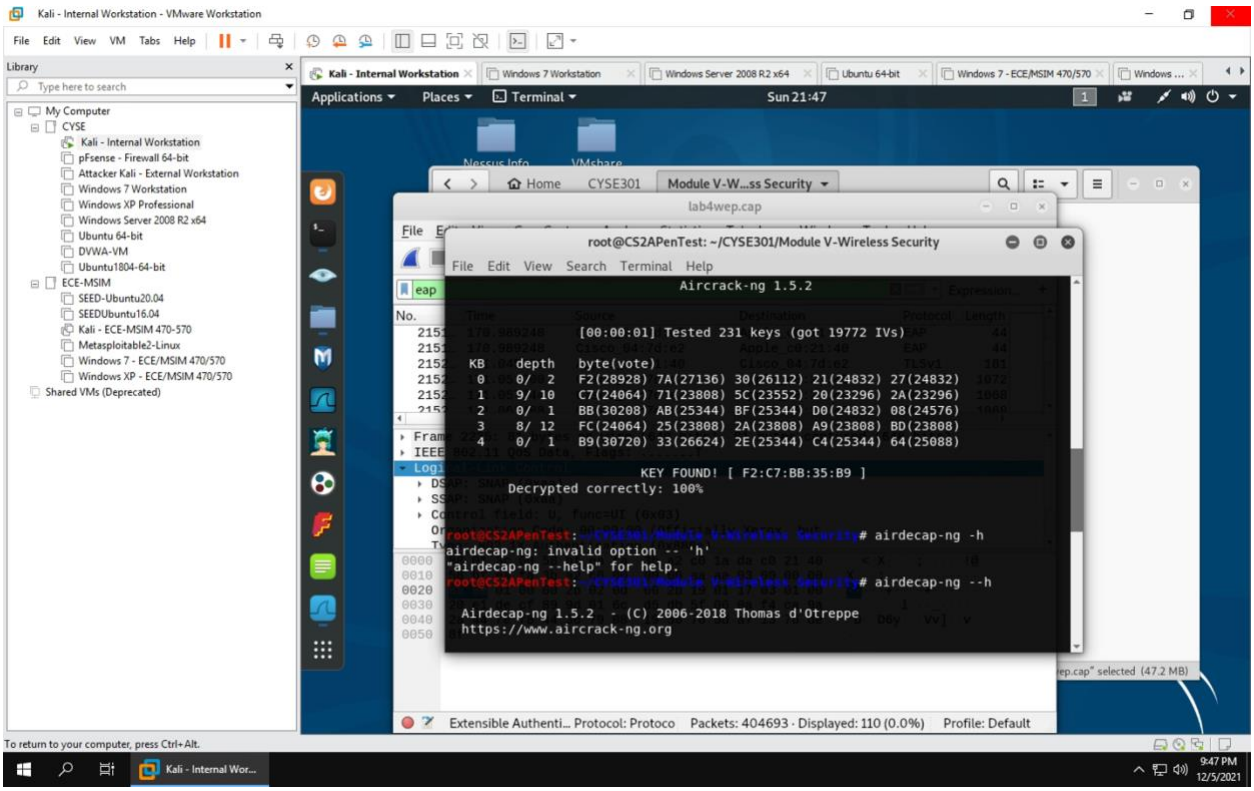
OLD DOMINION UNIVERSITY

CYSE 301 CYBERSECURITY TECHNIQUES AND OPERATIONS

Assignment #5 Wi-Fi Security

Timothy Attah

01140288


Kali - Internal Workstation - VMware Workstation
File Edit View VM Tabs Help
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Kali - Internal Workstation
pFsense - Firewall 64-bit
Attacker Kali - External Workstation
Windows 7 Workstation
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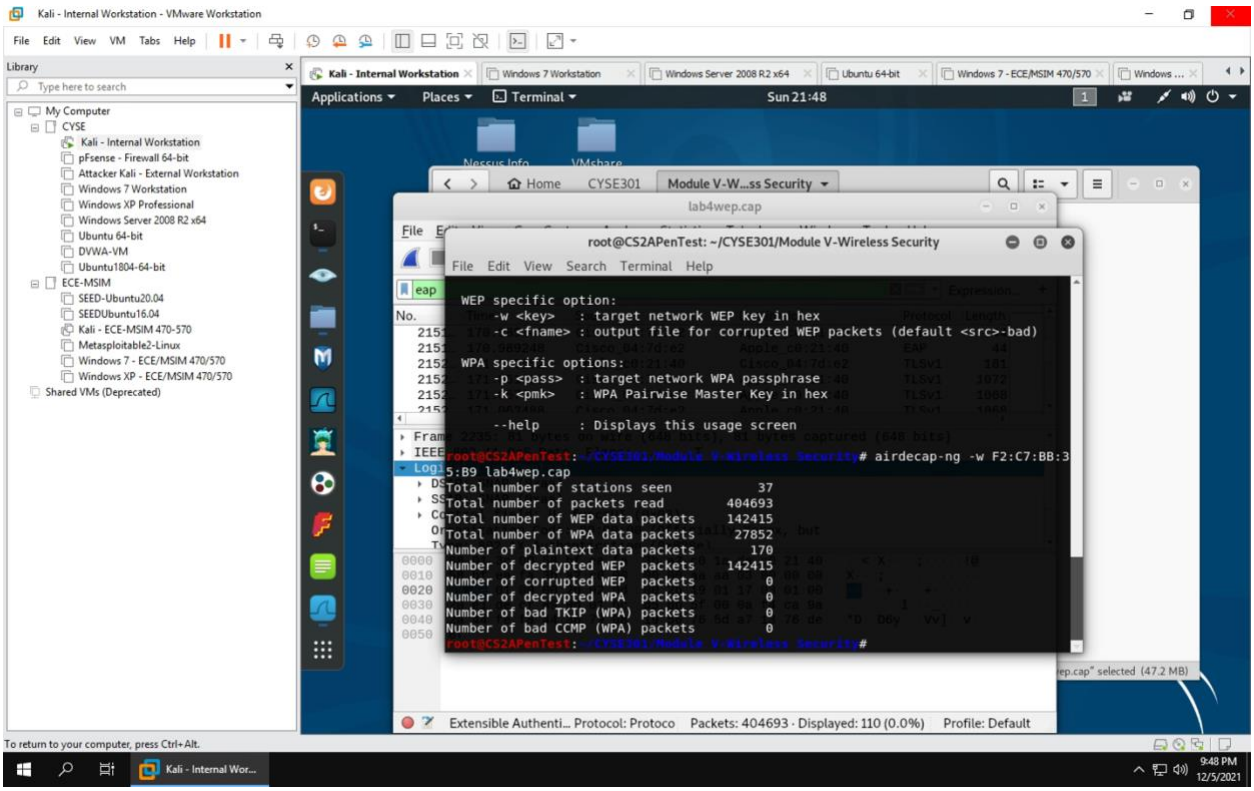
Windows Server 2008 R2 x64
Ubuntu 64-bit
DVWA-VM
Ubuntu1804-64-bit
ECE-MSIM
SEED-Ubuntu20.04
SEEDUbuntu16.04
Kali - ECE-MSIM 470-570
Metasploitable2-Linux
Windows 7 - ECE/MSIM 470/570
Windows XP - ECE/MSIM 470/570
Shared VMs (Deprecated)
Kali - Internal Workstation
Windows 7 Workstation
Windows Server 2008 R2 x64
Ubuntu 64-bit
Windows 7 - ECE/MSIM 470/570
Applications Places Terminal Sun 21:47
Home CYSE301 Module V-W...ss Security
lab4wep.cap
root@CS2APenTest: ~/CYSE301/Module V-Wireless Security
File Edit View Search Terminal Help
Aircrack-ng 1.5.2
[00:00:01] Tested 231 keys (got 19772 IVs)
KB depth byte(vote)
0 0/ 2 F2(28928) 7A(27136) 30(26112) 21(24832) 27(24832)
1 9/ 10 C7(24064) 71(23808) 5C(23552) 20(23296) 2A(23296)
2 0/ 1 BB(30208) AB(25344) BF(25344) D0(24832) 08(24576)
3 8/ 12 FC(24064) 25(23808) 2A(23808) A9(23808) BD(23808)
4 0/ 1 B9(30720) 33(26624) 2E(25344) C4(25344) 64(25088)
KEY FOUND! [F2:C7:BB:35:B9]
Decrypted correctly: 100%
root@CS2APenTest:~/CYSE301/Module V-Wireless Security# airdecap-ng -h
airdecap-ng: invalid option -- 'h'
"airdecap-ng --help" for help.
root@CS2APenTest:~/CYSE301/Module V-Wireless Security# airdecap-ng --h
Airdecap-ng 1.5.2 - (C) 2006-2018 Thomas d'Otreppe
https://www.aircrack-ng.org
Extensible Authenti... Protocol: Protoco Packets: 404693 · Displayed: 110 (0.0%) Profile: Default
To return to your computer, press Ctrl+Alt.
