

File Machine View Input Devices Help



kali㉿kali:~

```
(kali㉿kali)-[~]
$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
        inet 127.0.0.1/8 scope host lo
            valid_lft forever preferred_lft forever
        inet6 ::1/128 scope host noprefixroute
            valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:d1:5d:66 brd ff:ff:ff:ff:ff:ff
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:37:82:0c brd ff:ff:ff:ff:ff:ff
        inet 10.0.3.45/24 brd 10.0.3.255 scope global dynamic noprefixroute eth1
            valid_lft 86367sec preferred_lft 86367sec
        inet6 fd17:625c:f037:3:a1f2:c5af:eddb:440c/64 scope global temporary dynamic
            valid_lft 14369sec preferred_lft 14369sec
        inet6 fd17:625c:f037:3:a00:27ff:fe37:826c/64 scope global dynamic mngtmpaddr noprefixroute
            valid_lft 86369sec preferred_lft 14369sec
        inet6 fe00::a0:27ff:fe37:826c/64 scope link noprefixroute
            valid_lft forever preferred_lft forever
```

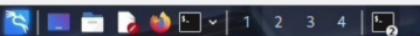
```
(kali㉿kali)-[~]
$ ping -c 2 192.168.56.104
PING 192.168.56.104 (192.168.56.104) 56(84) bytes of data.
64 bytes from 192.168.56.104: icmp_seq=1 ttl=255 time=3.86 ms
64 bytes from 192.168.56.104: icmp_seq=2 ttl=255 time=1.71 ms
— 192.168.56.104 ping statistics —
2 packets transmitted, 2 received, 0% packet loss, time 1070ms
rtt min/avg/max/mdev = 1.714/2.786/3.858/1.072 ms
```

```
(kali㉿kali)-[~]
$ sudo pkill -f tcpdump || true rm -f ~/step6_arp_icmp.pcap
[sudo] password for kali:
sudo: pkill: command not found
```

```
(kali㉿kali)-[~]
$ sudo pkill -f tcpdump || true rm -f ~/step6_arp_icmp.pcap
```

```
(kali㉿kali)-[~]
$ sudo tcpdump -i eth0 -n \ -w ~/step6_arp_icmp.pcap
```

File Machine View Input Devices Help



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```
valid_lft forever preferred_lft forever
(kali㉿kali)-[~]
$ ping -c 2 192.168.56.104
PING 192.168.56.104 (192.168.56.104) 56(84) bytes of data.
64 bytes from 192.168.56.104: icmp_seq=1 ttl=255 time=3.86 ms
64 bytes from 192.168.56.104: icmp_seq=2 ttl=255 time=1.71 ms

--- 192.168.56.104 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1070ms
rtt min/avg/max/mdev = 1.714/2.786/3.858/1.072 ms

(kali㉿kali)-[~]
$ sudo pkill -f tcpdump || true rm -f ~/step6_arp_icmp.pcap
[sudo] password for kali:
sudo: pkill: command not found

(kali㉿kali)-[~]
$ sudo pkill -f tcpdump || true rm -f ~/step6_arp_icmp.pcap

(kali㉿kali)-[~]
$ sudo tcpdump -i eth0 -n -w ~/step6_arp_icmp.pcap \ 'arp or icmp' -c 100
tcpdump: invalid option -- '-'
tcpdump version 4.99.5
libpcap version 1.10.5 (with TPACKET_V3)
OpenSSL 3.5.0 8 Apr 2025
64-bit build, 64-bit time_t
Usage: tcpdump [ -AbDefhHIJKLnNOpqStuUvxX# ] [ -B size ] [ -c count ] [ --count ]
      [ -C file_size ] [ -E algo:secret ] [ -F file ] [ -G seconds ]
      [ -I interface ] [ --immediate-mode ] [ -j tstamptype ]
      [ -M secret ] [ --number ] [ -print ] [ -Q inout|inout ]
      [ -r file ] [ -s snaplen ] [ -T type ] [ --version ]
      [ -V file ] [ -w file ] [ -W filecount ] [ -y datalinktype ]
      [ --time-stamp-precision precision ] [ --micro ] [ --nano ]
      [ -z postrotate-command ] [ -Z user ] [ expression ]
(kali㉿kali)-[~]
$
```

```
(kali㉿kali)-[~]
$
```

```
(kali㉿kali)-[~]
$
```

```
$ ps -ef | grep tcpdump
kali     14074    1696  0 21:36 pts/0    00:00:00 grep --color=auto tcpdump
(kali㉿kali)-[~]
$
```

File Machine View Input Devices Help



kali@kali: ~

```
(kali㉿kali)-[~]
$ echo "Secret message for lab" > plain

(kali㉿kali)-[~]
$ cat plain.txt
Secret message for lab

(kali㉿kali)-[~]
$ openssl enc -aes-256-cbc -pbkdf2 -in plain.txt -out secret.enc -pass pass:MyStrongPass123

(kali㉿kali)-[~]
$ ls -l
total 64
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Desktop
drwxr-xr-x 2 kali kali 4096 Sep 11 18:28 Documents
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Downloads
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Music
drwxr-xr-x 2 kali kali 4096 Sep 11 19:14 Pictures
drwxr-xr-x 2 kali kali 23 Sep 11 19:27 plain
-rw-rw-r-- 1 kali kali 23 Sep 11 18:36 plain.txt
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Public
-rw-rw-r-- 1 kali kali 48 Sep 11 19:29 secret.enc
-rw-rw-r-- 1 kali kali 12708 Feb 2 2019 vt_5_92_1_and06.deb
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Templates
-rw-r-r-- 1 root root 13 Sep 6 11:20 test.txt
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Videos

(kali㉿kali)-[~]
$ cat secret.enc
)***x*****RMoy^2*
```

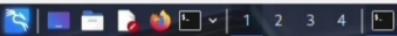


```
(kali㉿kali)-[~]
$ openssl enc -d -aes-256-cbc -pbkdf2 -in secret.enc -out plain_decrypted.txt -pass pass:MyStrongPass123

(kali㉿kali)-[~]
$ cat plain_decrypted.txt
Secret message for lab

(kali㉿kali)-[~]
$ rm -f secret.enc plain_decrypted.txt

(kali㉿kali)-[~]
```



File Actions Edit View Help

(kali㉿kali)-[~]

\$ ping -c 4 google.com

```
PING google.com (142.251.220.14) 56(84) bytes of data.  
64 bytes from pnbomb-ay-in-f14.1e100.net (142.251.220.14): icmp_seq=1 ttl=255 time=82.6 ms  
64 bytes from pnbomb-ay-in-f14.1e100.net (142.251.220.14): icmp_seq=2 ttl=255 time=65.5 ms  
64 bytes from pnbomb-ay-in-f14.1e100.net (142.251.220.14): icmp_seq=3 ttl=255 time=72.5 ms  
64 bytes from pnbomb-ay-in-f14.1e100.net (142.251.220.14): icmp_seq=4 ttl=255 time=80.9 ms
```

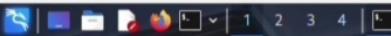
— google.com ping statistics —

```
4 packets transmitted, 4 received, 0% packet loss, time 3026ms  
rtt min/avg/max/mdev = 65.513/75.397/82.636/6.867 ms
```

(kali㉿kali)-[~]

\$ ping -c 4 google.com

File Machine View Input Devices Help



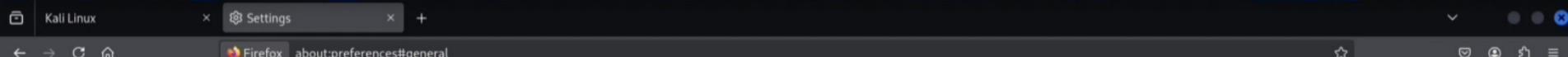
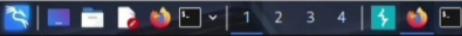
kali@kali: ~

File Actions Edit View Help

```
(kali㉿kali)-[~]  
$ echo "This is my OpenSSL encryption test" > message.txt
```

```
(kali㉿kali)-[~]  
$ cat message.txt  
This is my OpenSSL encryption test  
(kali㉿kali)-[~]
```

```
$ openssl enc -aes-256-cbc -pbkdf2 -in message.txt -out message.enc -
```



Your browser is being managed by your organization.

Connection Settings

Auto-detect proxy settings for this network

Use system proxy settings

Manual proxy configuration

HTTP Proxy Port

Also use this proxy for HTTPS

HTTPS Proxy Port

SOCKS Host Port

SOCKS v4 SOCKS v5

Automatic proxy configuration URL Reload

No proxy for

Example: .mozilla.org, .net.nz, 192.168.1.0/24

Connections to localhost, 127.0.0.1/8, and ::1 are never proxied.

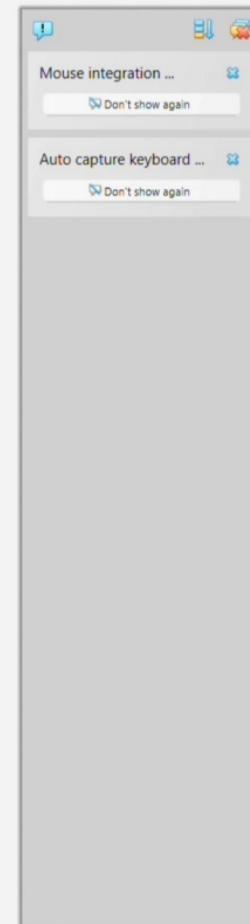
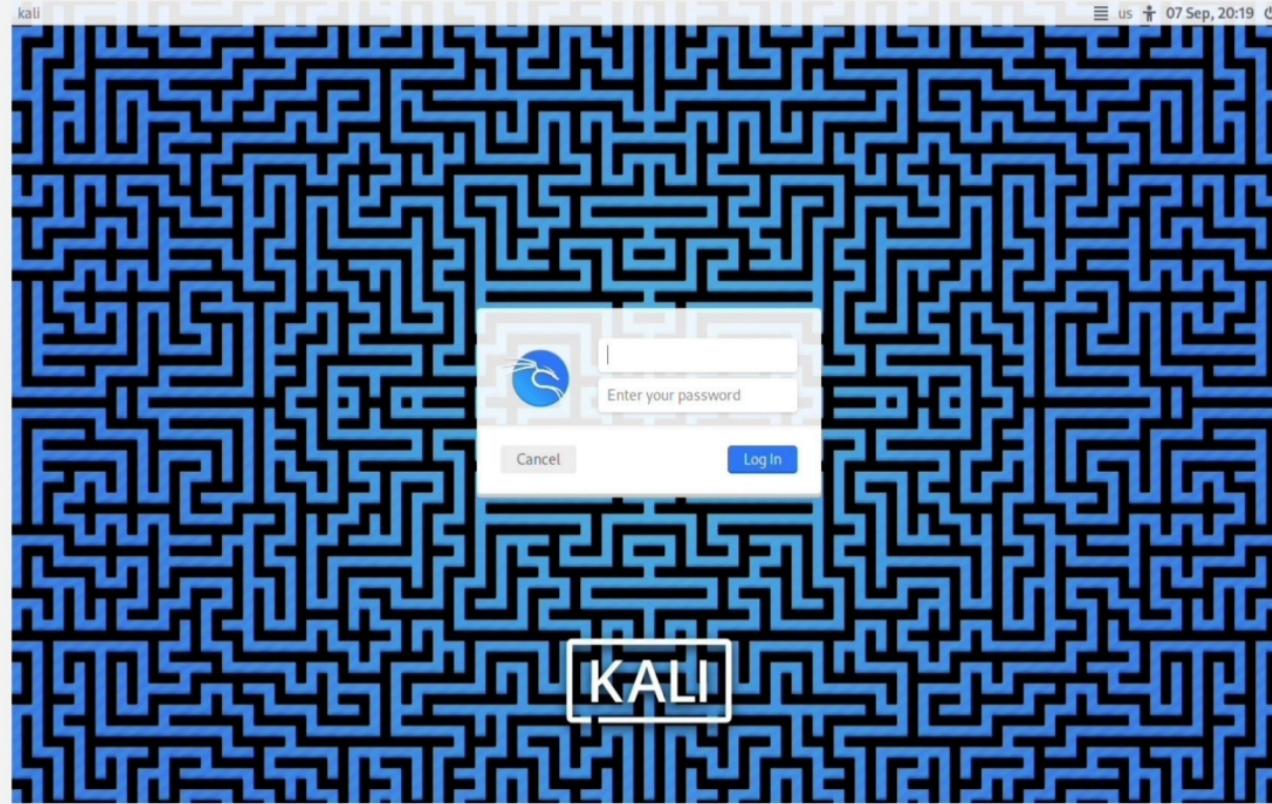
Do not prompt for authentication if password is saved

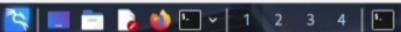
Proxy DNS when using SOCKS v4

Proxy DNS when using SOCKS v5

Cancel

OK





kali㉿kali: ~

