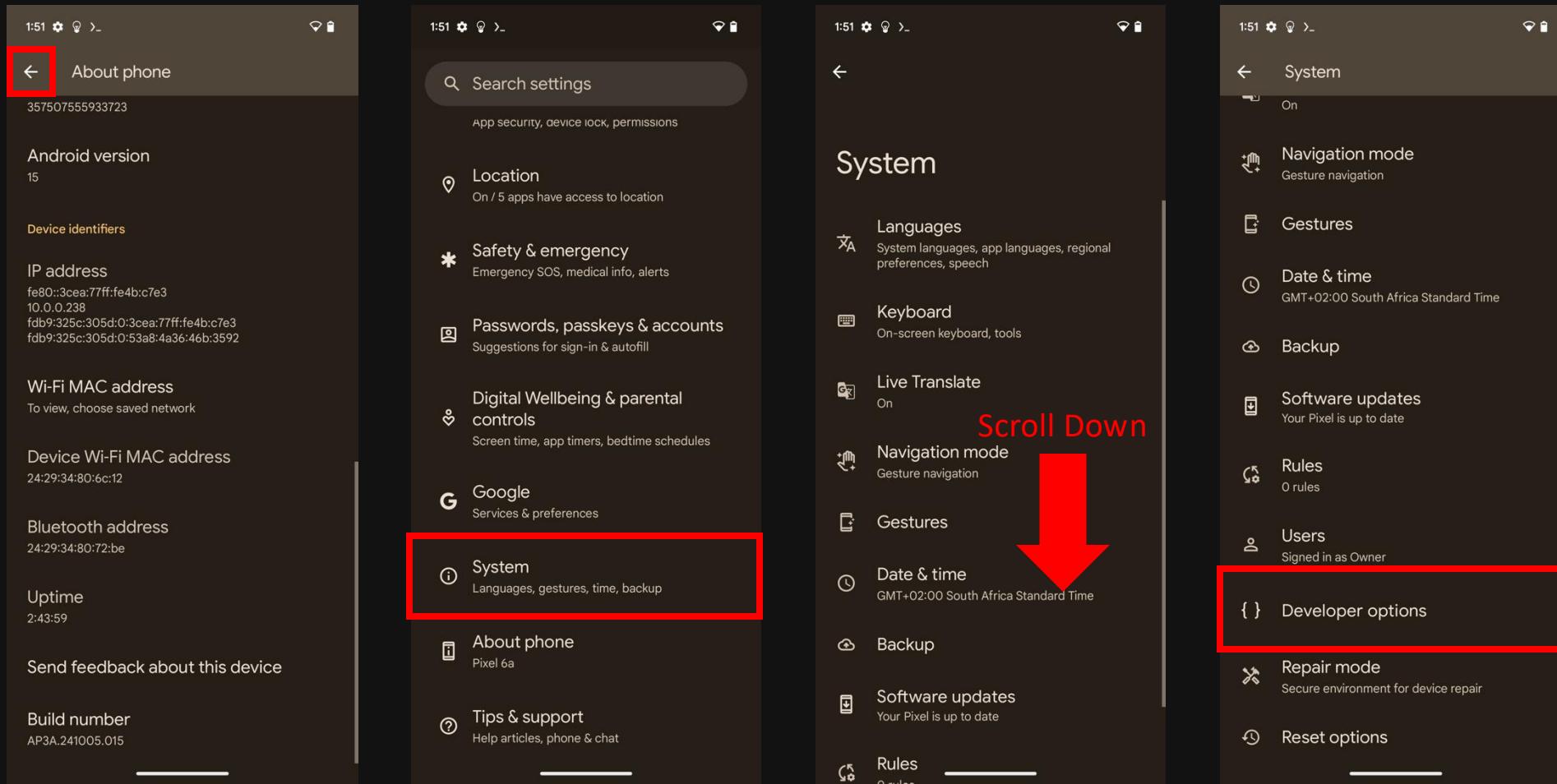
Android Kali NetHunter Rootless Install – Stop killing of child processes