Kali - Internal Wor...
9:47 PM
12/5/2021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Ubuntu 64-bit
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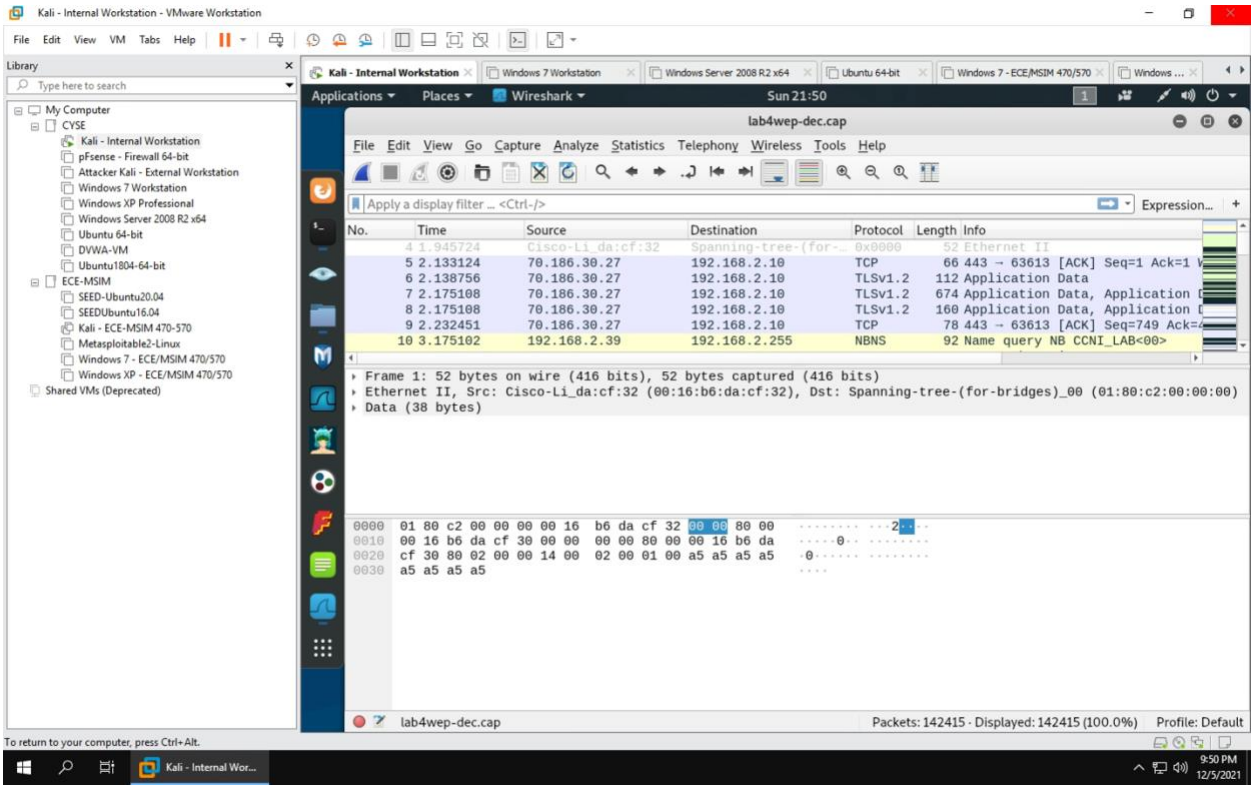
Applications Places Terminal Sun 21:48
Home CYSE301 Module V-W...ss Security
lab4wep.cap
root@CS2APenTest: ~/CYSE301/Module V-Wireless Security
File Edit View Search Terminal Help
WEP specific option:
-w <key> : target network WEP key in hex
-c <fname> : output file for corrupted WEP packets (default <src>-bad)
WPA specific options:
-p <pass> : target network WPA passphrase
-k <pmk> : WPA Pairwise Master Key in hex
--help : Displays this usage screen
root@CS2APenTest:~/CYSE301/Module V-Wireless Security# airdecap-ng -w F2:C7:BB:35:B9 lab4wep.cap
Total number of stations seen 37
Total number of packets read 404693
Total number of WEP data packets 142415
Total number of WPA data packets 27852
Number of plaintext data packets 170
Number of decrypted WEP packets 142415
Number of corrupted WEP packets 0
Number of decrypted WPA packets 0
Number of bad TKIP (WPA) packets 0
Number of bad CCMP (WPA) packets 0
root@CS2APenTest:~/CYSE301/Module V-Wireless Security#
Extensible Authenti... Protocol: Protoco Packets: 404693 · Displayed: 110 (0.0%) Profile: Default
To return to your computer, press Ctrl+Alt.
Kali - Internal Wor...
9:48 PM
12/5/2021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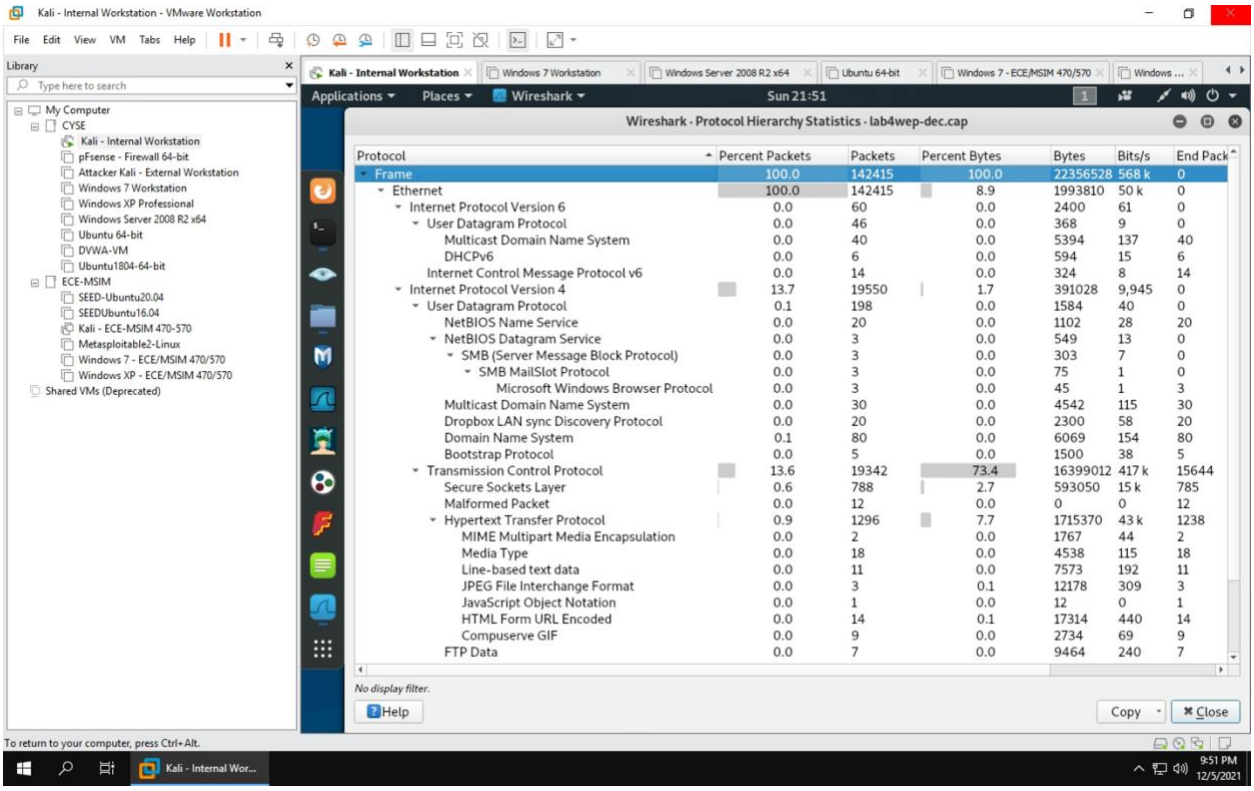
Windows XP - ECE/MSIM 470/570
Shared VMs (Deprecated)
Applications Places Wireshark Sun 21:50
lab4wep-dec.cap
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
Apply a display filter ... <Ctrl-/>
Expression...