```
(kali㉿kali)-[~]
└─$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
        inet6 ::1/128 scope host noprefixroute
            valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:d1:5d:66 brd ff:ff:ff:ff:ff:ff
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:37:82:0c brd ff:ff:ff:ff:ff:ff
    inet 10.0.3.15/24 brd 10.0.3.255 scope global dynamic noprefixroute eth1
        valid_lft 86230sec preferred_lft 86230sec
    inet6 fd17:625c:f037:3:8076:8d82:6362:f99c/64 scope global temporary dynamic
        valid_lft 86232sec preferred_lft 14232sec
    inet6 fd17:625c:f037:3:a00:27ff:fe37:826c/64 scope global dynamic mngtmpaddr noprefixroute
        valid_lft 86232sec preferred_lft 14232sec
    inet6 fe80::a00:27ff:fe37:826c/64 scope link noprefixroute
        valid_lft forever preferred_lft forever

(kali㉿kali)-[~]
└─$ ping -c
```

Mouse integration ...

Don't show again



kali@kali: ~

```
(kali㉿kali)-[~]
$ echo "hello hacker">>test.txt

(kali㉿kali)-[~]
$ ls
Desktop Documents Downloads Music Pictures Public Templates test.txt Videos

(kali㉿kali)-[~]
$ ls -l test.txt
-rw-rw-r-- 1 kali kali 13 Sep  6 11:20 test.txt

(kali㉿kali)-[~]
$ chmod +x test.txt

(kali㉿kali)-[~]
$ ls -l test.txt
-rwxrwxr-x 1 kali kali 13 Sep  6 11:20 test.txt

(kali㉿kali)-[~]
$ chmod -w test.txt

(kali㉿kali)-[~]
$ ls -l test.txt
-r-xr-xr-x 1 kali kali 13 Sep  6 11:20 test.txt

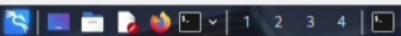
(kali㉿kali)-[~]
$ chmod 644 test.txt

(kali㉿kali)-[~]
$ ls -l test.txt
-rw-r--r-- 1 kali kali 13 Sep  6 11:20 test.txt

(kali㉿kali)-[~]
$ sudo chown root:root test.txt
[sudo] password for kali:

(kali㉿kali)-[~]
$
```

File Machine View Input Devices Help



kali@kali: ~

```
(kali㉿kali)-[~]
$ ping -c 4 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=255 time=71.7 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=255 time=69.7 ms
64 bytes from 8.8.8.8: icmp_seq=4 ttl=255 time=83.6 ms

--- 8.8.8.8 ping statistics ---
4 packets transmitted, 3 received, 25% packet loss, time 3095ms
rtt min/avg/max/mdev = 69.650/74.976/83.558/6.126 ms
```

```
(kali㉿kali)-[~]
$ ping -c 4 google.com
PING google.com (142.250.192.78) 56(84) bytes of data.
64 bytes from bom1zs16-in-f14.1e100.net (142.250.192.78): icmp_seq=1 ttl=255 time=65.6 ms
64 bytes from bom1zs16-in-f14.1e100.net (142.250.192.78): icmp_seq=2 ttl=255 time=84.2 ms
64 bytes from bom1zs16-in-f14.1e100.net (142.250.192.78): icmp_seq=3 ttl=255 time=428 ms
64 bytes from bom1zs16-in-f14.1e100.net (142.250.192.78): icmp_seq=4 ttl=255 time=91.7 ms

--- google.com ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 7578ms
rtt min/avg/max/mdev = 65.601/167.393/428.058/150.794 ms
```

```
(kali㉿kali)-[~]
$ netstat -tuln
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address          Foreign Address        State
```

```
(kali㉿kali)-[~]
$ sudo apt install traceroute -y
traceroute is already the newest version (1:2.1.6-1).
The following packages were automatically installed and are no longer required:
  binutils-mingw-w64-i686   gcc-mingw-w64-i686-win32-runtime  libkdbs5-10t64    mingw-w64-x86-64-dev      python3-aiowinreg  python3-llvmlite  python3-oscrypto  python3-qasync   smtp-user-enum
  binutils-mingw-w64-x86-64  gcc-mingw-w64-x86-64-win32   libkrb5-dev       ndiff                python3-arc4     python3-lsassy  python3-pandas   python3-qrcode  sparta-scripts
  bloodhound.py              gcc-mingw-w64-x86-64-win32-runtime liblinear4       nmap-common          python3-asciitree  python3-masky   python3-pandas-lib  python3-serial-asyncio sphinx-rtd-theme-common
  comerr-dev                 imagemagick           libluajit-5.1-2  numba-doc            python3-asn1tools  python3-minidump  python3-pefile   python3-smmmap  toilet-fonts
  dnsmap                    imagemagick-7.q16      libluajit-5.1-common oracle-instantclient-basic python3-asyauth  python3-minikerberos  python3-pyexploitdb  python3-tables  unicorncan
  dnssd                     libkrb5-multidev      libnids1.21t64   python3-odf-doc      python3-asysocks  python3-msldap   python3-pyfiglet  python3-tables-lib  urlscan
  ettercap-common            liblai0t64          libtbb12         python3-odf-tools    python3-bitstruct  python3-neo4j    python3-pylink3  python3-tld    wapiti
  ettercap-graphical         libapache2-mod-php    libtbbbind-2-5   python3-tables-data  python3-bottleneck  python3-neobolt  python3-pynfsclient  python3-unicrypto
  file                      libbbloc2-2        libtbbmalloc2   python3-aardwolf   python3-cpulinfo   python3-neotime  python3-pypsrp   python3-winacl
  finger                    libgssrpc4t64      medusa          python3-aesedb     python3-dploot    python3-numba   python3-pypykatz  python3-xmtdict
  gcc-mingw-w64-base         libkadm5clnt-mit12   mingw-w64-common python3-aicmd     python3-git      python3-numexpr  python3-psyhodan  python3-yaswfp
  gcc-mingw-w64-i686-win32  libkadm5srv-mit12   mingw-w64-dev    python3-aiosmb    python3-gitdb    python3-odf     python3-pspnego  rsh-redone-client
Use 'sudo apt autoremove' to remove them.
```

Summary:
Upgrading: 0, Installing: 0, Removing: 0, Not Upgrading: 0

```
(kali㉿kali)-[~]
$ tr
```

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```
File Actions Edit View Help
[_ssl-date: 2025-09-13T17:25:38+00:00; -ls from scanner time.
5900/tcp open  vnc          VNC (protocol 3.3)
| vnc-info:
|   Protocol version: 3.3
|   Security types:
|     VNC Authentication (2)
|_  6000/tcp open  X11          (access denied)
6667/tcp open  irc          UnrealIRCd
8009/tcp open  ajp13        Apache Jserv (Protocol v1.3)
|_ajp-methods: Failed to get a valid response for the OPTION request
8180/tcp open  http         Apache Tomcat/Coyote JSP engine 1.1
|_http-favicon: Apache Tomcat
|_http-title: Apache Tomcat/5.5
|_http-server-header: Apache-Coyote/1.1
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: bridgeVoIP adapter/general purpose
Running (JUST GUESSING): Oracle Virtualbox (98%), Slirp (98%), AT&T embedded (95%), QEMU (94%)
OS CPE: cpe:/o:oracle:virtualbox cpe:/a:danny_gasparovski:slirp cpe:/a:qemu:qemu
Aggressive OS guesses: Oracle Virtualbox Slirp NAT bridge (98%), AT&T BGW210 voice gateway (95%), QEMU user mode network gateway (94%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 1 hop
Service Info: Hosts: metasploitable.localdomain, irc.Metasploitable.LAN; OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel

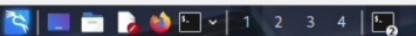
Host script results:
| smb-os-discovery:
|   OS: Unix (Samba 3.0.20-Debian)
|     Computer name: metasploitable
|     NetBIOS computer name:
|     Domain name: localdomain
|     FQDN: metasploitable.localdomain
|_  System time: 2025-09-13T13:25:24-04:00
| smb-security-mode:
|   account_used: <blank>
|   authentication_level: user
|   challenge_response: supported
|_  message_signing: disabled (dangerous, but default)
|_smb2-time: Protocol negotiation failed (SMB2)
|_clock-skew: mean: 59m58s, deviation: 2h00m00s, median: -1s
|_nbstat: NetBIOS name: METASPLOITABLE, NetBIOS user: <unknown>, NetBIOS MAC: <unknown> (unknown)

TRACEROUTE (using port 80/tcp)
HOP RTT      ADDRESS
1  0.52 ms 192.168.56.104

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 76.74 seconds
```

```
(kali㉿kali)-[~]
└─$ sudo nmap -sV 192.168.56.104 | tee nmap_scan.txt
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-13 22:57 IST
```