2. Press on Settings. Click on About phone. Press the Build number 7 times.



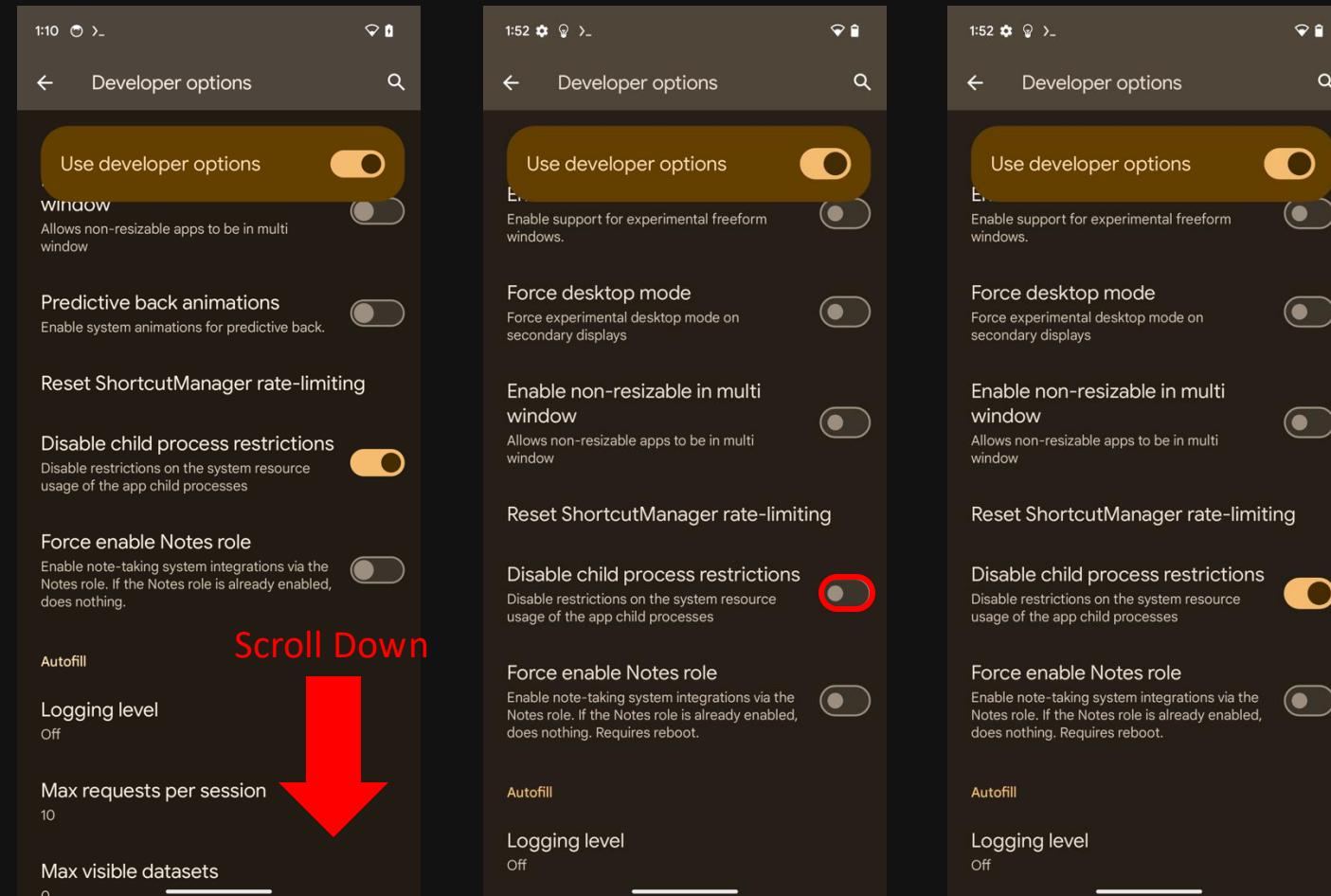
Android Kali NetHunter Rootless Install – Stop killing of child processes

2. Go to Developer options.



Android Kali NetHunter Rootless Install – Stop killing of child processes

3. Go down to Disable child process restrictions and turn it on.



Android Kali NetHunter Rootless Install – Start nh and nh kex

- Once you run nh you are now in the Kali NetHunter CLI.



```
13:17 67%
## 88      a8P      db      88      88  ##
## 88      .88'     d88b    88      88  ##
## 88      88'     d8' '8b   88      88  ##
## 88  d88     d8'  '8b   88      88  ##
## 8888'88.   d8YaaaaY8b  88      88  ##
## 88P  Y8b     d8' '8888b 88      88  ##
## 88      '88.   d8'     '8b  88      88  ##
## 88      Y8b d8'     '8b  8888888888 88  ##
##                                     ##
#### ##### NetHunter #####
[=] Kali NetHunter for Termux installed successfully
[+] To start Kali NetHunter, type:
[+] nethunter          # To start NetHunter CLI
[+] nethunter kex passwd # To set the KeX password
[+] nethunter kex &      # To start NetHunter GUI
[+] nethunter kex stop   # To stop NetHunter GUI
[+] nethunter -r         # To run NetHunter as root
[+] nh                  # Shortcut for nethunter

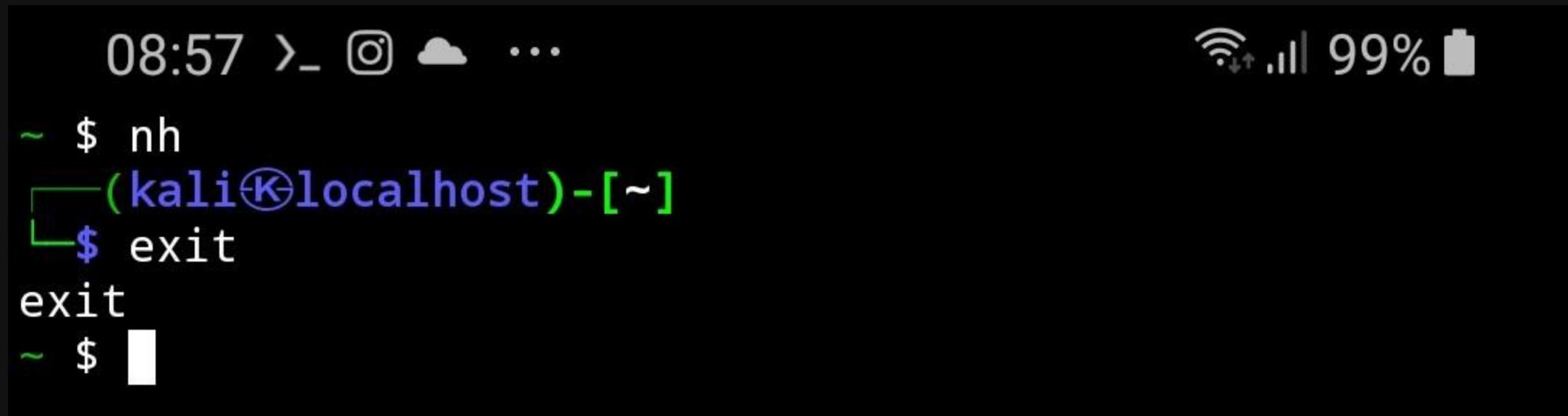
~ $ nh
└─(kali㉿localhost)-[~]
└$
```

