

Network Security Lab 18

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Network Security Lab 18

David Ayeke April 10, 2017

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david@yogata: ~/Downloads/test

Aircrack-ng 1.2 beta3

[00:00:00] 234 keys tested (445.74 k/s)

KEY FOUND! [ dictionary ]

Master Key      : 5D F9 20 B5 48 1E D7 05 38 DD 5F D0 24 23 D7 E2
                  52 22 05 FE EE BB 97 4C AD 08 A5 2B 56 13 ED E2

Transient Key   : 1B 7B 26 96 03 F0 6C 6C D4 03 AA F6 AC E2 81 FC
                  55 15 9A AF BB 3B 5A A8 69 05 13 73 5C 1C EC E0
                  A2 15 4A E0 99 6F A9 5B 21 1D A1 8E 85 FD 96 49
                  5F B4 97 85 67 33 87 B9 DA 97 97 AA C7 82 8F 52

EAPOL HMAC     : 6D 45 F3 53 8E AD 8E CA 55 98 C2 60 EE FE 6F 51
david@yogata:~/Downloads/test$ ^C
david@yogata:~/Downloads/test$ airdecap-ng -p dictionary dump-05.cap
You must also specify the ESSID (-e).
"airdecap-ng --help" for help.
david@yogata:~/Downloads/test$ airdecap-ng -e linksys -p dictionary dump-05.cap
Total number of packets read      3523
Total number of WEP data packets  0
Total number of WPA data packets  3424
Number of plaintext data packets  0
Number of decrypted WEP packets   0
Number of corrupted WEP packets   0
Number of decrypted WPA packets   0
david@yogata:~/Downloads/test$ airdecap-ng -e linksys -p dictionary wpa-psk-linksys.cap
Total number of packets read      587
Total number of WEP data packets  0
Total number of WPA data packets  57
Number of plaintext data packets  0
Number of decrypted WEP packets   0
Number of corrupted WEP packets   0
Number of decrypted WPA packets   53
david@yogata:~/Downloads/test$ iwconfig
wlp3s0 IEEE 802.11abgn ESSID:"Pretty_Fly_For_A_WiFi"
        Mode:Managed Frequency:2.412 GHz Access Point: A0:63:91:AB:F1:2C
        Bit Rate=300 Mb/s   Tx-Power=22 dBm
        Retry short limit:7 RTS thr:off   Fragment thr:off
        Power Management:on
        Link Quality=68/70 Signal level=-42 dBm
        Rx invalid nwid:0 Rx invalid crypt:0 Rx invalid frag:0
        Tx excessive retries:1 Invalid misc:83 Missed beacon:0

lo      no wireless extensions.

enp0s31f6 no wireless extensions.

mon0    IEEE 802.11abgn Mode:Monitor Tx-Power=0 dBm
        Retry short limit:7 RTS thr:off   Fragment thr:off
        Power Management:on

docker0 no wireless extensions.

david@yogata:~/Downloads/test$
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david@yogata: ~/Downloads/test
Number of decrypted WPA packets      53
david@yogata:~/Downloads/test$ iwconfig
wlp3s0 IEEE 802.11abgn ESSID:"Pretty_Fly_For_A_WiFi"
        Mode:Managed Frequency:2.412 GHz Access Point: A0:63:91:AB:F1:2C
        Bit Rate=300 Mb/s   Tx-Power=22 dBm
        Retry short limit:7   RTS thr:off   Fragment thr:off
        Power Management:on
        Link Quality=68/70   Signal level=-42 dBm
        Rx invalid nwid:0   Rx invalid crypt:0   Rx invalid frag:0
        Tx excessive retries:1 Invalid misc:83   Missed beacon:0

```

```
lo      no wireless extensions.
```

```
enp0s31f6 no wireless extensions.
```

```
mon0 IEEE 802.11abgn Mode:Monitor Tx-Power=0 dBm
        Retry short limit:7   RTS thr:off   Fragment thr:off
        Power Management:on
```

```
docker0 no wireless extensions.
```

```
david@yogata:~/Downloads/test$ history | grep airmon
```

```

2012 airmon-ng
2013 sudo airmon-ng
2016* airmon-ng
2017 sudo airmon-ng start wlp3s0
2027 sudo airmon-ng start wlp3s0
2058 sudo airmon-ng start wlp3s0
2067 sudo airmon-ng stop mon2
2069 sudo airmon-ng stop mon1
2075 sudo airmon-ng stop mon0
2076 sudo airmon-ng stop wlp3s0
2080 sudo airmon-ng stop wlp3s0
2081 sudo airmon-ng start wlp3s0
2154 history | grep airmon
david@yogata:~/Downloads/test$ !2081

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sudo airmon-ng start wlp3s0
[sudo] password for david:

```

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Found 5 processes that could cause trouble.
If airodump-ng, aireplay-ng or airtun-ng stops working after
a short period of time, you may want to kill (some of) them!

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PID      Name
799      avahi-daemon
824      avahi-daemon
846      NetworkManager
1182     wpa_supplicant
5745     dhclient
Process with PID 5745 (dhclient) is running on interface wlp3s0

```

Interface	Chipset	Driver
wlp3s0	Intel AC	iwlwifi - [phy0] (monitor mode enabled on mon1)
mon0	Intel AC	iwlwifi - [phy0]

```
david@yogata:~/Downloads/test$
```

3.