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```
File Actions Edit View Help
64 bytes from 192.168.56.104: icmp_seq=4 ttl=255 time=2.72 ms
64 bytes from 192.168.56.104: icmp_seq=5 ttl=255 time=2.30 ms
64 bytes from 192.168.56.104: icmp_seq=6 ttl=255 time=1.68 ms
64 bytes from 192.168.56.104: icmp_seq=7 ttl=255 time=1.15 ms
64 bytes from 192.168.56.104: icmp_seq=8 ttl=255 time=1.44 ms
64 bytes from 192.168.56.104: icmp_seq=9 ttl=255 time=1.88 ms
64 bytes from 192.168.56.104: icmp_seq=10 ttl=255 time=1.26 ms
64 bytes from 192.168.56.104: icmp_seq=11 ttl=255 time=1.26 ms

— 192.168.56.104 ping statistics —
10 packets transmitted, 10 received, 0% packet loss, time 9027ms
rtt min/avg/max/mdev = 1.153/2.789/12.511/3.273 ms
```

```
(kali㉿kali)-[~]
$ sudo apt install -y arping >/dev/null || true
```

The following packages were automatically installed and are no longer required:

binutils-mingw-w64-i686	gcc-mingw-w64-i686-win32-runtime	libkdb5-10t64	numba-doc	python3-asn1tools	python3-minidump	python3-pefile	python3-smmmap	toilet-fonts
binutils-mingw-w64-x86-64	gcc-mingw-w64-x86-64-win32	libkrb5-dev	oracle-instantclient-basic	python3-asyauth	python3-minikerberos	python3-pyexploitdb	python3-tables	unicornscan
bloodhound.py	gcc-mingw-w64-x86-64-win32-runtime	liblbiaj1t-5.1-2	python3-odf-doc	python3-asyncsocks	python3-msldap	python3-pyfiglet	python3-tables-lib	uriscan
comerr-dev	imagemagick	liblbiaj1t-5.1-common	python3-odf-tools	python3-bitsruct	python3-neo4j	python3-pylink3	python3-tld	wapiti
dnsmasq	imagemagick-q16	liblbind1.21t64	python3-tables-data	python3-bottleneck	python3-neobolt	python3-pynfsclient	python3-unicrypto	
dnsiff	krb5-multidev	libtbb2	python3-aardwolf	python3-cpuinfo	python3-neotime	python3-pysrps	python3-winacl	
ettercap-common	libtai0t64	libtbbbind-2-5	python3-aesedb	python3-dploot	python3-numba	python3-pypykatz	python3-xmldict	
ettercap-graphical	libapache2-mod-php	libtbbmalloc2	python3-aiocmd	python3-git	python3-numexpr	python3-pshtodan	python3-yawsfp	
figlet	liblbbosc2-4	medusa	python3-aiosmb	python3-gitdb	python3-odf	python3-pysnego	rsh-redone-client	
finger	libgssrpc4t64	mingw-w64-common	python3-aiowinreg	python3-lvmlite	python3-oscrypto	python3-qasync	smtp-user-enum	
gcc-mingw-w64-base	libkadm5clnt-mit12	mingw-w64-i686-dev	python3-arc4	python3-lsassy	python3-pandas	python3-qrcode	sparta-scripts	
gcc-mingw-w64-i686-win32	libkadm5srv-mit128_arp_icmp_pcap	mingw-w64-x86-64-dev	python3-asciitree	python3-masky	python3-pandas-lib	python3-serial-asyncio	sphinx-rtd-theme-common	

Use 'sudo apt autoremove' to remove them.

```
Upgrading:
 arping
```

Summary:

Upgrading: 1, Installing: 0, Removing: 0, Not Upgrading: 963

Download size: 0 B / 33.1 kB

Space needed: 0 B / 97.4 GB available

(Reading database ... 381037 files and directories currently installed.)

Preparing to unpack .../arping_2.26-1_amd64.deb ...

Unpacking arping (2.26-1) over (2.25-1) ...

Setting up arping (2.26-1) ...

Processing triggers for kali-menu (2025.2.7) ...

Processing triggers for man-db (2.13.1-1) ...

Processing triggers for libnet (1.0.3-1) ...

Processing triggers for libnet-libs (1.0.3-1) ...

Processing triggers for libnet-py (1.0.3-1) ...

Processing triggers for libnet-py3 (1.0.3-1) ...

Processing triggers for libnet-py3.8 (1.0.3-1) ...

Processing triggers for libnet-py3.9 (1.0.3-1) ...

Processing triggers for libnet-py3.10 (1.0.3-1) ...

Processing triggers for libnet-py3.11 (1.0.3-1) ...

Processing triggers for libnet-py3.12 (1.0.3-1) ...

Processing triggers for libnet-py3.13 (1.0.3-1) ...

Processing triggers for libnet-py3.14 (1.0.3-1) ...

Processing triggers for libnet-py3.15 (1.0.3-1) ...

Processing triggers for libnet-py3.16 (1.0.3-1) ...

Processing triggers for libnet-py3.17 (1.0.3-1) ...

Processing triggers for libnet-py3.18 (1.0.3-1) ...

Processing triggers for libnet-py3.19 (1.0.3-1) ...

Processing triggers for libnet-py3.20 (1.0.3-1) ...

Processing triggers for libnet-py3.21 (1.0.3-1) ...

Processing triggers for libnet-py3.22 (1.0.3-1) ...

Processing triggers for libnet-py3.23 (1.0.3-1) ...

Processing triggers for libnet-py3.24 (1.0.3-1) ...

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Processing triggers for libnet-py3.175 (1.0.3-1) ...

Processing triggers for libnet-py3.176 (1.0.3-1) ...

Processing triggers for libnet-py3.177 (1.0.3-1) ...

Processing triggers for libnet-py3.178 (1.0.3-1) ...

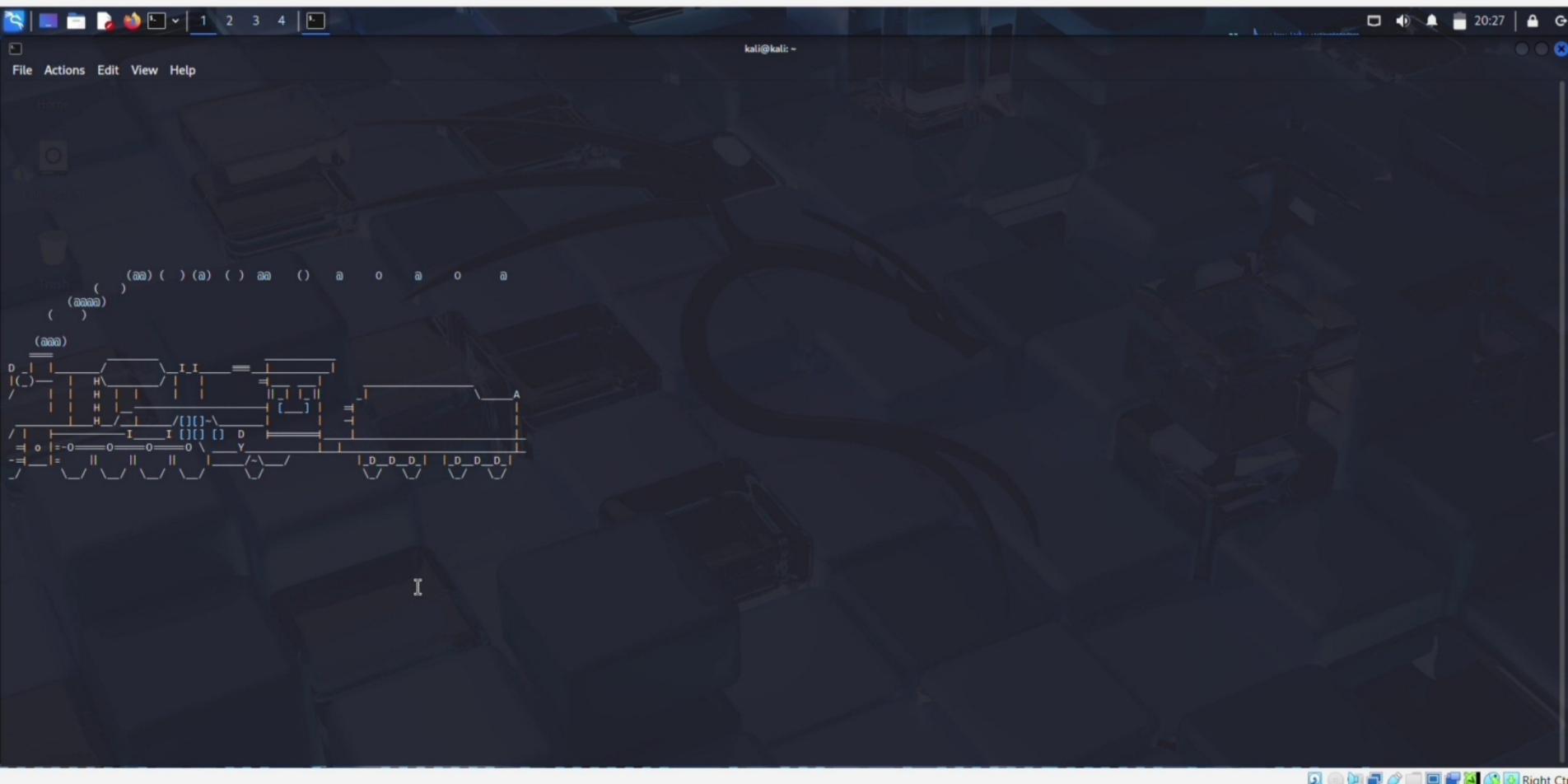
Processing triggers for libnet-py3.179 (1.0.3-1) ...

Processing triggers for libnet-py3.180 (1.0.3-1) ...

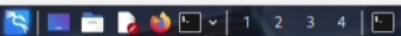
Processing triggers for libnet-py3.181 (1.0.3-1) ...

Processing triggers for libnet-py3.182 (1.0.3-1) ...

<p



File Machine View Input Devices Help



kali㉿kali: ~

```
(kali㉿kali)-[~]
$ sha256sum hash.txt
e32c0bfeba13ba88636f74bbdf2cb0efab88f8e0a1322c0ec4975daf3d5d4646 hash.txt
```

```
(kali㉿kali)-[~]
$ rm -f hash.txt
```

```
(kali㉿kali)-[~]
$ openssl genrsa -out myprivate.key 2048
```

```
(kali㉿kali)-[~]
$ ls -lmy private.key
ls: invalid option -- 'y'
Try 'ls --help' for more information.
```

```
(kali㉿kali)-[~]
$ ls -lmy private.key
ls: invalid option -- 'y'
Try 'ls --help' for more information.
```

```
(kali㉿kali)-[~]
$ ls -l myprivate.key
-rw——— 1 kali kali 1704 Sep 11 20:26 myprivate.key
```

```
(kali㉿kali)-[~]
$ openssl req -new -key myprivate.key -out myrequest.csr
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
```

```
Country Name (2 letter code) [AU]:ls -l myprivate.key
String too long, must be at most 2 bytes long
Country Name (2 letter code) [AU]:IN
State or Province Name (full name) [Some-State]:Uttar Pradesh
Locality Name (eg, city) []:Varanasi
Organization Name (eg, company) [Internet Widgits Pty Ltd]:Google
Organizational Unit Name (eg, section) []:A
Common Name (e.g. server FQDN or YOUR name) []:Kumar Pratap Dubey
Email Address []:47ashutoshdubey@gmail.com
```

```
Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:kali
An optional company name []:IN
```

```
(kali㉿kali)-[~]
$
```

File Machine View Input Devices Help



kali㉿kali: ~

```
(kali㉿kali)-[~]
$ md5sum hash.txt
4b713cf82676527e30d4abebf63a8c2  hash.txt

(kali㉿kali)-[~]
$ sha256sum hash.txt
e32c0bfeba13ba88636f74bbd1f2cb0efa88f8e0a1322c0ec4975daf3d5d4646  hash.txt

(kali㉿kali)-[~]
$ rm -f hash.txt

(kali㉿kali)-[~]
$ openssl genrsa -out myprivate.key 2048

(kali㉿kali)-[~]
$ ls -lmy private.key
ls: invalid option -- 'y'
Try 'ls --help' for more information.