ESC / - HOME ↑ END PGUP
→ CTRL ALT ← ↓ → PGDN



Android Kali NetHunter Rootless Install – Start nh and nh kex

2. You can exit the NetHunter CLI by entering exit.



A screenshot of the Android Kali NetHunter Rootless CLI. The screen shows a terminal window with the following text:

```
08:57 >_ 📸 ☁ ...  
~ $ nh  
└─(kali㉿localhost)-[~]  
└$ exit  
exit  
~ $ █
```

The terminal window has a dark background with light-colored text. The status bar at the top shows the time (08:57), signal strength, and battery level (99%).



Android Kali NetHunter Rootless Install – Start nh and nh kex

3. Set the password for KeX VNC by running nh kex for the first time. You'll use the password.

```
13:18 📸 🚶 📧 ⏮ ... ⌘ 67% 🕵️
~ $ nh kex
vncserver: No matching VNC server running for this user!
vncserver: No matching VNC server running for this user!
Password:
Verify:
Would you like to enter a view-only password (y/n)? █
```



Android Kali NetHunter Rootless Install

4. Remember the port number. You will use it in later.

```
10:00 >_ 🖼 ↵ ... ⚡.ll 93% 🕵  
* Upgrade packages: pkg upgrade  
  
Subscribing to additional repositories:  
* Root:     pkg install root-repo  
* X11:      pkg install x11-repo  
  
Report issues at https://termux.com/issues  
  
~ $ nh kex  
vncserver: No matching VNC server running for this user!  
vncserver: No matching VNC server running for this user!  
  
NetHunter KeX server sessions:  


| X DISPLAY # | RFB PORT # | PROCESS ID | SERVER   |
|-------------|------------|------------|----------|
| :1          | 5901       | 30136      | Xtigervn |
| c           |            |            |          |

  
You can use the KeX client to connect to any of these displays.  

```



Android Kali NetHunter Rootless Install

5. Set the password for KeX VNC by running nh kex for the first time. Say no to entering a view-only password.

```
13:18 📸 🚙 📧 ⏮ ... ⌘ 67% 🕵️
~ $ nh kex
vncserver: No matching VNC server running for this user!
vncserver: No matching VNC server running for this user!
Password:
Verify:
Would you like to enter a view-only password (y/n)? █
```



Android Kali NetHunter Rootless Install

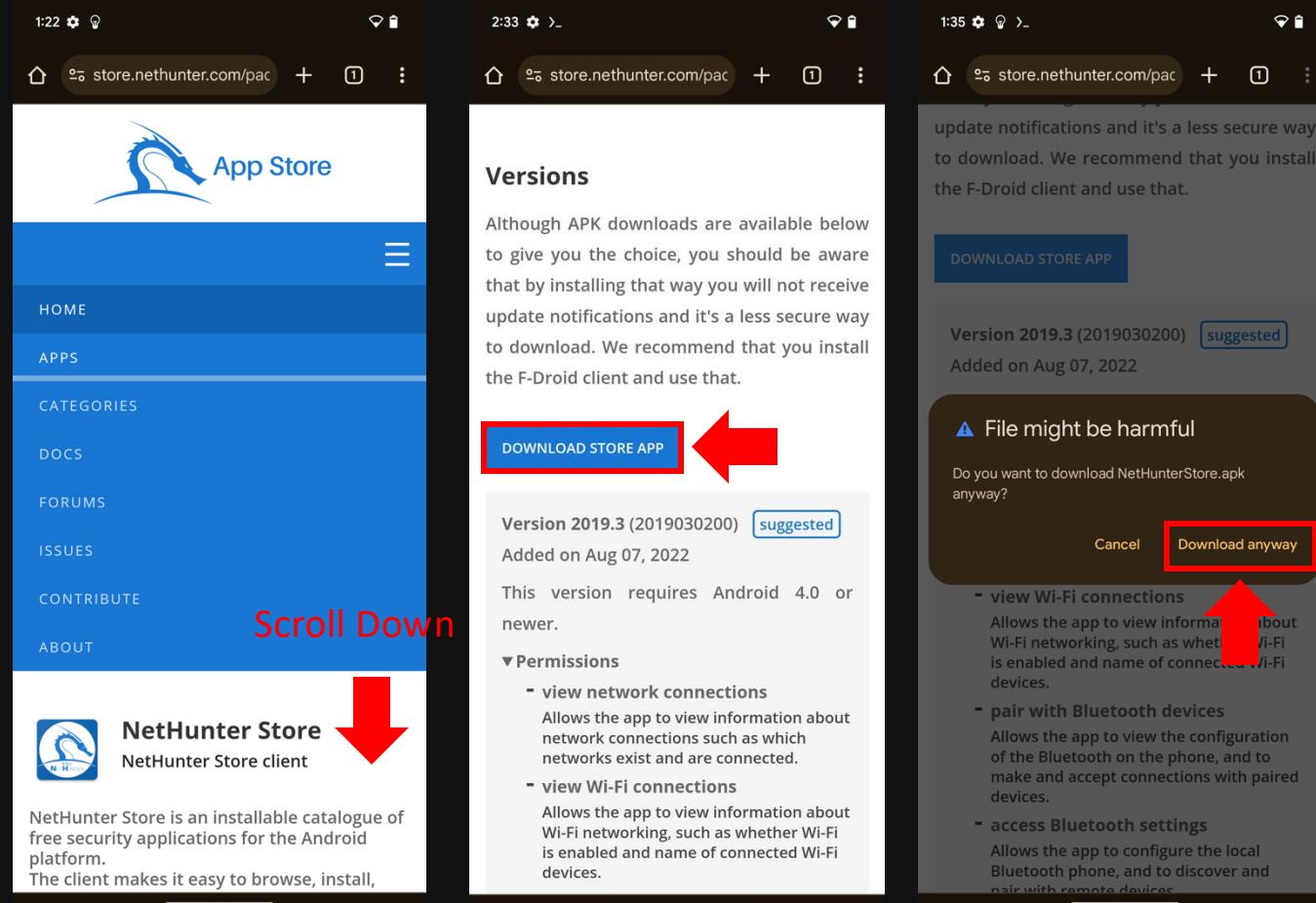
6. Go to the Kali NetHunter App Store website:

<https://store.nethunter.com/packages/com.offsec.nethunter.store/>



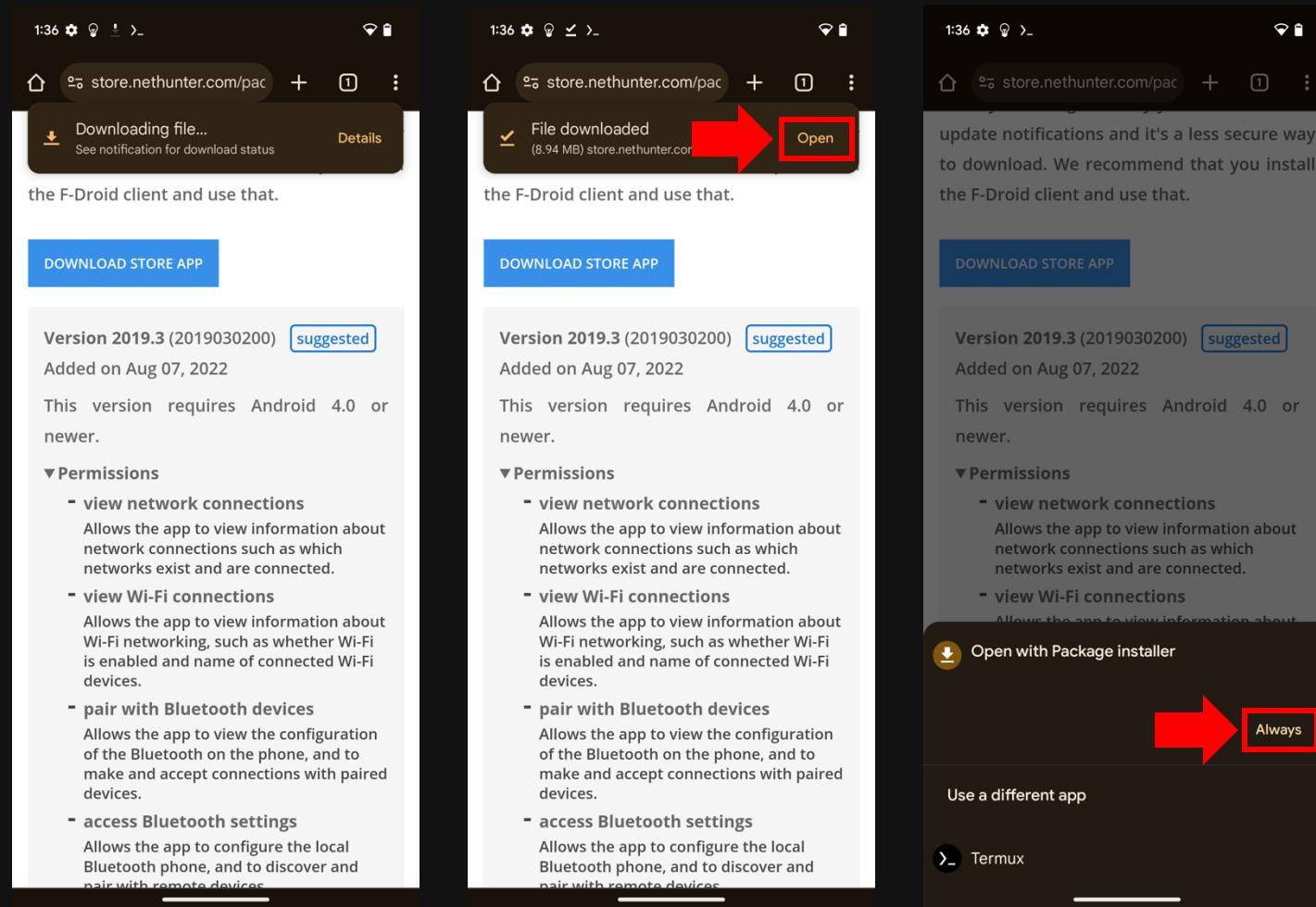
Android Kali NetHunter Rootless Install

7. Download the NetHunter Store App. Press on Download anyway.



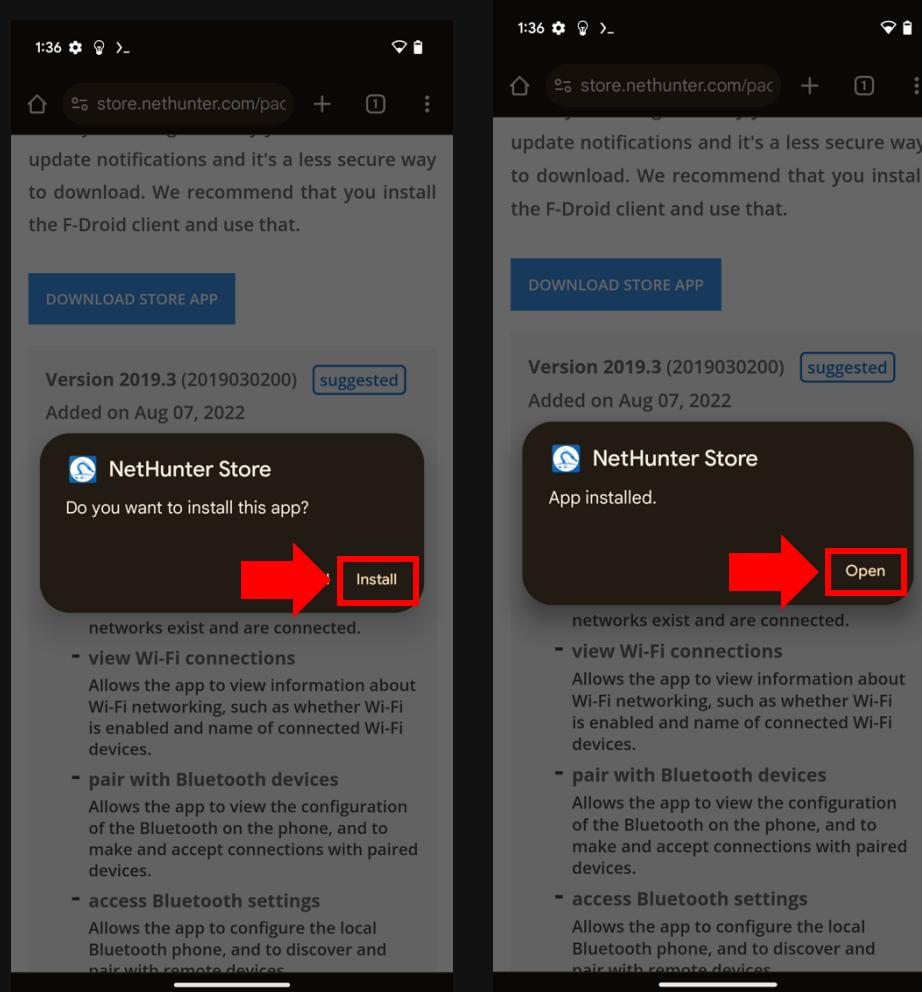
Android Kali NetHunter Rootless Install

8. Wait for file to download. Then press Open. On Open with Package installer press Always.