No. Time Source Destination Protocol Length Info
4 1.945724 Cisco-Li_da:cf:32 Spanning-tree-(for-... 0x0000 52 Ethernet II
5 2.133124 70.186.30.27 192.168.2.10 TCP 66 443 → 63613 [ACK] Seq=1 Ack=1
6 2.138756 70.186.30.27 192.168.2.10 TLSv1.2 112 Application Data
7 2.175108 70.186.30.27 192.168.2.10 TLSv1.2 674 Application Data, Application
8 2.175108 70.186.30.27 192.168.2.10 TLSv1.2 160 Application Data, Application
9 2.232451 70.186.30.27 192.168.2.10 TCP 78 443 → 63613 [ACK] Seq=749 Ack=
10 3.175102 192.168.2.39 192.168.2.255 NBNS 92 Name query NB CCNI_LAB<00>
Frame 1: 52 bytes on wire (416 bits), 52 bytes captured (416 bits)
Ethernet II, Src: Cisco-Li_da:cf:32 (00:16:b6:da:cf:32), Dst: Spanning-tree-(for-bridges)_00 (01:80:c2:00:00:00)
Data (38 bytes)
0000 01 80 c2 00 00 00 00 16 b6 da cf 32 00 00 80 00
0010 00 16 b6 da cf 30 00 00 00 00 80 00 00 16 b6 da
0020 cf 30 80 02 00 00 14 00 02 00 01 00 a5 a5 a5 a5
0030 a5 a5 a5 a5
lab4wep-dec.cap
Packets: 142415 · Displayed: 142415 (100.0%)
Profile: Default
To return to your computer, press Ctrl+Alt.
Kali - Internal Wor...
9:50 PM
12/5/2021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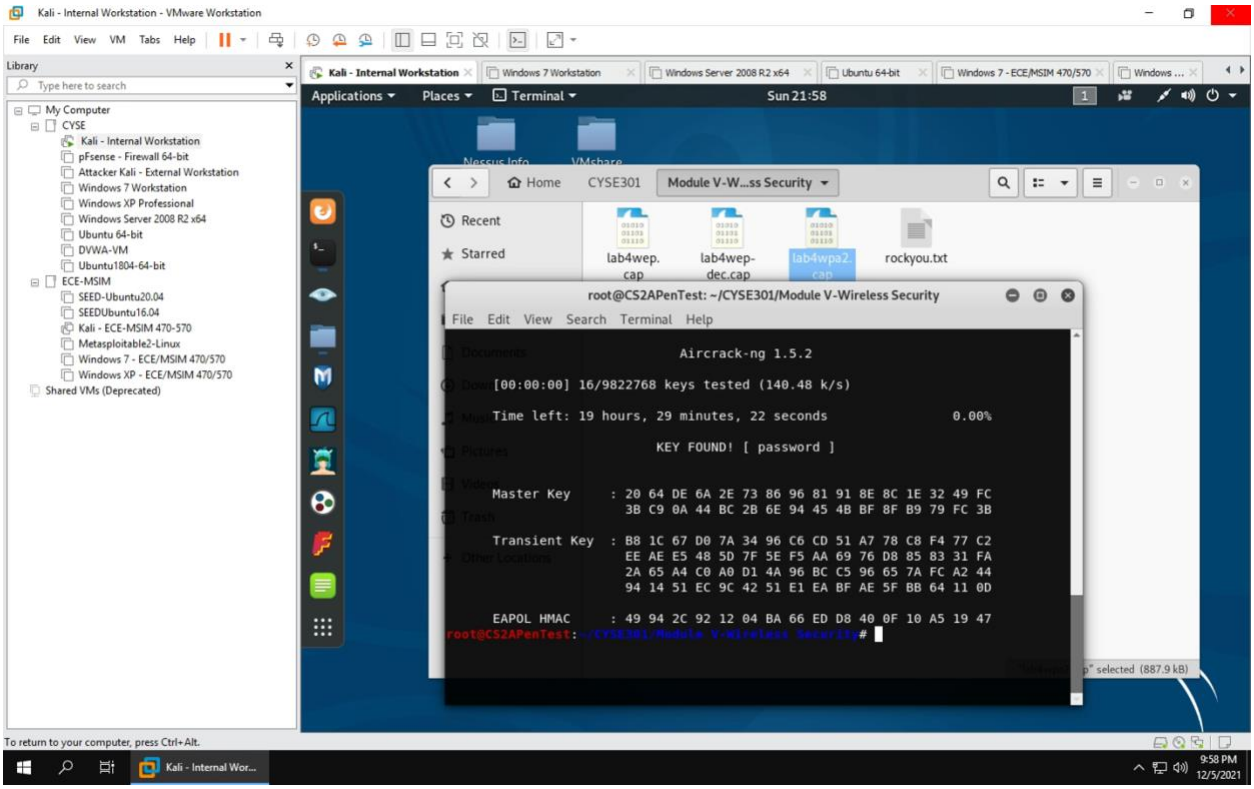
Shared VMs (Deprecated)
Applications Places Wireshark Sun 21:51
Wireshark · Protocol Hierarchy Statistics · lab4wep-dec.cap
Protocol Percent Packets Packets Percent Bytes Bytes Bits/s End Pack
Frame 100.0 142415 100.0 22356528 568 k 0
Ethernet 100.0 142415 8.9 1993810 50 k 0
Internet Protocol Version 6 0.0 60 0.0 2400 61 0
User Datagram Protocol 0.0 46 0.0 368 9 0
Multicast Domain Name System 0.0 40 0.0 5394 137 40
DHCPv6 0.0 6 0.0 594 15 6
Internet Control Message Protocol v6 0.0 14 0.0 324 8 14
Internet Protocol Version 4 13.7 19550 1.7 391028 9,945 0
User Datagram Protocol 0.1 198 0.0 1584 40 0
NetBIOS Name Service 0.0 20 0.0 1102 28 20
NetBIOS Datagram Service 0.0 3 0.0 549 13 0
SMB (Server Message Block Protocol) 0.0 3 0.0 303 7 0
SMB MailSlot Protocol 0.0 3 0.0 75 1 0
Microsoft Windows Browser Protocol 0.0 3 0.0 45 1 3
Multicast Domain Name System 0.0 30 0.0 4542 115 30
Dropbox LAN sync Discovery Protocol 0.0 20 0.0 2300 58 20
Domain Name System 0.1 80 0.0 6069 154 80
Bootstrap Protocol 0.0 5 0.0 1500 38 5
Transmission Control Protocol 13.6 19342 73.4 16399012 417 k 15644
Secure Sockets Layer 0.6 788 2.7 593050 15 k 785
Malformed Packet 0.0 12 0.0 0 0 12
Hypertext Transfer Protocol 0.9 1296 7.7 1715370 43 k 1238
MIME Multipart Media Encapsulation 0.0 2 0.0 1767 44 2
Media Type 0.0 18 0.0 4538 115 18
Line-based text data 0.0 11 0.0 7573 192 11
JPEG File Interchange Format 0.0 3 0.1 12178 309 3
JavaScript Object Notation 0.0 1 0.0 12 0 1
HTML Form URL Encoded 0.0 14 0.1 17314 440 14
Compuserve GIF 0.0 9 0.0 2734 69 9
FTP Data 0.0 7 0.0 9464 240 7
No display filter.
Help
Copy
Close
To return to your computer, press Ctrl+Alt.
Kali - Internal Wor...