(kali㉿kali)-[~]
$ ls -lmy private.key
ls: invalid option -- 'y'
Try 'ls --help' for more information.

(kali㉿kali)-[~]
$ ls -l myprivate.key
-rw----- 1 kali kali 1704 Sep 11 20:26 myprivate.key

(kali㉿kali)-[~]
$ openssl req -new -key myprivate.key -out myrequest.csr
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
_____
Country Name (2 letter code) [AU]:ls -l myprivate.key
String too long, must be at most 2 bytes long
Country Name (2 letter code) [AU]:IN
State or Province Name (full name) [Some-State]:Uttar Pradesh
Locality Name (eg, city) []:Varanasi
Organization Name (eg, company) [Internet Widgits Pty Ltd]:Google
Organizational Unit Name (eg, section) []:A
Common Name (e.g. server FQDN or YOUR name) []:Kuwar Pratap Dubey
Email Address []:47ashutoshdubey@gmail.com

Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:
```

```
(kali㉿kali)-[~]
$ ip route
default via 10.0.3.2 dev eth1 proto dhcp src 10.0.3.15 metric 100
10.0.3/24 dev eth1 proto kernel scope link src 10.0.3.15 metric 100

(kali㉿kali)-[~]
$ nslookup google.com
Server:      192.168.43.45
Address:     192.168.43.45#53

Non-authoritative answer:
Name:   google.com
Address: 142.250.76.206
Name:   google.com
Address: 2404:6800:4009:805::200e
```

```
(kali㉿kali)-[~]
$ dig google.com

; <>> DiG 9.20.9-1-Debian <>> google.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<- opcode: QUERY, status: NOERROR, id: 28300
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

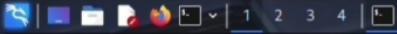
;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; QUESTION SECTION:
;google.com.           IN      A

;; ANSWER SECTION:
google.com.      98      IN      A      142.250.192.78

;; Query time: 164 msec
;; SERVER: 192.168.43.45#53(192.168.43.45) (UDP)
;; WHEN: Thu Sep 11 11:48:42 IST 2025
;; MSG SIZE  rcvd: 55
```

```
(kali㉿kali)-[~]
$ sudo apt update
[sudo] password for kali:
Notice: It seems that you don't have any APT data sources configured.
Notice: You won't be able to update your system or install new packages.
Notice: For more information, please refer to the online documentation at:
Notice: https://www.kali.org/docs/general-use/kali-linux-sources-list-repositories/
All packages are up to date.
```

```
(kali㉿kali)-[~]
$ sudo apt install gdm3 sudo dpkg-reconfigure gdm3
```



kali@kali: ~

```
File Actions Edit View Help
<title>Example Domain</title>
<meta charset="utf-8" />
<meta http-equiv="Content-type" content="text/html; charset=utf-8" />
<meta name="viewport" content="width=device-width, initial-scale=1" />
<style type="text/css">
body {
    background-color: #f0f0f2;
    margin: 0;
    padding: 0;
    font-family: -apple-system, system-ui, BlinkMacSystemFont, "Segoe UI", "Open Sans", "Helvetica Neue", Helvetica, Arial, sans-serif;
}
div {
    width: 600px;
    margin: 5em auto;
    padding: 2em;
    background-color: #fdfdff;
    border-radius: 0.5em;
    box-shadow: 2px 3px 7px 2px rgba(0,0,0,0.02);
}
a:link, a:visited {
    color: #38488f;
    text-decoration: none;
}
@media (max-width: 700px) {
    div {
        margin: 0 auto;
        width: auto;
    }
}
</style>
</head>
<body>
<div>
    <h1>Example Domain</h1>
    <p>This domain is for use in illustrative examples in documents. You may use this
    domain in literature without prior coordination or asking for permission.</p>
    <p><a href="https://www.iana.org/domains/example">More information ...</a></p>
</div>
</body>
</html>
```

```
(kali㉿kali)-[~]
└─$ ip route
default via 10.0.3.2 dev eth1 proto dhcp src 10.0.3.15 metric 100
10.0.3.0/24 dev eth1 proto kernel scope link src 10.0.3.15 metric 100

(kali㉿kali)-[~]
└─$
```



kali㉿kali: ~

```
File Actions Edit View Help  
1099/tcp open  rmiregistry  
1524/tcp open  ingreslock  
2049/tcp open  nfs  
2121/tcp open  cccproxy-ftp  
3306/tcp open  mysql  
5432/tcp open  postgresql  
5900/tcp open  vnc  
6000/tcp open  X11  
6667/tcp open  irc  
8009/tcp open  ajp13  
8180/tcp open  unknown
```

Nmap done: 1 IP address (1 host up) scanned in 11.37 seconds

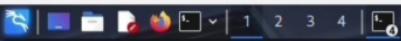
```
(kali㉿kali)-[~]  
$ sudo nmap -sV 192.168.56.104  
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-13 22:53 IST  
Nmap scan report for 192.168.56.104  
Host is up (0.0042s latency).  
Not shown: 977 filtered tcp ports (no-response)  
PORT      STATE SERVICE VERSION  
21/tcp    open  ftp      vsftpd 2.3.4  
22/tcp    open  ssh      OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)  
23/tcp    open  telnet   Linux telnetd  
25/tcp    open  smtp    Postfix smtpd  
53/tcp    open  domain   ISC BIND 9.4.2  
80/tcp    open  http    Apache httpd 2.2.8 ((Ubuntu) DAV/2)  
111/tcp   open  rpcbind 2 (RPC #100000)  
139/tcp   open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)  
445/tcp   open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)  
512/tcp   open  exec    netkit-rsh rexec  
513/tcp   open  login?  Netkit rshd  
514/tcp   open  shell    Netkit rshd  
1099/tcp  open  java-rmi  GNU Classpath grmiregistry  
1524/tcp  open  bindshell Metasploitable root shell  
2049/tcp  open  nfs     2-4 (RPC #100003)  
2121/tcp  open  ftp     ProFTPD 1.3.1  
3306/tcp  open  mysql   MySQL 5.0.51a-3ubuntu5  
5432/tcp  open  postgresql PostgreSQL DB 8.3.0 - 8.3.7  
5900/tcp  open  vnc     VNC (protocol 3.3)  
6000/tcp  open  X11     (access denied)  
6667/tcp  open  irc     UnrealIRCd  
8009/tcp  open  ajp13   Apache Jserv (Protocol v1.3)  
8180/tcp  open  http    Apache Tomcat/Coyote JSP engine 1.1  
Service Info: Hosts: metasploitable.localdomain, irc.Metasploitable.LAN; OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel
```

Service detection performed. Please report any incorrect results at <https://nmap.org/submit/>.

Nmap done: 1 IP address (1 host up) scanned in 23.23 seconds

```
(kali㉿kali)-[~]  
$
```

File Machine View Input Devices Help



kali@kali:~

```
File Actions Edit View Help
0 UP LOOPBACK RUNNING MTU:16436 Metric:1
0 RX packets:256 errors:0 dropped:0 overruns:0 frame:0
0 TX packets:256 errors:0 dropped:0 overruns:0 carrier:0
0 collisions:0 txqueuelen:0
0 RX bytes:99845 (97.5 KB) TX bytes:99845 (97.5 KB)

cat /etc/*release
DISTRIB_ID=Ubuntu
DISTRIB_RELEASE=8.04
DISTRIB_CODENAME=hardy
DISTRIB_DESCRIPTION="Ubuntu 8.04"

cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/bin/sh
bin:x:2:2:bin:/bin/sh
sys:x:3:3:sys:/dev/bin/sh
sync:x:4:65534:sync:/bin/sync
games:x:5:60:games:/usr/games:/bin/sh
man:x:6:12:man:/var/cache/man:/bin/sh
lp:x:7:7:lp:/var/spool/lpd:/bin/sh
mail:x:8:8:mail:/var/mail:/bin/sh
news:x:9:9:news:/var/spool/news:/bin/sh
uucp:x:10:10:uucp:/var/spool/uucp:/bin/sh
proxy:x:13:13:proxy:/bin/sh
www-data:x:33:33:www-data:/var/www:/bin/sh
backup:x:34:34:backup:/var/backups:/bin/sh
list:x:38:38:Mailing List Manager:/var/list:/bin/sh
irc:x:39:39:ircd:/var/run/ircd:/bin/sh
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/bin/sh
nobody:x:65534:65534:nobody:/nonexistent:/bin/sh
libuuid:x:100:101::/var/lib/libuuid:/bin/sh
dhcpc:x:101:102::/nonexistent:/bin/false
syslog:x:102:103::/home/syslog:/bin/false
klog:x:103:104::/home/klog:/bin/false
sshd:x:104:65534::/var/run/sshd:/usr/sbin/nologin
msfadmin:x:1000:1000:msfadmin,,,:/home/msfadmin:/bin/bash
bind:x:105:113::/var/cache/bind:/bin/false
postfix:x:106:115::/var/spool/postfix:/bin/false
ftp:x:107:65534::/home/ftp:/bin/false
postgres:x:108:117:PostgreSQL administrator,,,:/var/lib/postgresql:/bin/bash
mysql:x:109:118:MySQL Server,,,:/var/lib/mysql:/bin/false
tomcat55:x:110:65534::/usr/share/tomcat5.5:/bin/false
distccd:x:111:65534::/bin/false
user:x:1001:1001:just a user,111,,,:/home/user:/bin/bash
service:x:1002:1002,,,:/home/service:/bin/bash
telnetd:x:112:120::/nonexistent:/bin/false
proftpd:x:113:65534::/var/run/proftpd:/bin/false
statd:x:114:65534::/var/lib/nfs:/bin/false
```

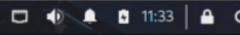
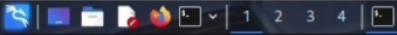
File	Actions	Edit	View	Help	dnsniff	krb5-multidev	libtbb12	python3-aardwolf	python3-cpuinfo	python3-neotime	python3-pypsrp	python3-winac
ettercap-common					libtbb10t64	libtbbbind-2-5	python3-aesedb	python3-dploot	python3-numba	python3-pykkatz	python3-xmldict	
ettercap-graphical					libapache2-mod-php	libtbbmalloc2	python3-aiocmd	python3-git	python3-numexpr	python3-psydolan	python3-yaswfp	
figlet					libtbboss2-4	medusa	python3-aiosmb	python3-gitdb	python3-odf	python3-psynego	rsh-redone-client	
finger					libgbsrcp4t64	mingw-w64-common	python3-aiowinreg	python3-llvmlite	python3-oscrypto	python3-qasync	smtp-user-enum	
gcc-mingw-w64-base					libkadm5lnt-mit12	mingw-w64-i686-dev	python3-arca	python3-lssatty	python3-pandas	python3-qrcode	sparta-scripts	
gcc-mingw-w64-1686-win32					libkadm5rsrc-mit12	mingw-w64-x86-64-dev	python3-asciitree	python3-masksy	python3-pandas-lib	python3-serial-asyncio	sphinx-rtd-theme-common	