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david@yogata: ~/Downloads/test
5745  dhclient
Process with PID 5745 (dhclient) is running on interface wlp3s0
```

Interface	Chipset	Driver
wlp3s0	Intel AC	iwlwifi - [phy0] (monitor mode enabled on mon1)
mon0	Intel AC	iwlwifi - [phy0]

```
david@yogata:~/Downloads/test$ ifconfig
docker0  Link encap:Ethernet  HWaddr 02:42:92:d8:42:46
          inet addr:172.17.0.1  Bcast:0.0.0.0  Mask:255.255.0.0
          UP BROADCAST MULTICAST  MTU:1500  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:0 (0.0 B)  TX bytes:0 (0.0 B)

enp0s31f6  Link encap:Ethernet  HWaddr 54:ee:75:7c:b7:15
            UP BROADCAST MULTICAST  MTU:1500  Metric:1
            RX packets:0 errors:0 dropped:0 overruns:0 frame:0
            TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
            collisions:0 txqueuelen:1000
            RX bytes:0 (0.0 B)  TX bytes:0 (0.0 B)
            Interrupt:16 Memory:d3600000-d3620000

lo         Link encap:Local Loopback
            inet addr:127.0.0.1  Mask:255.0.0.0
            inet6 addr: ::1/128  Scope:Host
            UP LOOPBACK RUNNING  MTU:65536  Metric:1
            RX packets:86224 errors:0 dropped:0 overruns:0 frame:0
            TX packets:86224 errors:0 dropped:0 overruns:0 carrier:0
            collisions:0 txqueuelen:1
            RX bytes:848508572 (848.5 MB)  TX bytes:848508572 (848.5 MB)

mon0      Link encap:UNSPEC  HWaddr A4-34-D9-2A-50-62-3A-30-00-00-00-00-00-00-00-00
            UP BROADCAST NOTRAILERS RUNNING PROMISC ALLMULTI  MTU:1500  Metric:1
            RX packets:280976 errors:0 dropped:0 overruns:0 frame:0
            TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
            collisions:0 txqueuelen:1000
            RX bytes:265682037 (265.6 MB)  TX bytes:0 (0.0 B)

mon1      Link encap:UNSPEC  HWaddr A4-34-D9-2A-50-62-00-00-00-00-00-00-00-00-00-00
            UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
            RX packets:1464 errors:0 dropped:0 overruns:0 frame:0
            TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
            collisions:0 txqueuelen:1000
            RX bytes:174488 (174.4 KB)  TX bytes:0 (0.0 B)

wlp3s0    Link encap:Ethernet  HWaddr a4:34:d9:2a:50:62
            inet addr:192.168.1.11  Bcast:192.168.1.255  Mask:255.255.255.0
            inet6 addr: fe80::a634:d9ff:fe2a:5062/64  Scope:Link
            UP BROADCAST RUNNING  MTU:1500  Metric:1
            RX packets:11370325 errors:0 dropped:2 overruns:0 frame:0
            TX packets:3580399 errors:0 dropped:0 overruns:0 carrier:0
            collisions:0 txqueuelen:1000
            RX bytes:14451413020 (14.4 GB)  TX bytes:2289680701 (2.2 GB)

david@yogata:~/Downloads/test$
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Lab 1

1. Log in
 - > Ve
 - > Us
2. Use a
3. Use if
4. Check
 - airod
 - > Us
 - ne
5. While
 - mobil
 - mobil
 - > W
 - pro
 - (d)

Washington Univ

Lab 1

6. Use a
- down

wpa-psk-linksys.

CH 6][Elapsed: 16 s][2017-04-10 08:25][WPA handshake: A0:63:91:AB:F1:2C

BSSID	PWR	Beacons	#Data, #/s	CH	MB	ENC	CIPHER	AUTH	ESSID
A0:63:91:38:C1:0D	-41	1	0	0	6	54e	WPA2	CCMP	PSK MyCharterWiFi0d-2G
A0:63:91:AB:F1:2C	-50	2	214	9	1	54e	WPA2	CCMP	PSK Pretty_Fly_For_A_WiFi
A0:63:91:AB:F1:2E	-53	3	25	0	161	54e	WPA2	CCMP	PSK Tell_My_WiFi_Love_Her
A0:63:91:38:C1:0C	-54	0	0	0	-1	54e	WPA2	CCMP	PSK MyCharterWiFi0d-5G
10:05:B1:08:D2:A0	-58	0	0	0	11	54e	WPA2	CCMP	PSK ATT5P3u9t4
E4:D3:32:B6:AD:FA	-70	0	0	0	6	54e	WPA2	CCMP	PSK Kick Mr Huang's ass
AC:F1:DF:CB:34:84	-70	0	0	0	1	54e	WPA2	CCMP	PSK dlink
E8:33:81:0C:7B:50	-71	1	0	0	1	54e	WPA2	CCMP	PSK ICECUBE

BSSID	STATION	PWR	Rate	Lost	Frames	Probe
A0:63:91:AB:F1:2C	A4:34:D9:2A:50:62	0	0e- 0e	207	240	

4.



```
david@yogata: ~/Downloads/test

Aircrack-ng 1.2 beta3

[00:00:00] 234 keys tested (860.88 k/s)

KEY FOUND! [ dictionary ]

Master Key      : 5D F9 20 B5 48 1E D7 05 38 DD 5F D0 24 23 D7 E2
                  52 22 05 FE EE BB 97 4C AD 08 A5 2B 56 13 ED E2

Transient Key   : 1B 7B 26 96 03 F0 6C 6C D4 03 AA F6 AC E2 81 FC
                  55 15 9A AF BB 3B 5A A8 69 05 13 73 5C 1C EC E0
                  A2 15 4A E0 99 6F A9 5B 21 1D A1 8E 85 FD 96 49
                  5F B4 97 85 67 33 87 B9 DA 97 97 AA C7 82 8F 52

EAPOL HMAC     : 6D 45 F3 53 8E AD 8E CA 55 98 C2 60 EE FE 6F 51
david@yogata:~/Downloads/test$ airdecap-ng -e linksys -p dictionary dump-07.cap
Total number of packets read      587
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