9:51 PM
12/5/2021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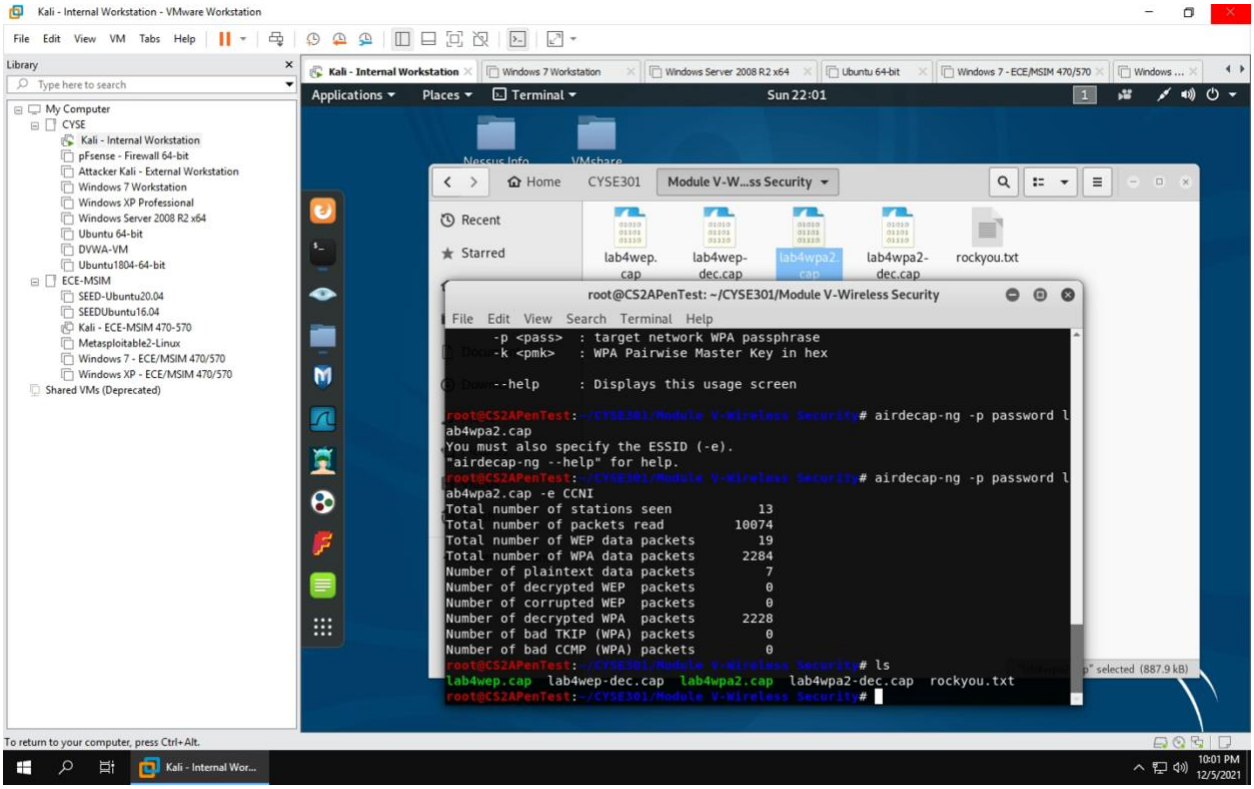
Windows 7 - ECE/MSIM 470/570
Applications
Places
Terminal
Sun 21:58
Home
CYSE301
Module V-W...ss Security
Recent
Starred
lab4wep.cap
lab4wep-dec.cap
lab4wpa2.cap
rockyou.txt
root@CS2APenTest: ~/CYSE301/Module V-Wireless Security
File Edit View Search Terminal Help
Aircrack-ng 1.5.2
[00:00:00] 16/9822768 keys tested (140.48 k/s)
Time left: 19 hours, 29 minutes, 22 seconds 0.00%
KEY FOUND! [password]
Master Key : 20 64 DE 6A 2E 73 86 96 81 91 8E 8C 1E 32 49 FC
3B C9 0A 44 BC 2B 6E 94 45 4B BF 8F B9 79 FC 3B
Transient Key : B8 1C 67 D0 7A 34 96 C6 CD 51 A7 78 C8 F4 77 C2
EE AE E5 48 5D 7F 5E F5 AA 69 76 D8 85 83 31 FA
2A 65 A4 C0 A0 D1 4A 96 BC C5 96 65 7A FC A2 44
94 14 51 EC 9C 42 51 E1 EA BF AE 5F BB 64 11 0D
EAPOL HMAC : 49 94 2C 92 12 04 BA 66 ED D8 40 0F 10 A5 19 47
root@CS2APenTest:~/CYSE301/Module V-Wireless Security#
selected (887.9 kB)
To return to your computer, press Ctrl+Alt.
Kali - Internal Wor...
9:58 PM
12/5/2021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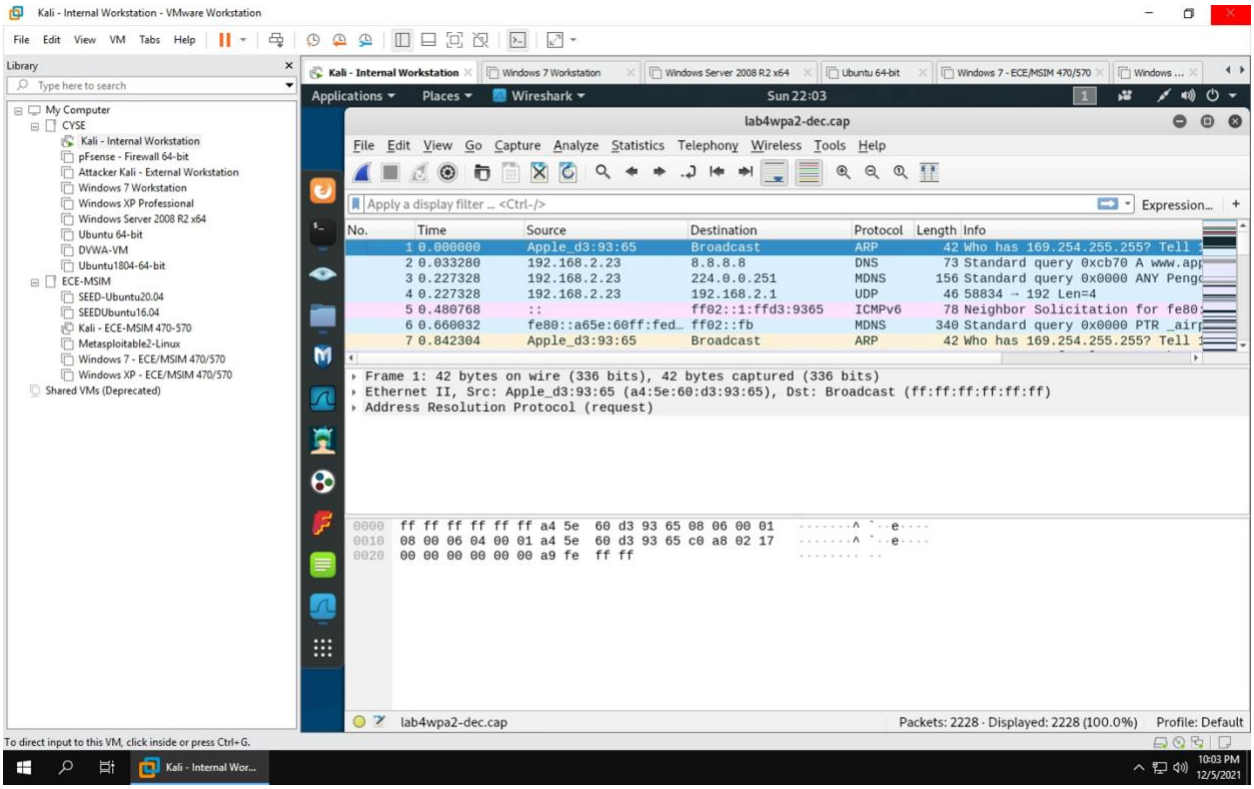
Kali - Internal Workstation
Windows 7 Workstation
Windows Server 2008 R2 x64
Ubuntu 64-bit
Windows 7 - ECE/MSIM 470/570
Applications
Places
Terminal
Sun 22:01
Home
CYSE301
Module V-W...ss Security
Recent
Starred
lab4wep.cap
lab4wep-dec.cap
lab4wpa2.cap
lab4wpa2-dec.cap
rockyou.txt
root@CS2APenTest: ~/CYSE301/Module V-Wireless Security
File Edit View Search Terminal Help
-p <pass> : target network WPA passphrase
-k <pmk> : WPA Pairwise Master Key in hex
--help : Displays this usage screen
root@CS2APenTest:~/CYSE301/Module V-Wireless Security# airdecap-ng -p password l
ab4wpa2.cap
You must also specify the ESSID (-e).