```
Upgrading: iputils-ping 22.168.50.184
iputils-arping 22.168.50.184 (56/84) options: -v -n 1000
Installing: iputils-arping 22.168.50.184 (56/84) temp
Removing: iputils-arping 22.168.50.184 (56/84) temp
```

```
[kali㉿kali]:~]$ sudo arping -I eth0 -c 5 192.168.56.104
ARPING 192.168.56.104 from 10.0.3.15 eth0
Unicast reply from 192.168.56.104 [08:00:27:1E:A9:63] 1.566ms
Unicast reply from 192.168.56.104 [08:00:27:1E:A9:63] 1.731ms
Unicast reply from 192.168.56.104 [08:00:27:1E:A9:63] 2.202ms
Unicast reply from 192.168.56.104 [08:00:27:1E:A9:63] 2.204ms
Unicast reply from 192.168.56.104 [08:00:27:1E:A9:63] 2.267ms
Sent 5 probes (1 broadcast(s))
Received 5 response(s)
```

[kali㉿kali)-[~]

File Machine View Input Devices Help



11:33

kali@kali: ~

File Actions Edit View Help

(kali㉿kali)-[~]
\$ ip a

I



File Machine View Input Devices Help



kali@kali: ~

```
File Actions Edit View Help
└$ ls -l myprivate.key
-rw——— 1 kali kali 1704 Sep 11 20:26 myprivate.key

[(kali㉿kali)-~]
$ openssl req -new -key myprivate.key -out myrequest.csr
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
Country Name (2 letter code) [AU]:ls -l myprivate.key
String too long, must be at most 2 bytes long
Country Name (2 letter code) [AU]:IN
State or Province Name (full name) [Some-State]:Uttar Pradesh
Locality Name (eg, city) []:Varanasi
Organization Name (eg, company) [Internet Widgits Pty Ltd]:Google
Organizational Unit Name (eg, section) []:A
Common Name (e.g. server FQDN or YOUR name) []:Kumar Pratap Dubey
Email Address []:47ashutoshdubey@gmail.com

Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:kali
An optional company name []:IN
```

```
[(kali㉿kali)-~]
$ openssl req -new -key myprivate.key -out myrequest.csr
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
```

```
Country Name (2 letter code) [AU]:IN
State or Province Name (full name) [Some-State]:Delhi
Locality Name (eg, city) []:Dehi
Organization Name (eg, company) [Internet Widgits Pty Ltd]:Mylab
Organizational Unit Name (eg, section) []:
Common Name (e.g. server FQDN or YOUR name) []:kali
Email Address []:
```

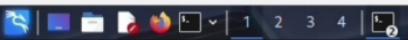
```
Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:kali
An optional company name []:kali
```

```
[(kali㉿kali)-~]
$ openssl x509 -req -days 365
```

File Machine View Input Devices Help



File Machine View Input Devices Help



kali@kali: ~

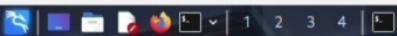
```
[ --time-stamp-precision precision ] [ --micro ] [ --nano ]
[ -z postrotate-command ] [ -Z user ] [ expression ]

(kali㉿kali)-[~]
$ 
(kali㉿kali)-[~]
$ 
(kali㉿kali)-[~]
$ 

(kali㉿kali)-[~]
└─$ ps -ef | grep tcpdump
kali          14074   1696  0 21:36 pts/0    00:00:00 grep --color=auto tcpdump
[kali@kali ~] 14074 1696 0 21:36 pts/0    00:00:00 grep --color=auto tcpdump
(kali㉿kali)-[~]
└─$ sudo tcpdump -i eth0 -n \ -w ./step6_arp_icmp.pcap \ 'arp or icmp' -c 100
[sudo] password for kali:
tcpdump: invalid option -- '/'
tcpdump version 4.99.5
libpcap version 1.10.5 (with TPACKET_V3)
OpenSSL 3.5.0 8 Apr 2025
64-bit build, 64-bit time_t
Usage: tcpdump [-AbDdefHIJLlnNOpqStuVxxX] [ -B size ] [ -c count ] [ --count ]
           [ -C file_size ] [ -E algo:secret ] [ -F file ] [ -G seconds ]
           [ -I interface ] [ --immediate-mode ] [ -j tstamptype ]
           [ -M secret ] [ --number ] [ --print ] [ -Q inlout|inout ]
           [ -R file ] [ -s snaplen ] [ -T type ] [ --version ]
           [ -V file ] [ -w file ] [ -W filecount ] [ -y datalinktype ]
           [ --time-stamp-precision precision ] [ --micro ] [ --nano ]
           [ -z postrotate-command ] [ -Z user ] [ expression ]

(kali㉿kali)-[~]
$ 
(kali㉿kali)-[~]
$ 
(kali㉿kali)-[~]
$ 

(kali㉿kali)-[~]
└─$ ls -lh ./step6_arp-icmp.pcap
ls: cannot access './home/kali/step6_arp-icmp.pcap': No such file or directory
(kali㉿kali)-[~]
$ 
```



kali㉿kali: ~

CPU usage: 0.7%

```
File Actions Edit View Help
Removing metasploit-framework (6.4.64-0kali1) ...
Removing nmap (7.95-dfsg-3kali1) ...
Processing triggers for desktop-file-utils (0.28-1) ...
Processing triggers for hicolor-icon-theme (0.18-2) ...
Processing triggers for man-db (2.13.1-1) ...
Processing triggers for wordlists (2023.2.0) ...
Processing triggers for kali-menu (2025.2.7) ...
```

```
[(kali㉿kali)-~]
$ sudo apt purge nmap -y
```

Package 'nmap' is not installed, so not removed

The following packages were automatically installed and are no longer required:

binutils-mingw-w64-i686	gcc-mingw-w64-i686-win32-runtime	libkdb5-10t64	mingw-w64-x86-64-dev	python3-aiowinreg	python3-llvmlite	python3-oscrypt	python3-qasync	smtp-user-enum
binutils-mingw-w64-x86-64	gcc-mingw-w64-x86-64-win32	libkrb5-dev	ndiff	python3-arc4	python3-lsassy	python3-pandas	python3-qrcode	sparta-scripts
bloodhound.py	gcc-mingw-w64-x86-64-win32-runtime	liblinear4	nmap-common	python3-asciitree	python3-masky	python3-pandas-lib	python3-serial-asyncio	sphinx-rtd-theme-common
comerr-dev	imagemagick	libluajit-5.1-2	numba-doc	python3-asn1tools	python3-minidump	python3-pefile	python3-smmmap	toilet-fonts
dnsmap	imagemagick-7.q16	libluajit-5.1-common	oracle-instantclient-basic	python3-asyauth	python3-minikerberos	python3-pyexploitdb	python3-tables	unicornscan
dsniff	krb5-multidev	liblaidsl.21t64	python3-odf-doc	python3-asyncsocks	python3-msldap	python3-pyfiglet	python3-tables-lib	urscan
ettercap-common	libapache2-mod-php	libtbb2	python3-odf-tools	python3-bisstruct	python3-neo4j	python3-pynlink3	python3-tld	wapiti
ettercap-graphical	libblosc2-4	libtbbbind-2-5	python3-tables-data	python3-bottleneck	python3-cpuinfo	python3-neotime	python3-pysrp	python3-unicrypto
figlet	libgssrpc4t64	medusa	python3-aardwolf	python3-dploot	python3-numexpr	python3-pypykatz	python3-winac	
finger	libkadm5clnt-mit12	mingw-w64-common	python3-aesedb	python3-git	python3-pypykatz	python3-psyhodan	python3-xmldict	
gcc-mingw-w64-base	libkadm5srvc-mit12	mingw-w64-dev	python3-aicmd	python3-gitdb	python3-odf	python3-psynego	python3-yaswfp	
gcc-mingw-w64-i686-win32	libkadm5srvc-mit12	mingw-w64-i686-dev	python3-aosmb					

Use 'sudo apt autoremove' to remove them.

Summary:
Upgrading: 0, Installing: 0, Removing: 0, Not Upgrading: 0

```
[(kali㉿kali)-~]
$ sudo apt --fix-broken install
```

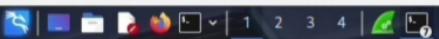
The following packages were automatically installed and are no longer required:

binutils-mingw-w64-i686	gcc-mingw-w64-i686-win32-runtime	libkdb5-10t64	mingw-w64-x86-64-dev	python3-aiowinreg	python3-llvmlite	python3-oscrypt	python3-qasync	smtp-user-enum
binutils-mingw-w64-x86-64	gcc-mingw-w64-x86-64-win32	libkrb5-dev	ndiff	python3-arc4	python3-lsassy	python3-pandas	python3-qrcode	sparta-scripts
bloodhound.py	gcc-mingw-w64-x86-64-win32-runtime	liblinear4	nmap-common	python3-asciitree	python3-masky	python3-pandas-lib	python3-serial-asyncio	sphinx-rtd-theme-common
comerr-dev	imagemagick	libluajit-5.1-2	numba-doc	python3-asn1tools	python3-minidump	python3-pefile	python3-smmmap	toilet-fonts
dnsmap	imagemagick-7.q16	libluajit-5.1-common	oracle-instantclient-basic	python3-asyauth	python3-minikerberos	python3-pyexploitdb	python3-tables	unicornscan
dsniff	krb5-multidev	liblaidsl.21t64	python3-odf-doc	python3-asyncsocks	python3-msldap	python3-pyfiglet	python3-tables-lib	urscan
ettercap-common	libaio1t64	libtbb2	python3-odf-tools	python3-bisstruct	python3-neo4j	python3-pynlink3	python3-tld	wapiti
ettercap-graphical	libapache2-mod-php	libtbbbind-2-5	python3-tables-data	python3-bottleneck	python3-neotime	python3-pysrp	python3-unicrypto	
figlet	libblosc2-4	medusa	python3-aardwolf	python3-cpuinfo	python3-pdloot	python3-pypykatz	python3-winac	
finger	libgssrpc4t64	mingw-w64-common	python3-aesedb	python3-git	python3-numexpr	python3-psyhodan	python3-xmldict	
gcc-mingw-w64-base	libkadm5clnt-mit12	mingw-w64-dev	python3-aicmd	python3-gitdb	python3-odf	python3-psynego	python3-yaswfp	
gcc-mingw-w64-i686-win32	libkadm5srvc-mit12	mingw-w64-i686-dev	python3-aosmb					

Use 'sudo apt autoremove' to remove them.

Summary:
Upgrading: 0, Installing: 0, Removing: 0, Not Upgrading: 0