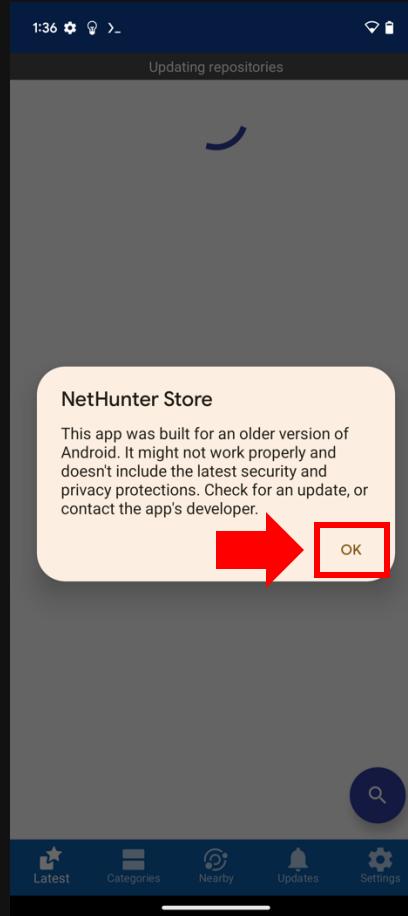
Android Kali NetHunter Rootless Install

9. When asked whether you want to install the app, press Install. Once the app is installed press Open.



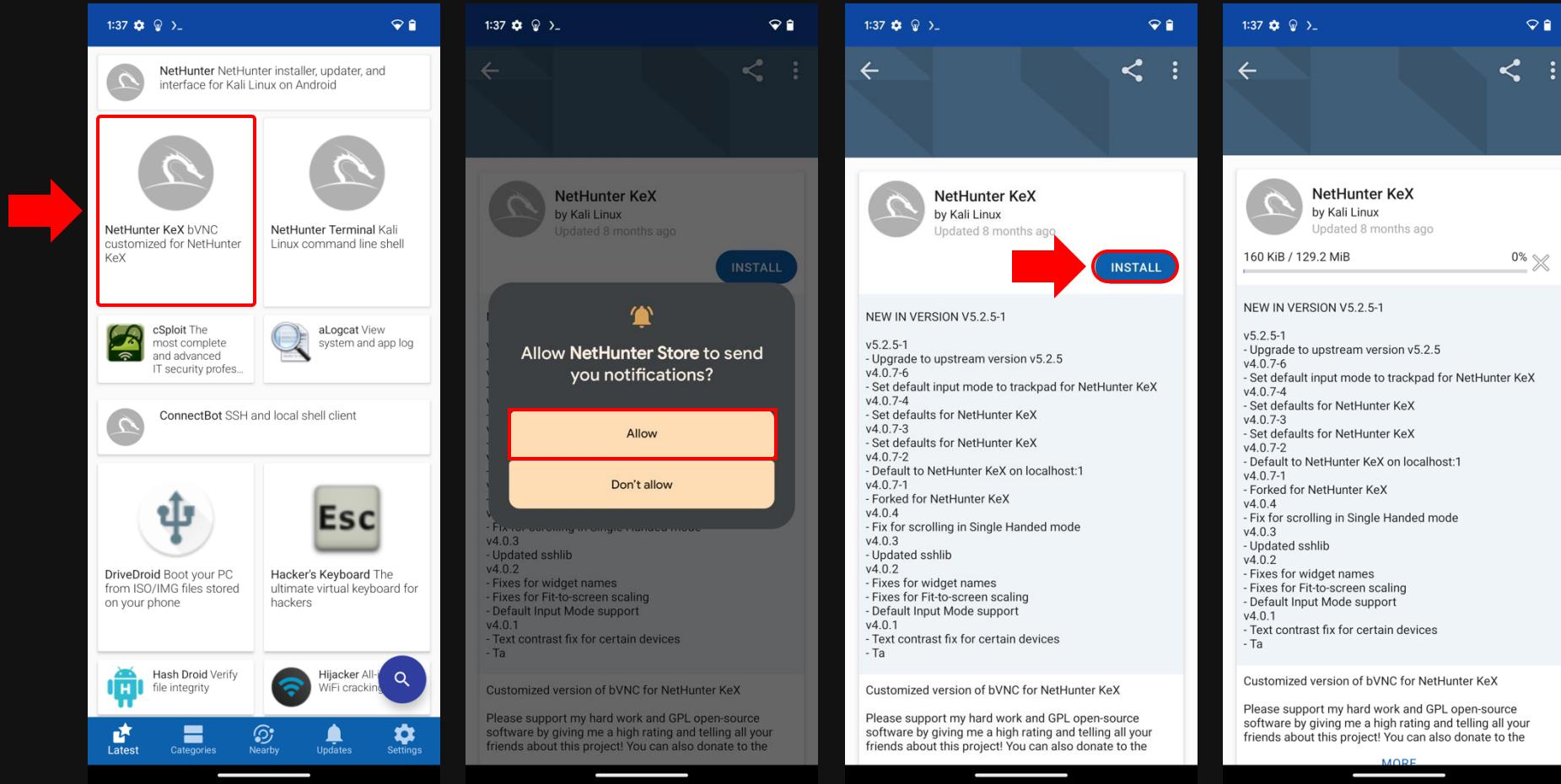
Android Kali NetHunter Rootless Install

10. NetHunter Store opens with a notification that it was built on an older version of Android. Press OK.