"airdecap-ng --help" for help.
root@CS2APenTest:~/CYSE301/Module V-Wireless Security# airdecap-ng -p password l
ab4wpa2.cap -e CCNI
Total number of stations seen 13
Total number of packets read 10074
Total number of WEP data packets 19
Total number of WPA data packets 2284
Number of plaintext data packets 7
Number of decrypted WEP packets 0
Number of corrupted WEP packets 0
Number of decrypted WPA packets 2228
Number of bad TKIP (WPA) packets 0
Number of bad CCMP (WPA) packets 0
root@CS2APenTest:~/CYSE301/Module V-Wireless Security# ls
lab4wep.cap lab4wep-dec.cap lab4wpa2.cap lab4wpa2-dec.cap rockyou.txt
root@CS2APenTest:~/CYSE301/Module V-Wireless Security#
selected (887.9 kB)
To return to your computer, press Ctrl+Alt.
Kali - Internal Wor...
10:01 PM
12/5/2021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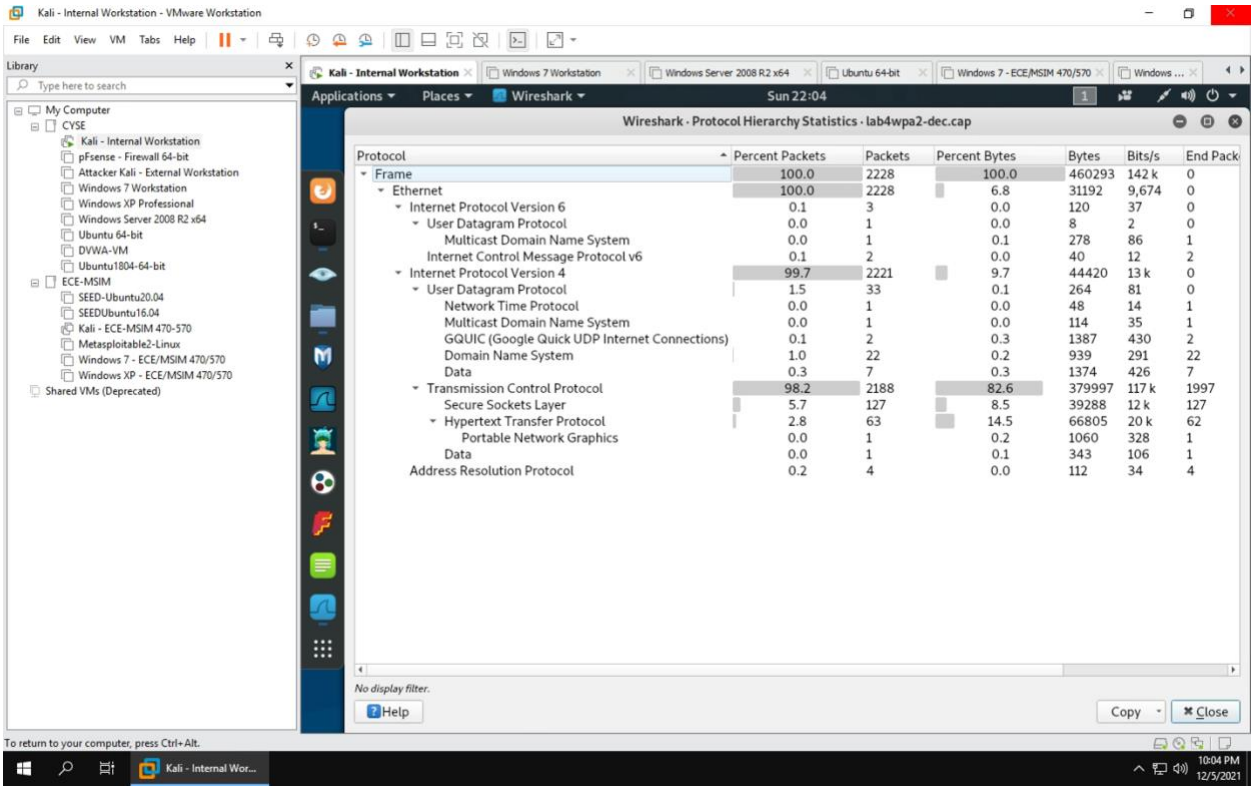
Shared VMs (Deprecated)
Applications Places Wireshark Sun 22:03
lab4wpa2-dec.cap
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
Apply a display filter ... <Ctrl-/>
Expression...
No. Time Source Destination Protocol Length Info
1 0.000000 Apple_d3:93:65 Broadcast ARP 42 Who has 169.254.255.255? Tell
2 0.033280 192.168.2.23 8.8.8.8 DNS 73 Standard query 0xcb70 A www.ap
3 0.227328 192.168.2.23 224.0.0.251 MDNS 156 Standard query 0x0000 ANY Peng
4 0.227328 192.168.2.23 192.168.2.1 UDP 46 58834 → 192 Len=4
5 0.480768 :: ff02::1:ffd3:9365 ICMPv6 78 Neighbor Solicitation for fe80
6 0.660032 fe80::a65e:60ff:fed... ff02::fb MDNS 340 Standard query 0x0000 PTR _air
7 0.842304 Apple_d3:93:65 Broadcast ARP 42 Who has 169.254.255.255? Tell
Frame 1: 42 bytes on wire (336 bits), 42 bytes captured (336 bits)
Ethernet II, Src: Apple_d3:93:65 (a4:5e:60:d3:93:65), Dst: Broadcast (ff:ff:ff:ff:ff:ff)
Address Resolution Protocol (request)
0000 ff ff ff ff ff ff a4 5e 60 d3 93 65 08 06 00 01
0010 08 00 06 04 00 01 a4 5e 60 d3 93 65 c0 a8 02 17
0020 00 00 00 00 00 00 a9 fe ff ff
lab4wpa2-dec.cap
Packets: 2228 · Displayed: 2228 (100.0%)
Profile: Default
To direct input to this VM, click inside or press Ctrl+G.
Kali - Internal Wor...
10:03 PM
12/5/2021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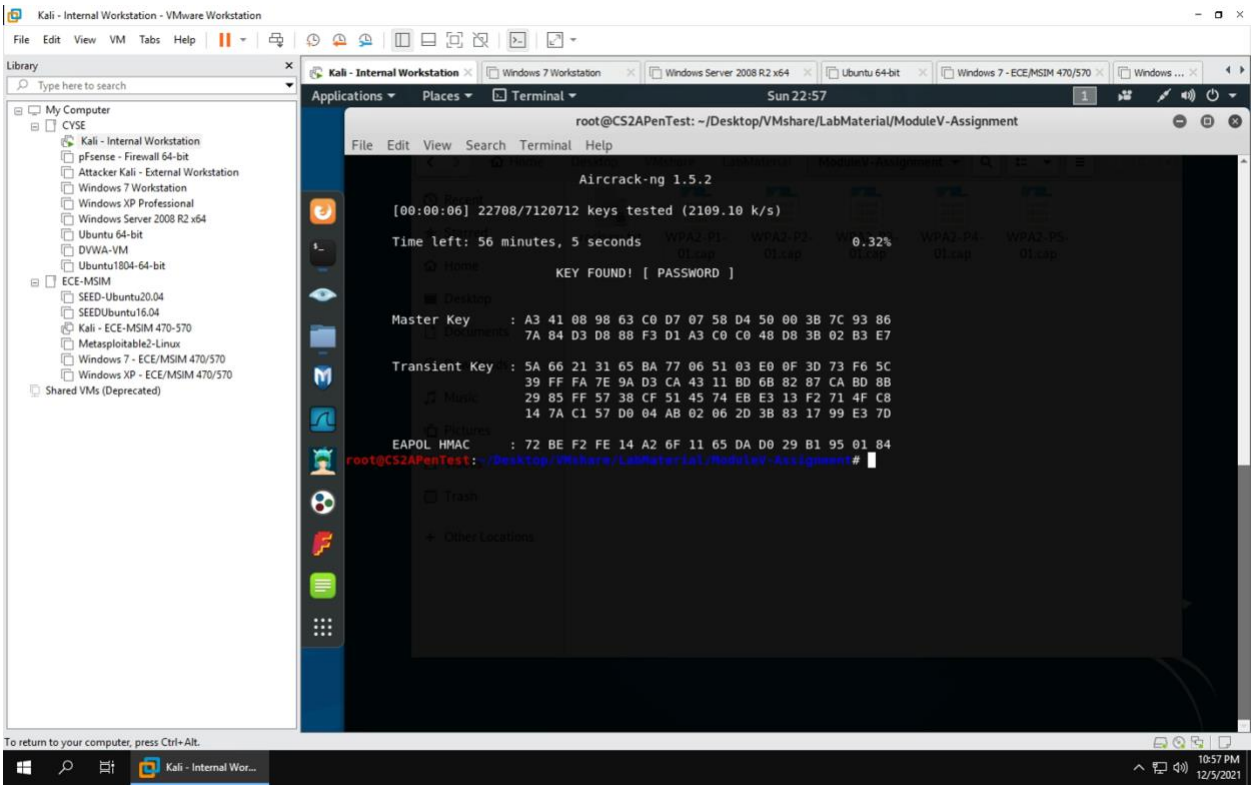
Windows XP - ECE/MSIM 470/570
Shared VMs (Deprecated)
Applications Places Wireshark Sun 22:04
Wireshark · Protocol Hierarchy Statistics · lab4wpa2-dec.cap
Protocol Percent Packets Packets Percent Bytes Bytes Bits/s End Pack
Frame 100.0 2228 100.0 460293 142 k 0
Ethernet 100.0 2228 6.8 31192 9,674 0
Internet Protocol Version 6 0.1 3 0.0 120 37 0
User Datagram Protocol 0.0 1 0.0 8 2 0
Multicast Domain Name System 0.0 1 0.1 278 86 1
Internet Control Message Protocol v6 0.1 2 0.0 40 12 2
Internet Protocol Version 4 99.7 2221 9.7 44420 13 k 0
User Datagram Protocol 1.5 33 0.1 264 81 0
Network Time Protocol 0.0 1 0.0 48 14 1
Multicast Domain Name System 0.0 1 0.0 114 35 1
GQUIC (Google Quick UDP Internet Connections) 0.1 2 0.3 1387 430 2
Domain Name System 1.0 22 0.2 939 291 22
Data 0.3 7 0.3 1374 426 7
Transmission Control Protocol 98.2 2188 82.6 379997 117 k 1997
Secure Sockets Layer 5.7 127 8.5 39288 12 k 127
Hypertext Transfer Protocol 2.8 63 14.5 66805 20 k 62
Portable Network Graphics 0.0 1 0.2 1060 328 1
Data 0.0 1 0.1 343 106 1
Address Resolution Protocol 0.2 4 0.0 112 34 4
No display filter.