```
[(kali㉿kali)-~]
$
```



kali㉿kali ~

```
File Actions Edit View Help
(kali㉿kali)-[~] ~ without prior coordination or asking for permission.<-->
$ ping -c 2 10.0.1.17 www.linux.org/domains/example/More information...<-->
ping: sendmsg: Operation not permitted
```

```
/body>
</html>
</Connection> 29 to host example.com left intact
```

```
--> (kali㉿kali)-[~]
--> $ ip link
1: lo: <LOOPBACK,UP,LOWER_UP> brd 00:00:00:00:00:00 state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 brd 127.0.0.1 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::/128 brd :: scope host noprefixroute
        valid_lft forever preferred_lft forever
```

```
2: eth0: <NO-CARRIER,BROADCAST,MULTICAST,UP,LOWER_UP> brd 00:0c:29:dc:0b:00 state DOWN group default qlen 1000
    link/ether 00:0c:29:dc:0b:00 brd ff:ff:ff:ff:ff:ff
    inet6 fe80::c00:c29ff:fedc:0b%eth0/64 brd fe80::ff:ff:ff:ff:ff:ff scope link noforwarding
        valid_lft 86399sec preferred_lft 86399sec
    inet6 10.0.1.17/24 brd 10.0.1.255 scope global temporary dynamic
        valid_lft 86377sec preferred_lft 86377sec
    inet6 fe80::c00:c29ff:fedc:0b%eth0/64 brd fe80::ff:ff:ff:ff:ff:ff scope link noforwarding
        valid_lft 86377sec preferred_lft 86377sec
```

```
    valid_lft forever preferred_lft forever

--> (kali㉿kali)-[~]
--> $ ip route
default via 10.0.1.1 dev eth0 proto dhcp src 10.0.1.1 metric 100
    dev eth0 proto kernel scope link src 10.0.1.1 metric 100

--> (kali㉿kali)-[~]
--> $ ping -c 2 10.0.1.17
PING 10.0.1.17(10.0.1.17) 56(84) bytes of data.
64 bytes from 10.0.1.17 icmp_seq=1 ttl=255 time=0.8 ms
64 bytes from 10.0.1.17 icmp_seq=2 ttl=255 time=0.8 ms
64 bytes from 10.0.1.17 icmp_seq=3 ttl=255 time=0.8 ms
64 bytes from 10.0.1.17 icmp_seq=4 ttl=255 time=0.7 ms

--- 10.0.1.17 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3856ms
rtt min/avg/max/mdev = 0.72/0.82/0.88/0.048 ms
```

```
--> (kali㉿kali)-[~]
--> $ sudo /usr/bin/nc -l -p 5555
[sudo] password for kali:
tcpdump: verbose output suppressed, use -v[v]... for full protocol decode
listening on eth1, link-type EN10MB (Ethernet), snapshot length 262144 bytes
0
```

File Machine View Input Devices Help



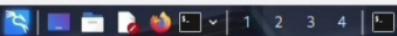
```
File Actions Edit View Help  
TRACEROUTE (using port 80/tcp)  
HOP RTT ADDRESS  
1 0.52 ms 192.168.56.104  
  
OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/.  
Nmap done: 1 IP address (1 host up) scanned in 76.74 seconds
```

```
(kali㉿kali)-[~]  
$ sudo nmap -sV 192.168.56.104 | tee nmap_scan.txt  
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-13 22:57 IST  
Nmap scan report for 192.168.56.104  
Host is up (0.0036s latency).  
Not shown: 977 filtered tcp ports (no-response)  
PORT      STATE SERVICE VERSION  
21/tcp    open  ftp     vsftpd 2.3.4  
22/tcp    open  ssh     OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)  
23/tcp    open  telnet  Linux telnetd  
25/tcp    open  smtp   Postfix smtpd  
53/tcp    open  domain ISC BIND 9.4.2  
80/tcp    open  http   Apache httpd 2.2.8 ((Ubuntu) DAV/2)  
111/tcp   open  rpcbind 2 (RPC #100000)  
139/tcp   open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)  
445/tcp   open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)  
512/tcp   open  exec   netkit-rsh rexec  
513/tcp   open  login?  
514/tcp   open  shell   Netkit rshd  
1099/tcp  open  java-rmi GNU Classpath grmiregistry  
1524/tcp  open  bindshell Metasploitable root shell  
2049/tcp  open  nfs    2-4 (RPC #100003)  
2121/tcp  open  ftp    ProFTPD 1.3.1  
3306/tcp  open  mysql  MySQL 5.0.51a-3ubuntu5  
5432/tcp  open  postgresql PostgreSQL DB 8.3.0 - 8.3.7  
5900/tcp  open  vnc    VNC (protocol 3.3)  
6000/tcp  open  X11   (access denied)  
6667/tcp  open  irc    UnrealIRCd  
8009/tcp  open  ajp13 Apache Jserv (Protocol v1.3)  
8180/tcp  open  http  Apache Tomcat/Coyote JSP engine 1.1  
Service Info: Hosts: metasploitable.localdomain, irc.Metasploitable.LAN; OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel  
  
Service detection performed. Please report any incorrect results at https://nmap.org/submit/.  
Nmap done: 1 IP address (1 host up) scanned in 22.59 seconds
```

```
(kali㉿kali)-[~]  
$ ls -lh nmap_scan.txt  
-rw-rw-r-- 1 kali kali 1.6K Sep 13 22:58 nmap_scan.txt  
  
(kali㉿kali)-[~]  
$ cat nmap_scan.txt | less  
  

```

File Machine View Input Devices Help



20:27

kali@kali: ~

File Actions Edit View Help

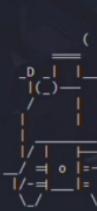
Home

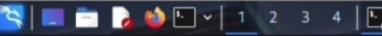


Applications



Trash





kali@kali: ~

```
[kali㉿kali)-[~]
└$ sudo tcpdump -i eth0 arp -c 10
[sudo] password for kali: 
tcpdump: verbose output suppressed, use -v[v]... for full protocol decode
listening on eth0, link-type EN10MB (Ethernet), snapshot length 262144 bytes
66 bytes from 10.0.3.2 ping statistics:
0 packets transmitted, 0 received, 0% packet loss, time 2057ms
rtt min/avg/max/mdev = 0.000/0.000/0.000/0.000 ms
```

File Machine View Input Devices Help

```
|_ Salt: 4;j6zW%PEFo{Am#Bqg_6
5432/tcp open postgresql PostgreSQL DB 8.3.0 - 8.3.7
| ssl-cert: Subject: commonName=ubuntu804-base.localdomain/organizationName=OCOSA/stateOrProvinceName=There is no such thing outside US/countryName=XX
| Not valid before: 2010-03-17T14:07:45
| Not valid after: 2010-04-16T14:07:45
|_ssl-date: 2025-09-13T17:25:38+00:00; -ls from scanner time.
5900/tcp open vnc VNC (protocol 3.3)
| vnc-info:
|   Protocol version: 3.3
|   Security types:
|     VNC Authentication (2)
|_ http-favicon: Apache Tomcat
6000/tcp open X11 (access denied)
6667/tcp open irc UnrealIRCd
8009/tcp open ajp13 Apache Jserv (Protocol v1.3)
|_ajp-methods: Failed to get a valid response for the OPTION request
8180/tcp open http Apache Tomcat/Coyote JSP engine 1.1
|_http-favicon: Apache Tomcat/5.5
|_http-title: Apache Tomcat/5.5
|_http-server-header: Apache-Coyote/1.1
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: bridge/VoIP adapter/general purpose
Running (JUST GUESSING): Oracle Virtualbox (98%), Slirp (98%), AT&T embedded (95%), QEMU (94%)
OS CPE: cpe:/o:oracle:virtualbox cpe:a:danny_gasparowski:slirp cpe:a:qemu:qemu
Aggressive OS guesses: Oracle Virtualbox Slirp NAT bridge (98%), AT&T BGW210 voice gateway (95%), QEMU user mode network gateway (94%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 1 hop
Service Info: Hosts: metasploitable.localdomain, irc.Metasploitable.LAN; OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel

Host script results:
| smb-os-discovery:
|   OS: Unix (Samba 3.0.20-Debian)
|   Computer name: metasploitable
|   NetBIOS computer name:
|   Domain name: localdomain
|   FQDN: metasploitable.localdomain
|   System time: 2025-09-13T13:25:24-04:00
|_smb-security-mode:
|   account_used: <blank>
|   authentication_level: user
|   challenge_response: supported
|   message_signing: disabled (dangerous, but default)
|_smb2-time: Protocol negotiation failed (SMB2)
|_clock-skew: mean: 59m58s, deviation: 2h00m00s, median: -1s
|_nbstat: NetBIOS name: METASPLOITABLE, NetBIOS user: <unknown>, NetBIOS MAC: <unknown> (unknown)