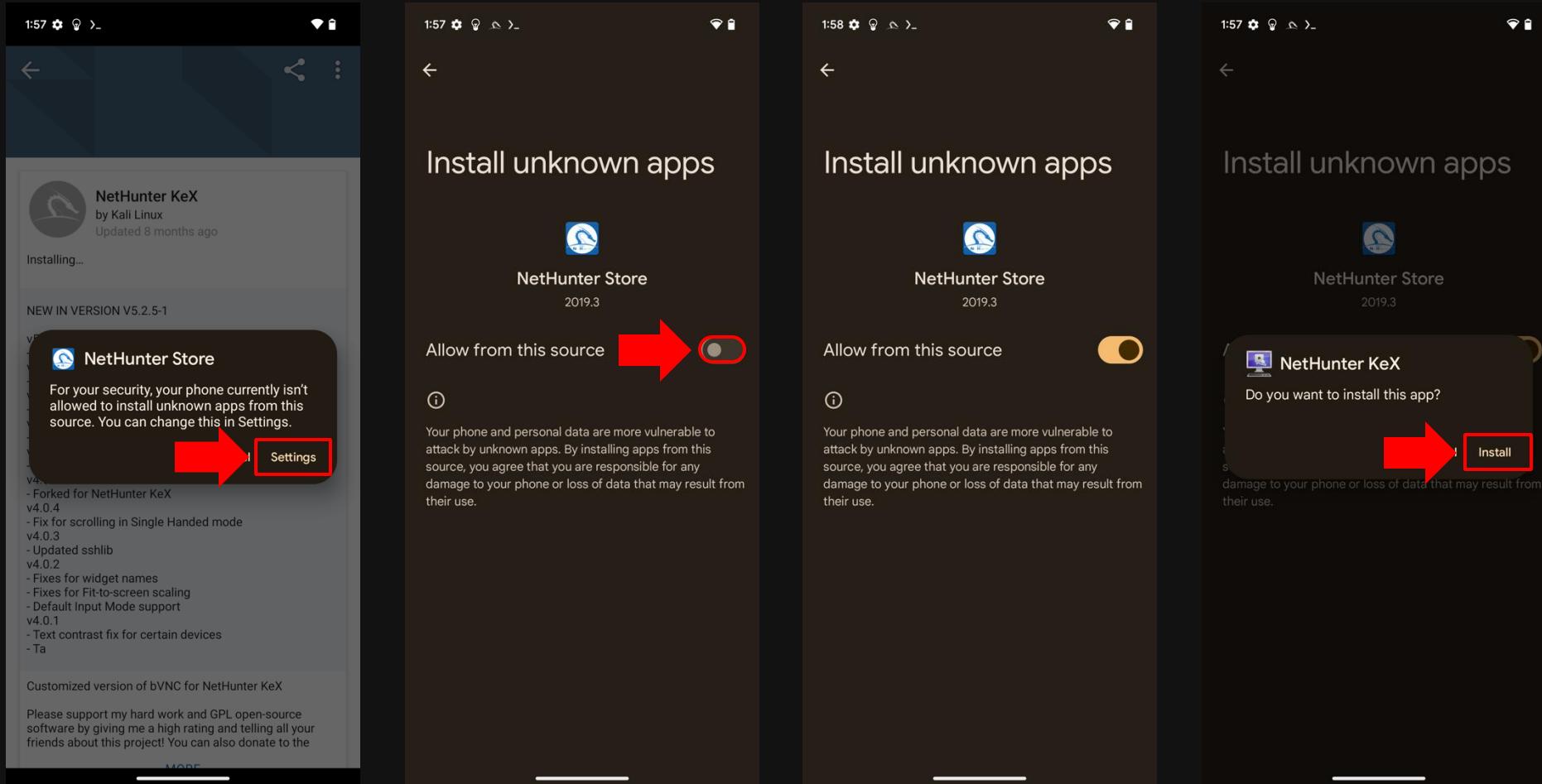
Android Kali NetHunter Rootless Install

11. At the time of installation KeX is one of the two top apps. Press on KeX, and press INSTALL.



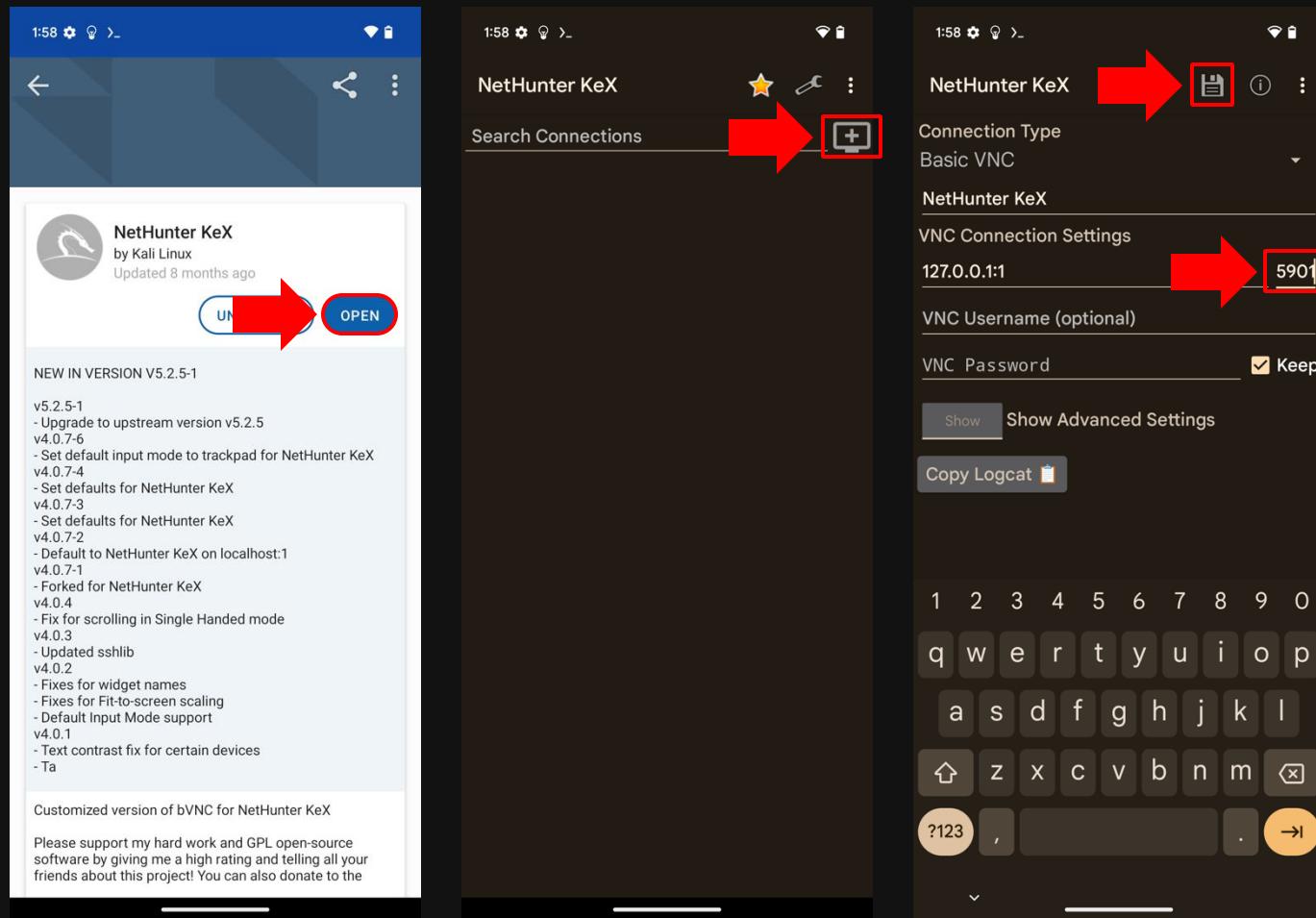
Android Kali NetHunter Rootless Install

12. You will need to change the Settings to allow Nethunter Store to install apps. Then press Install.