Help
Copy
Close
To return to your computer, press Ctrl+Alt.
Kali - Internal Wor...
10:04 PM
12/5/2021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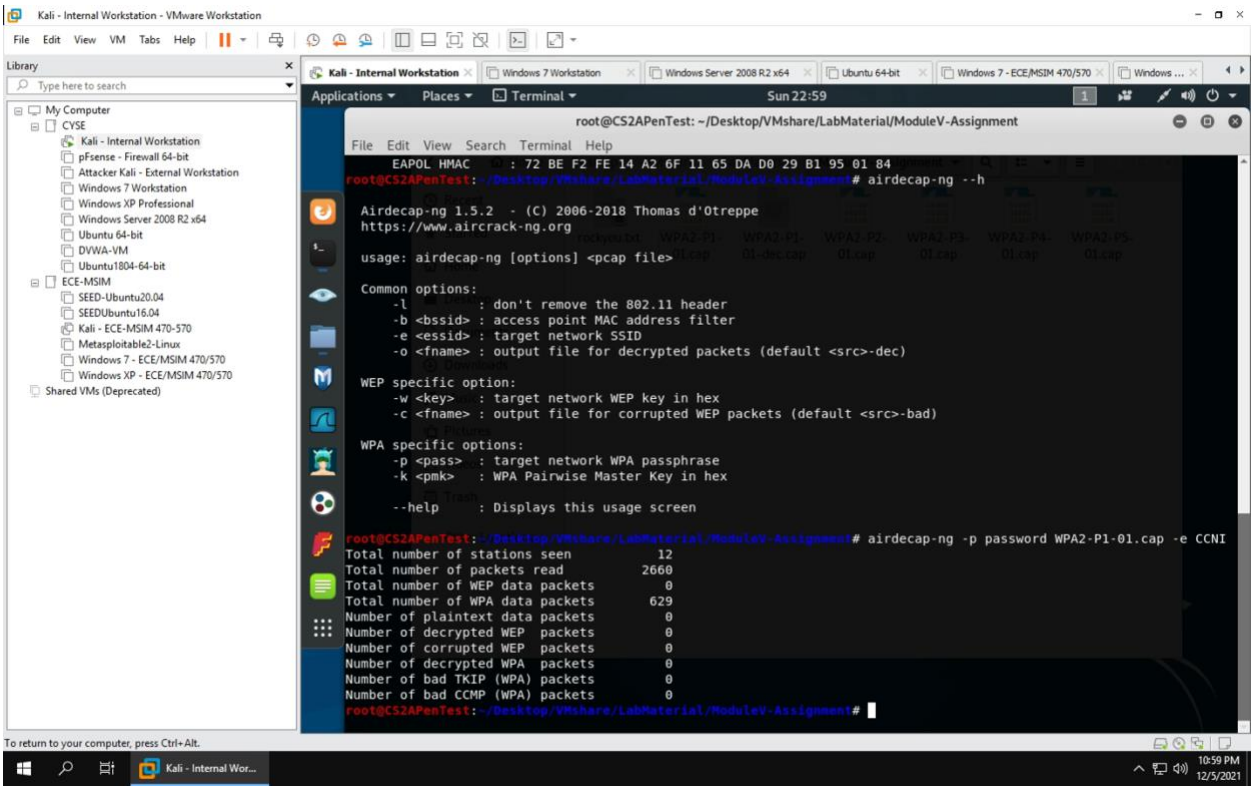
Ubuntu 64-bit
Windows 7 - ECE/MSIM 470/570
Applications Places Terminal Sun 22:57
root@CS2APenTest: ~/Desktop/VMshare/LabMaterial/ModuleV-Assignment
File Edit View Search Terminal Help
Aircrack-ng 1.5.2
[00:00:06] 22708/7120712 keys tested (2109.10 k/s)
Time left: 56 minutes, 5 seconds 0.32%
KEY FOUND! [PASSWORD]
Master Key : A3 41 08 98 63 C0 D7 07 58 D4 50 00 3B 7C 93 86
7A 84 D3 D8 88 F3 D1 A3 C0 C0 48 D8 3B 02 B3 E7
Transient Key : 5A 66 21 31 65 BA 77 06 51 03 E0 0F 3D 73 F6 5C
39 FF FA 7E 9A D3 CA 43 11 BD 6B 82 87 CA BD 8B
29 85 FF 57 38 CF 51 45 74 EB E3 13 F2 71 4F C8
14 7A C1 57 D0 04 AB 02 06 2D 3B 83 17 99 E3 7D
EAPOL HMAC : 72 BE F2 FE 14 A2 6F 11 65 DA D0 29 B1 95 01 84
root@CS2APenTest: ~/Desktop/VMshare/LabMaterial/ModuleV-Assignment#
To return to your computer, press Ctrl+Alt.
Kali - Internal Wor...
10:57 PM
12/5/2021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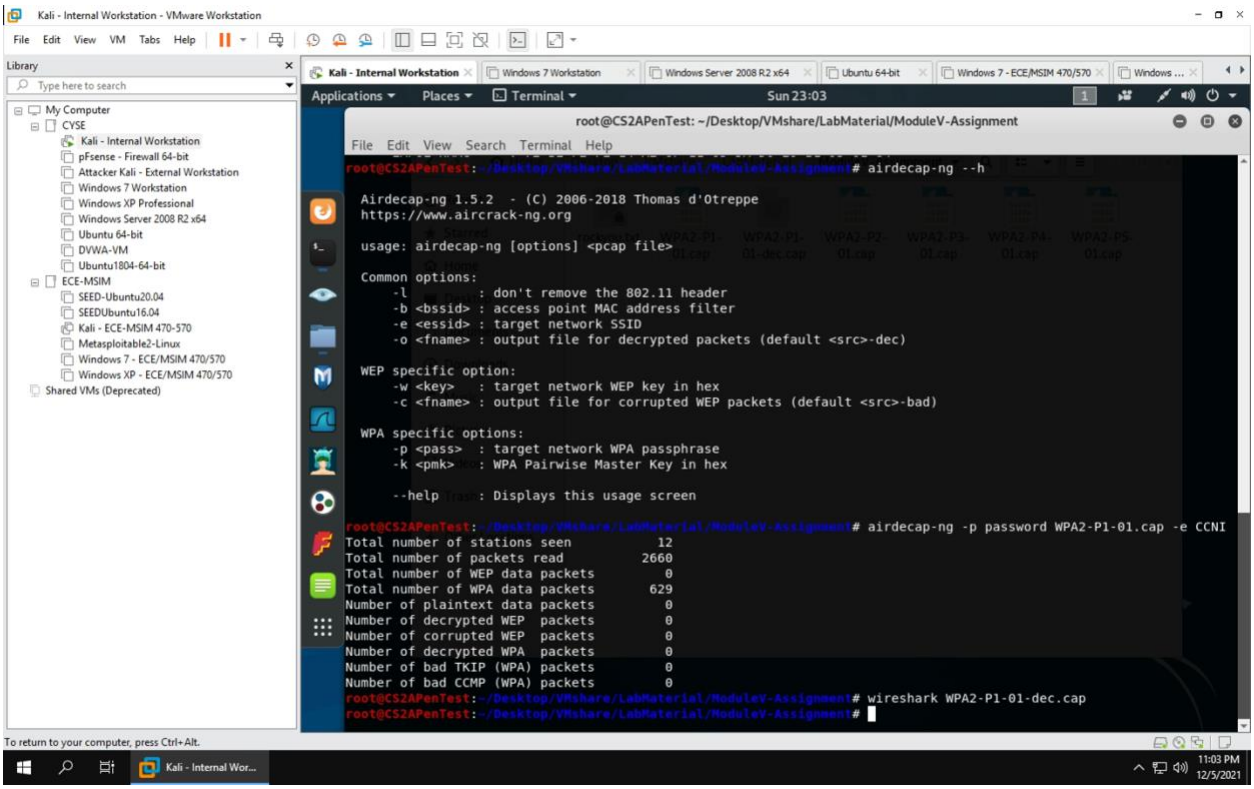
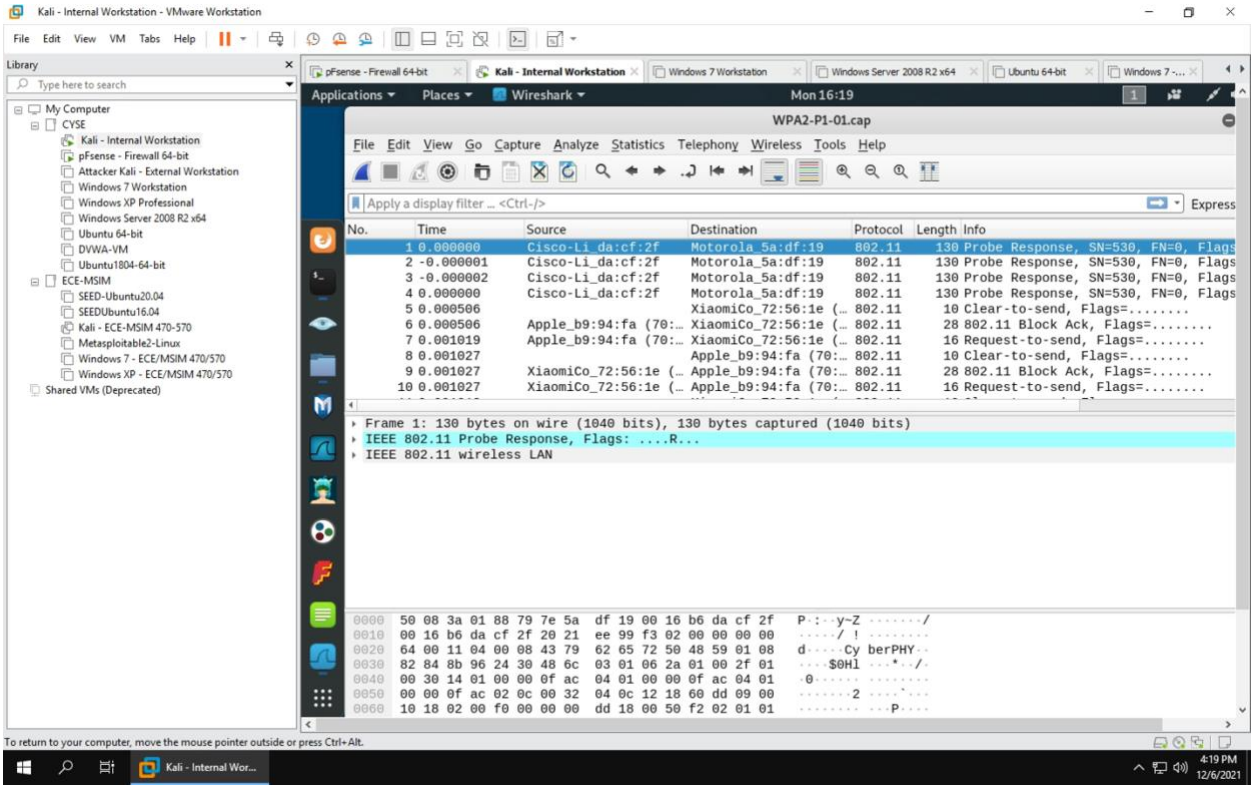
Windows 7 - ECE/MSIM 470/570
Applications Places Terminal Sun 22:59
root@CS2APenTest: ~/Desktop/VMshare/LabMaterial/ModuleV-Assignment
File Edit View Search Terminal Help
EAPOL HMAC : 72 BE F2 FE 14 A2 6F 11 65 DA D0 29 B1 95 01 84
root@CS2APenTest: ~/Desktop/VMshare/LabMaterial/ModuleV-Assignment# airdecap-ng --h
Airdecap-ng 1.5.2 - (C) 2006-2018 Thomas d'Otreppe
https://www.aircrack-ng.org
usage: airdecap-ng [options] <pcap file>
Common options:
-l : don't remove the 802.11 header
-b <bssid> : access point MAC address filter
-e <essid> : target network SSID
-o <fname> : output file for decrypted packets (default <src>-dec)
WEP specific option:
-w <key> : target network WEP key in hex
-c <fname> : output file for corrupted WEP packets (default <src>-bad)
WPA specific options:
-p <pass> : target network WPA passphrase
-k <pmk> : WPA Pairwise Master Key in hex
--help : Displays this usage screen
root@CS2APenTest: ~/Desktop/VMshare/LabMaterial/ModuleV-Assignment# airdecap-ng -p password WPA2-P1-01.cap -e CCNI
Total number of stations seen 12
Total number of packets read 2660
Total number of WEP data packets 0
Total number of WPA data packets 629
Number of plaintext data packets 0
Number of decrypted WEP packets 0
Number of corrupted WEP packets 0
Number of decrypted WPA packets 0
Number of bad TKIP (WPA) packets 0
Number of bad CCMP (WPA) packets 0
root@CS2APenTest: ~/Desktop/VMshare/LabMaterial/ModuleV-Assignment#
To return to your computer, press Ctrl+Alt.
Kali - Internal Wor...
10:59 PM
12/5/2021


Kali - Internal Workstation - VMware Workstation
File Edit View VM Tabs Help
Library
Type here to search
My Computer
CYSE
Kali - Internal Workstation
pFsense - Firewall 64-bit
Attacker Kali - External Workstation
Windows 7 Workstation
Windows XP Professional
Windows Server 2008 R2 x64
Ubuntu 64-bit
DVWA-VM
Ubuntu1804-64-bit
ECE-MSIM
SEED-Ubuntu20.04
SEEDUbuntu16.04
Kali - ECE-MSIM 470-570
Metasploitable2-Linux
Windows 7 - ECE/MSIM 470/570
Windows XP - ECE/MSIM 470/570
Shared VMs (Deprecated)
Kali - Internal Workstation
Windows 7 Workstation
Windows Server 2008 R2 x64
Ubuntu 64-bit
Windows 7 - ECE/MSIM 470/570
Applications Places Terminal Sun 23:03
root@CS2APenTest: ~/Desktop/VMshare/LabMaterial/ModuleV-Assignment
File Edit View Search Terminal Help
root@CS2APenTest:~/Desktop/VMshare/LabMaterial/ModuleV-Assignment# airdecap-ng --h
Airdecap-ng 1.5.2 - (C) 2006-2018 Thomas d'Otreppe
https://www.aircrack-ng.org
usage: airdecap-ng [options] <pcap file>
Common options:
-l : don't remove the 802.11 header
-b <bssid> : access point MAC address filter
-e <essid> : target network SSID
-o <fname> : output file for decrypted packets (default <src>-dec)
WEP specific option:
-w <key> : target network WEP key in hex
-c <fname> : output file for corrupted WEP packets (default <src>-bad)
WPA specific options:
-p <pass> : target network WPA passphrase
-k <pmk> : WPA Pairwise Master Key in hex
--help : Displays this usage screen
root@CS2APenTest:~/Desktop/VMshare/LabMaterial/ModuleV-Assignment# airdecap-ng -p password WPA2-P1-01.cap -e CCNI
Total number of stations seen 12
Total number of packets read 2660
Total number of WEP data packets 0
Total number of WPA data packets 629
Number of plaintext data packets 0
Number of decrypted WEP packets 0
Number of corrupted WEP packets 0
Number of decrypted WPA packets 0
Number of bad TKIP (WPA) packets 0
Number of bad CCMP (WPA) packets 0
root@CS2APenTest:~/Desktop/VMshare/LabMaterial/ModuleV-Assignment# wireshark WPA2-P1-01-dec.cap
root@CS2APenTest:~/Desktop/VMshare/LabMaterial/ModuleV-Assignment#
To return to your computer, press Ctrl+Alt.