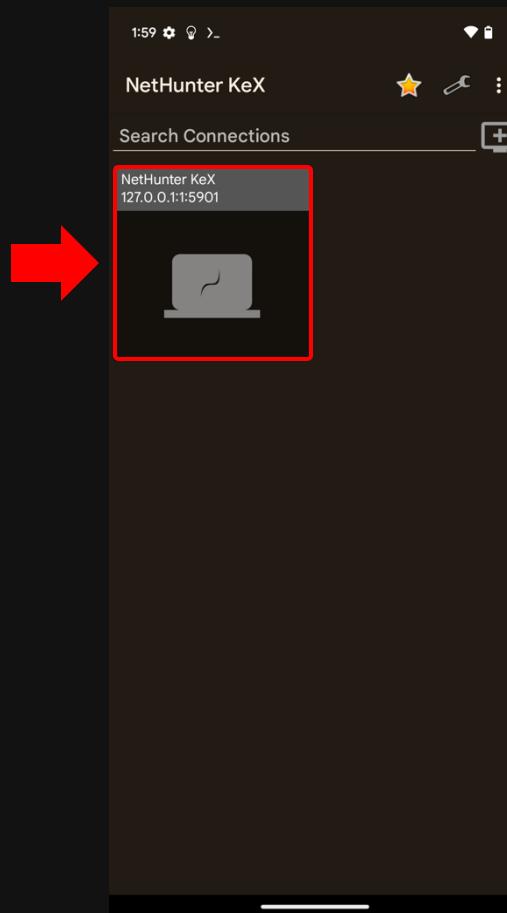
Android Kali NetHunter Rootless Install

13. Press OPEN. Create a new Connection. Change the port to 5901 and enter your password. Press save.



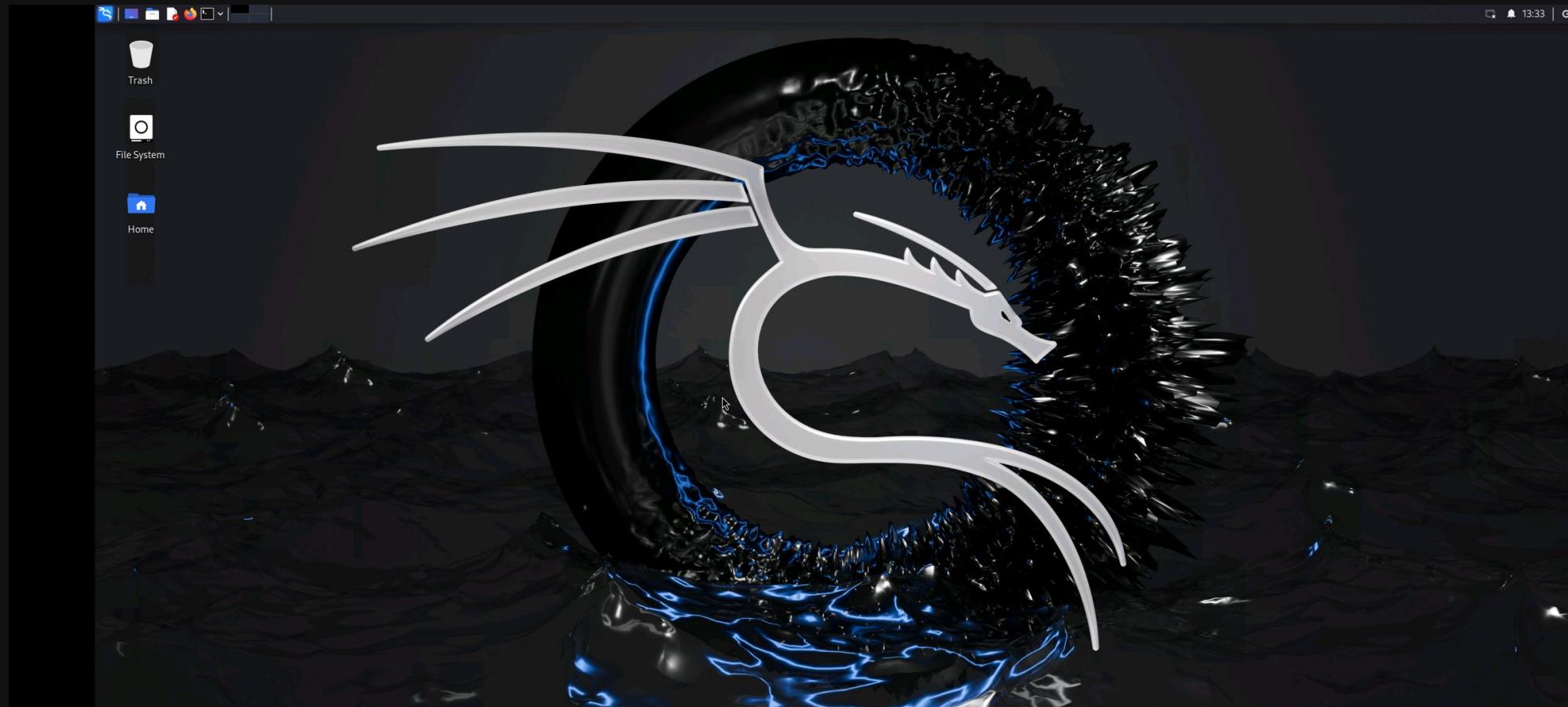
Android Kali NetHunter Rootless Install

14. Press on the connection to open the KeX VNC.



Android Kali NetHunter Rootless Install

15. You now should have Rootless Kali NetHunter GUI on your Android Phone!



Get more information

1. Website: <https://www.youtube.com/davidbombal>
2. Website: <https://store.nethunter.com/packages/com.offsec.nethunter.store/> Website:
<https://www.kali.org/docs/nethunter/nethunter-rootless/>

Termux problems with Android 12 and higher:

1. <https://github.com/termux/termux-app/issues/2366>