Kali - Internal Wor...
11:03 PM
12/5/2021


Kali - Internal Workstation - VMware Workstation
File Edit View VM Tabs Help
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Type here to search
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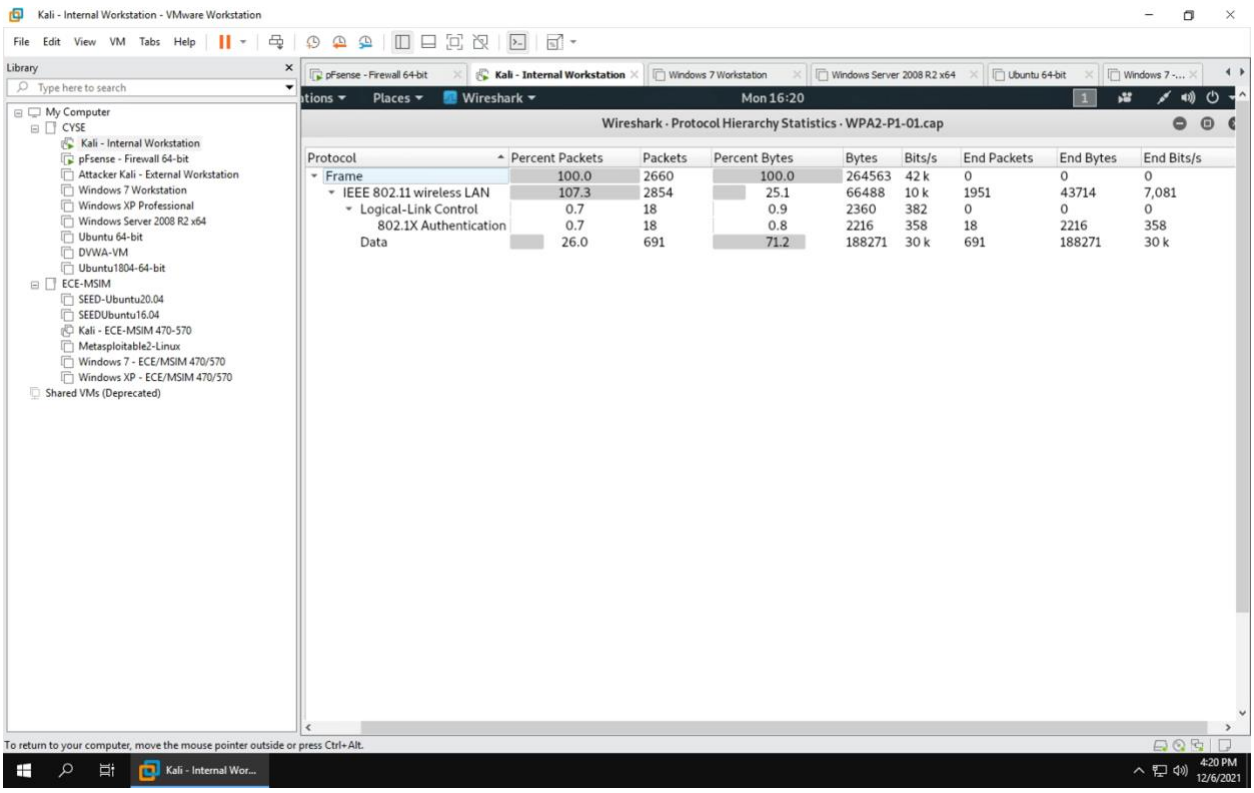
Shared VMs (Deprecated)
pFsense - Firewall 64-bit
Kali - Internal Workstation
Windows 7 Workstation
Windows Server 2008 R2 x64
Ubuntu 64-bit
Windows 7 -...
Applications Places Wireshark Mon 16:19
WPA2-P1-01.cap
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
Apply a display filter ... <Ctrl-/>
Express
No. Time Source Destination Protocol Length Info
1 0.000000 Cisco-Li_da:cf:2f Motorola_5a:df:19 802.11 130 Probe Response, SN=530, FN=0, Flags
2 -0.000001 Cisco-Li_da:cf:2f Motorola_5a:df:19 802.11 130 Probe Response, SN=530, FN=0, Flags
3 -0.000002 Cisco-Li_da:cf:2f Motorola_5a:df:19 802.11 130 Probe Response, SN=530, FN=0, Flags
4 0.000000 Cisco-Li_da:cf:2f Motorola_5a:df:19 802.11 130 Probe Response, SN=530, FN=0, Flags
5 0.000506 XiaomiCo_72:56:1e (... 802.11 10 Clear-to-send, Flags=.....
6 0.000506 Apple_b9:94:fa (70:... XiaomiCo_72:56:1e (... 802.11 28 802.11 Block Ack, Flags=.....
7 0.001019 Apple_b9:94:fa (70:... XiaomiCo_72:56:1e (... 802.11 16 Request-to-send, Flags=.....
8 0.001027 Apple_b9:94:fa (70:... 802.11 10 Clear-to-send, Flags=.....
9 0.001027 XiaomiCo_72:56:1e (... Apple_b9:94:fa (70:... 802.11 28 802.11 Block Ack, Flags=.....
10 0.001027 XiaomiCo_72:56:1e (... Apple_b9:94:fa (70:... 802.11 16 Request-to-send, Flags=.....
Frame 1: 130 bytes on wire (1040 bits), 130 bytes captured (1040 bits)
IEEE 802.11 Probe Response, Flags: ....R...
IEEE 802.11 wireless LAN
0000 50 08 3a 01 88 79 7e 5a df 19 00 16 b6 da cf 2f P:..y~Z ...../
0010 00 16 b6 da cf 2f 20 21 ee 99 f3 02 00 00 00 00 ...../ ! ....
0020 64 00 11 04 00 08 43 79 62 65 72 50 48 59 01 08 d.....Cy berPHY..
0030 82 84 8b 96 24 30 48 6c 03 01 06 2a 01 00 2f 01 ....$0Hl ...*../.
0040 00 30 14 01 00 00 0f ac 04 01 00 00 0f ac 04 01 .0.....
0050 00 00 0f ac 02 0c 00 32 04 0c 12 18 60 dd 09 00 .....2 ....`...
0060 10 18 02 00 f0 00 00 00 dd 18 00 50 f2 02 01 01 ....P....
To return to your computer, move the mouse pointer outside or press Ctrl+Alt.
Kali - Internal Wor...
4:19 PM
12/6/2021



Description

- I decrypted the lab4wep.cap file and found the key. After that I ran a traffic analysis both in the terminal and on Wireshark. I repeated this process again with the lab4wpa2.cap file.
- I downloaded the drop link box and since Tatta (My ODU name) ends with the MD5 hash of 0, I got the WPA2-P1-01.cap. After I downloaded it in the Windows 10 lab and shared it into the VM files. I was able to access in Kali then decrypt it. “Password,” ended being the key from the dictionary attack. After I decrypted, I found that there were 2660 packets read, 629 of it are WPA data packets. The protocol types are IEEE 802.11 wireless LAN (107.3% Packets 25.1 % Bytes). Logical Link Control (0.7% Packets and 0.9% Bytes). Then Data (26% Packets and 71.2% Bytes).