TRACEROUTE (using port 80/tcp)
HOP RTT      ADDRESS
1  0.52 ms 192.168.56.104

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 76.74 seconds
```

Screenshot taken

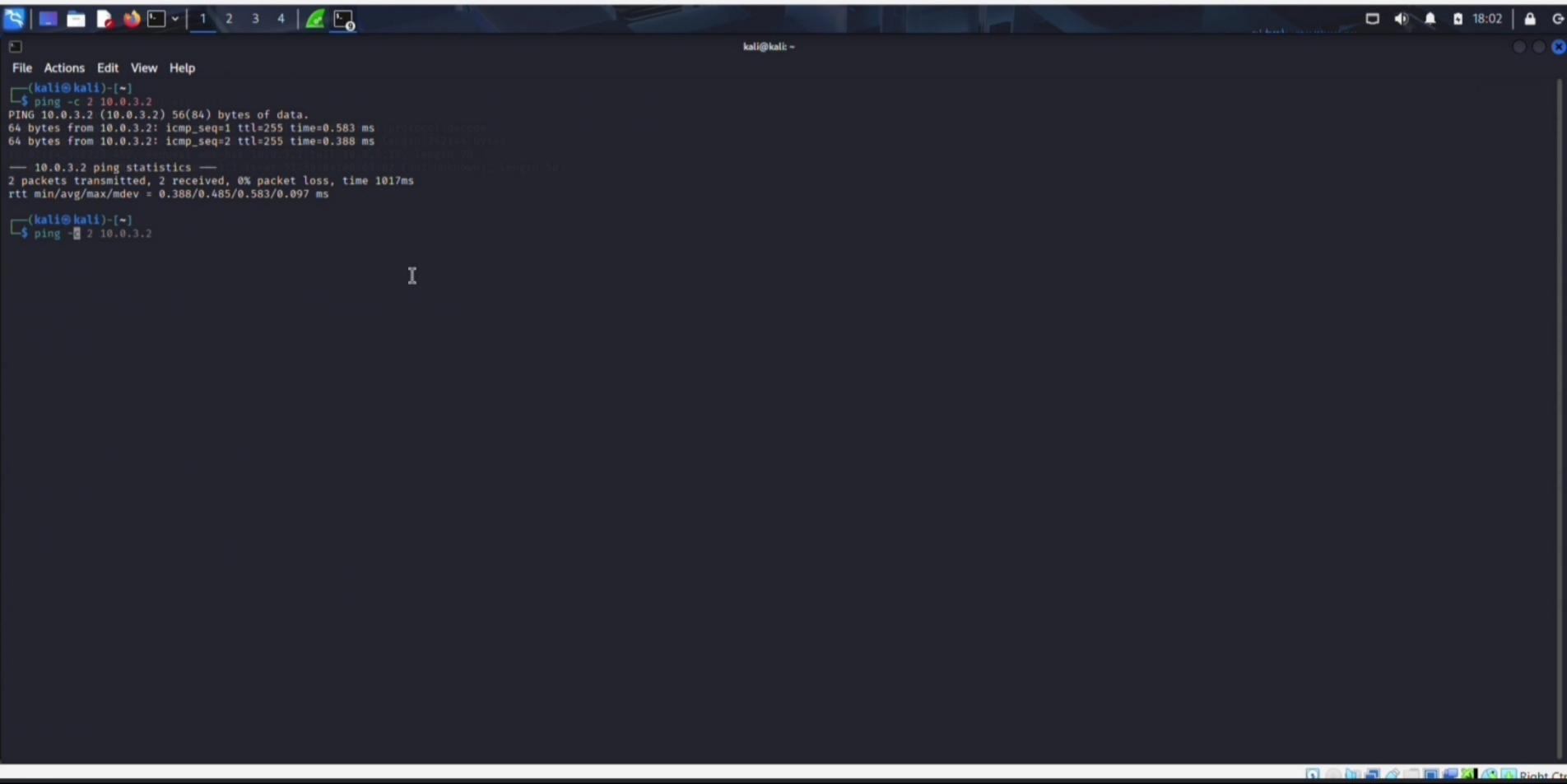
Screenshot taken

View image

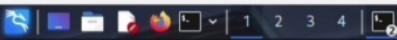
View image

File Machine View Input Devices Help





File Machine View Input Devices Help



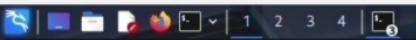
kali@kali: ~

File Actions Edit View Help

(kali㉿kali)-[~]
\$ nc 127.0.0.1 4444

hi this is my last point of my step 6 task 1 intwsrnship

File Machine View Input Devices Help



kali@kali:~



```
File Actions Edit View Help
(kali㉿kali)-[~]
$ nmap -sT -O 192.168.56.104
Starting Nmap 7.93 ( https://nmap.org ) at 2023-09-06 11:44 IST
Nmap scan timing: about 85.90% done; DTY: 11:45 (0:08:02 remaining)
Nmap scan report for 192.168.56.104
Host is up (0.003s latency).
Not shown: 977 filtered ports (no-response)
PORT      STATE SERVICE VERSION
22/tcp    open  ssh  OpenSSH 8.5p1 Debian 10v6 (protocol 2.0)
33/tcp    open  telnet  Linux telnetd
53/tcp    open  domain ISC BIND 9.8.2
80/tcp    open  http  Apache httpd/2.4.1 ((Ubuntu) OAN/1)
131/tcp   open  rpcbind 2.11 (RPC #100000)
139/tcp   open  netbios-ssn Samba smbd 3.X-5.8 (workgroup: WORKGROUP)
445/tcp   open  netbios-ssn Samba smbd 3.X-5.8 (workgroup: WORKGROUP)
513/tcp   open  rsh  netkit-rsh-reexec
513/tcp   open  login
516/tcp   open  shell  Netkit rshd
1099/tcp  open  java-rmi  GNU Classpath gomrregistry
1524/tcp  open  bindshell  Metasploitable root shell
2049/tcp  open  nfs  2-4 (RPC #100003)
2121/tcp  open  ftp  ProFTPD 1.3.1
3306/tcp  open  mysql  MySQL 5.6.51-0ubuntu5
5912/tcp  open  postgresql PostgreSQL 8.3.0-0.3.7
5980/tcp  open  vnc  VNC (protocol 3.3)
6000/tcp  open  x11  (access denied)
6002/tcp  open  irc  ircnullIRCd
6009/tcp  open  aiol2  Apache Jserv (Protocol v1.3)
8150/tcp  open  http  Apache Tomcat/9.0.52 engine/1.1
Service Info: Host: Metasploitable.localdomain; OS: Metasploitable; LAN: OS: Linux; CPU: x86_64; OS: Linux; Kernel: 5.10.0-1022-lowlatency

Nmap done: 1 IP address (1 host up) scanned in 16.11 seconds
```



Right Ctrl

File Machine View Input Devices Help

```
(kali㉿kali)-[~]
$ echo "Secret message for lab" > plain

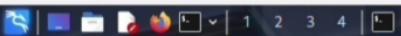
(kali㉿kali)-[~]
$ cat plain.txt
Secret message for lab

(kali㉿kali)-[~]
$ openssl enc -aes-256-cbc -pbkdf2 -in plain.txt -out secret.enc -pass pass:MyStrongPass123

(kali㉿kali)-[~]
$ ls -l
total 64
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Desktop
drwxr-xr-x 2 kali kali 4096 Sep 11 18:28 Documents
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Downloads
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Music
drwxr-xr-x 2 kali kali 4096 Sep 11 19:14 Pictures
-rw-rw-r-- 1 kali kali 23 Sep 11 19:27 plain
-rw-rw-r-- 1 kali kali 23 Sep 11 18:36 plain.txt
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Public
-rw-rw-r-- 1 kali kali 48 Sep 11 19:29 secret.enc
-rw-rw-r-- 1 kali kali 12708 Feb  2 2019 sl_3_02-1_and05.deb
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Templates
-rw-r-r-- 1 root root 13 Sep  6 11:20 test.txt
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Videos

(kali㉿kali)-[~]
$ cat secret.enc
)***RMoy'2*
```

File Machine View Input Devices Help



kali@kali: ~

```
(kali㉿kali)-[~]
$ echo "Secret message for lab" > plain

(kali㉿kali)-[~]
$ cat plain.txt
Secret message for lab

(kali㉿kali)-[~]
$ openssl enc -aes-256-cbc -pbkdf2 -in plain.txt -out secret.enc -pass pass:MyStrongPass123

(kali㉿kali)-[~]
$ ls -l
total 64
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Desktop
drwxr-xr-x 2 kali kali 4096 Sep 11 18:28 Documents
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Downloads
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Music
drwxr-xr-x 2 kali kali 4096 Sep 11 19:14 Pictures
-rw-rw-r-- 1 kali kali 23 Sep 11 19:27 plain
-rw-rw-r-- 1 kali kali 23 Sep 11 18:36 plain.txt
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Public
-rw-rw-r-- 1 kali kali 48 Sep 11 19:29 secret.enc
-rw-rw-r-- 1 kali kali 12708 Feb 2 2019 vt_5_92_1_and64.deb
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Templates
-rw-r--r-- 1 root root 13 Sep 6 11:20 test.txt
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Videos

(kali㉿kali)-[~]
$ cat secret
```

File Machine View Input Devices Help



```
Issuer: C=IN, ST=Delhi, L=Dehi, O=Mylab, CN=kali
Validity
    Not Before: Sep 11 15:06:35 2025 GMT
    Not After : Sep 11 15:06:35 2026 GMT
Subject: C=IN, ST=Delhi, L=Dehi, O=Mylab, CN=kali
Subject Public Key Info:
    Public Key Algorithm: rsaEncryption
        Public-Key: (2048 bit)
            Modulus:
                00:e1:eb:db:51:d0:f6:f5:fc:68:6b:f6:c4:37:0c:
                53:ad:ab:10:af:48:87:0c:d3:49:dd:f2:27:80:40:
                f8:8f:6f:fb:59:70:18:eb:dc:0e:36:e2:40:7f:61:
                ee:73:6c:e7:22:7c:80:fb:f2:aa:1e:5c:2c:8f:0b:
                60:03:58:22:5a:23:ec:5a:0b:74:30:18:54:fa:ca:
                42:7b:9d:4c:fd:47:b6:f6:cfc:aea:e5:e0:60:4f:
                7f:db:76:91:fa:f3:b3:ff:3b:9e:c5:df:72:bb:ac:
                c3:6d:73:03:29:ac:0c:d4:97:a2:e1:@0:6a:d0:24:
                27:06:18:4c:2a:@0:70:65:e9:9b:33:3d:34:51:0f:
                66:93:fc:41:31:23:a3:13:80:@0:d9:5a:@d:85:dd:
                3a:c3:26:d9:24:e2:eb:@f:91:d8:dc:6d:6:89:51:
                fe:ab:fc:dc:02:@7:db:99:89:c4:49:59:d2:67:7e:
                c2:af:d5:0f:ac:20:f3:c5:eb:75:02:ea:6c:74:b7:
                9c:4f:6e:50:7a:55:35:4f:ac:18:22:08:f1:60:b6:
                11:e9:64:a2:75:01:8e:e7:99:d1:f1:ca:21:fe:e5:
                3a:1e:ad:87:84:e5:30:a5:f3:fb:8a:4e:41:39:03:
                a0:0c:2b:37:@0:56:aa:96:83:41:8f:5c:95:24:a7:
                a::c1
            Exponent: 65537 (0x10001)
```

X509v3 extensions:

X509v3 Subject Key Identifier:

EC:9F:9C:A0:58:DD:21:A0:AB:30:92:DA:9B:9A:F6:67:29:88:6F:29

Signature Algorithm: sha256WithRSAEncryption

Signature Value:

```
45:42:32:5c:9b:e3:49:1e:7f:dd:a8:69:54:7c:87:ff:56:0f:
00:c6:24:21:39:2f:a0:01:69:70:aa:69:2b:9d:bb:55:dc:3b:
f0:79:57:a2:c9:6a:fd:18:79:@1:20:d5:81:f0:43:45:09:f2:
6f:df:b7:a9:51:4b:0a:88:00:ea:e7:51:87:ec:6e:36:54:44:
6f:0d:61:75:fc:e4:@0:25:06:3e:5d:03:dc:9c:57:43:9a:53:
0f:68:c1:94:3b:ed:83:12:83:09:d1:8b:b9:c5:cd:ce:@1:2a:
da:98:83:54:61:71:25:19:a8:91:de:ae:99:2e:30:64:@7:e1:
32:aa:@0:bd:e5:83:31:c3:76:e1:dc:19:22:5e:5a:18:d4:df:
60:67:@0:0d:03:c0:@1:77:23:aac:0d:1e:66:00:6a:39:5a:dc:
04:45:b5:3f:57:df:@2:87:ee:@0:9d:6f:fd:da:73:95:81:aa:
c8:13:b5:b8:@1:2e:66:64:62:77:87:e6:52:17:2e:0b:b8:1f:
f2:f5:06:95:39:76:@2:dc:63:8d:ee:45:4c:cd:1d:c0:@1:d5:
45:bd:3f:61:e7:c6:78:77:8c:fc:ed:46:13:c3:f7:3e:22:02:
8d:73:a0:f9:8f:79:a5:c8:ec:ee:b4:b8:16:8e:84:c5:ac:00:
03:84:98:3b
```

(kali㉿kali)-[~]

File Machine View Input Devices Help



kali@kali: ~

```
(kali㉿kali)-[~]
$ echo "Secret message for lab" > plain

(kali㉿kali)-[~]
$ cat plain.txt
Secret message for lab

(kali㉿kali)-[~]
$ openssl enc -aes-256-cbc -pbkdf2 -in plain.txt -out secret.enc -pass pass:MyStrongPass123

(kali㉿kali)-[~]
$ ls -l
total 64
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Desktop
drwxr-xr-x 2 kali kali 4096 Sep 11 18:28 Documents
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Downloads
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Music
drwxr-xr-x 2 kali kali 4096 Sep 11 19:14 Pictures
-rw-rw-r-- 1 kali kali 23 Sep 11 19:27 plain
-rw-rw-r-- 1 kali kali 23 Sep 11 18:36 plain.txt
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Public
-rw-rw-r-- 1 kali kali 48 Sep 11 19:29 secret.enc
-rw-rw-r-- 1 kali kali 12708 Feb 2 2019 vt_5_92-1_and06.deb
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Templates
-rw-r--r-- 1 root root 13 Sep 6 11:20 test.txt
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Videos

(kali㉿kali)-[~]
$ cat secret.enc
)***x*****RMoy^2*
```



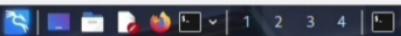
```
(kali㉿kali)-[~]
$ openssl enc -d -aes-256-cbc -pbkdf2 -in secret.enc -out plain_decrypted.txt -pass pass:MyStrongPass123

(kali㉿kali)-[~]
$ cat plain_decrypted.txt
Secret message for lab

(kali㉿kali)-[~]
$ rm -f secret.enc plain_decrypted.txt

(kali㉿kali)-[~]
```

File Machine View Input Devices Help



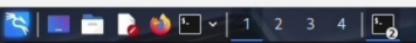
kali@kali: ~

```
File Actions Edit View Help
(kali㉿kali)-[~]
└─$ echo "Secret message for lab" > plain
(kali㉿kali)-[~]
└─$ cat plain.txt
Secret message for lab
(kali㉿kali)-[~]
└─$ openssl enc -aes-256-cbc -pbkdf2 -in plain.txt -out secret.enc -pass pass:MyStrongPass123
(kali㉿kali)-[~]
└─$ ls -l
total 64
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Desktop
drwxr-xr-x 2 kali kali 4096 Sep 11 18:28 Documents
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Downloads
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Music
drwxr-xr-x 2 kali kali 4096 Sep 11 19:14 Pictures
drwxr-xr-x 2 kali kali 23 Sep 11 19:27 plain
-rw-rw-r-- 1 kali kali 23 Sep 11 18:36 plain.txt
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Public
-rw-rw-r-- 1 kali kali 48 Sep 11 19:29 secret.enc
-rw-rw-r-- 1 kali kali 12708 Feb 2 2019 vt_3_92_1_and06.deb
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Templates
-rw-r--r-- 1 root root 13 Sep 6 11:20 test.txt
drwxr-xr-x 2 kali kali 4096 Aug 31 17:51 Videos

(kali㉿kali)-[~]
└─$ cat secret.enc
)***RMy'2*
```

```
(kali㉿kali)-[~]
└─$ openssl enc -d -aes-256-cbc -pbkdf2 -in secret.enc -out plain_decrypted.txt -pass pass:MyStrongPass123
```

File Machine View Input Devices Help



kali@kali: ~

```
(kali㉿kali)-[~] no route to host no-prefixroute
└─$ sudo ip neigh flush all deferred lift forever
[sudo] password for kali: 
└─$ ping -c 10 192.168.56.104
PING 192.168.56.104 (192.168.56.104) 56(84) bytes of data. 
64 bytes from 192.168.56.104: icmp_seq=1 ttl=255 time=12.5 ms
64 bytes from 192.168.56.104: icmp_seq=2 ttl=255 time=1.27 ms temporary dynamic
64 bytes from 192.168.56.104: icmp_seq=3 ttl=255 time=1.69 ms
64 bytes from 192.168.56.104: icmp_seq=4 ttl=255 time=2.72 ms dynamic_mngmapdly no-prefixroute
64 bytes from 192.168.56.104: icmp_seq=5 ttl=255 time=2.30 ms
64 bytes from 192.168.56.104: icmp_seq=6 ttl=255 time=1.68 ms
64 bytes from 192.168.56.104: icmp_seq=7 ttl=255 time=1.15 ms
64 bytes from 192.168.56.104: icmp_seq=8 ttl=255 time=1.44 ms
64 bytes from 192.168.56.104: icmp_seq=9 ttl=255 time=1.88 ms
64 bytes from 192.168.56.104: icmp_seq=10 ttl=255 time=1.26 ms

--- 192.168.56.104 ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9027ms
rtt min/avg/max/mdev = 1.153/2.789/12.511/3.273 ms
```

```
(kali㉿kali)-[~]
└─$ sudo apt install -y arping >/dev/null
```

```
--> kali㉿kali:[~]
└─$ sudo tcptrace -i tcplink 10 -c 1000m -l -stop6_arp_icmp.pcap
[sudo] password for kali:
[sudo] gsk111: command not found
```

```
--> kali㉿kali:[~]
└─$ sudo tcptk -i tcplink 10 -c 1000m -l -stop6_arp_icmp.pcap
```

```
--> kali㉿kali:[~]
└─$ sudo tcpreplay -i tcplink -r /stop6_arp_icmp.pcap -w 1 -l -stop6_arp_icmp.pcap
tcpdump: listening on tcplink
tcpdump version 4.99.5
tcptk version 4.10.5 (with libpcap_V3)
OpenSSL 1.1.1-fips 29 Mar 2020
64-bit build, 64-bit time
Usage: tcpreplay [[-A]definitive|timebased|snapshot] [[-B]size] [[-C]count] [[-count]
[-C]filesize] [[-f]algsecret] [[-F]file] [[-G]seconds]
[[-i]interface] [[-I]immediate_mode] [[-j]latempty]
[[-M]secret] [[-n]number] [[-p]print] [[-Q]injection]
[[-r]file] [[-s]snapshot] [[-T]type] [[-version]
[[-v]file]] [[-w]file] [[-W]filecount] [[-v]datalinktype]
[[-x]time-stamp-precision] [[-y]micro] [[-z]nano]
[[-e]postrotate-command] [[-Z]user] [[-expression]]
```

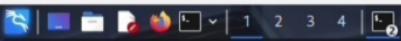
Kali Linux [~]



kali@kali: ~

```
File Actions Edit View Help
(kali㉿kali)-[~]
$ echo "Secret message for lab" > plain
(kali㉿kali)-[~]
$ cat plain.txt
Secret message for lab
(kali㉿kali)-[~]
$ openssl enc -aes-256-cbc -pbkdf2 -in plain.txt -out
```

File Machine View Input Devices Help



kali@kali: ~

23:36



File Actions Edit View Help

(kali㉿kali)-[~]
\$ nc 127.0.0.1 4444

hi this is my last point of my step 6 task 1 internship

nc -lvp 4445 > received.txt my step 6 task 1 internship

echo "Hello from Netcat file test"

File Machine View Input Devices Help



kali㉿kali: ~

```
└─$ ls
Desktop Documents Downloads Music Pictures plain plain.txt Public sl_5.02-1_x64.deb Templates test.txt Videos

[(kali㉿kali)-~]
└─$ echo "Hashing example for lab" > hash.txt
[(kali㉿kali)-~]
└─$ cat hash.txt
Hashing example for lab
[(kali㉿kali)-~]
└─$ md5sum hash.txt
f56d49d999d4b145573ab01b6264b2cd hash.txt

[(kali㉿kali)-~]
└─$ sha256sum hash.txt
4048668fe61283821140b68a3efd260359097fd061f6de32c98f22601e3d6888 hash.txt

[(kali㉿kali)-~]
└─$ echo "Modified data" > hash.txt
[(kali㉿kali)-~]
└─$ md5sum hash.txt
4b713cf082676527e30d4abebf63a8c2 hash.txt

[(kali㉿kali)-~]
└─$ sha256sum hash.txt
e32c0bfeba13ba88636f74bbdf2cb0efa88f8e0a1322c0ec4975daf3d5d4646 hash.txt

[(kali㉿kali)-~]
└─$ rm -f hash.txt

[(kali㉿kali)-~]
└─$ openssl genrsa -out myprivate.key 2048

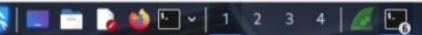
[(kali㉿kali)-~]
└─$ ls -lmy private.key
ls: invalid option -- 'y'
Try 'ls --help' for more information.

[(kali㉿kali)-~]
└─$ ls -lmy private.key
ls: invalid option -- 'y'
Try 'ls --help' for more information.

[(kali㉿kali)-~]
└─$ ls -l myprivate.key
-rw——— 1 kali kali 1704 Sep 11 20:26 myprivate.key

[(kali㉿kali)-~]
└─$ openssl req -new -key myprivate
```

File Machine View Input Devices Help



File Actions Edit View Help

\$ curl -v

```
[kali㉿kali:~] $ curl -v
curl: (35) ** (wiredark)[3651]:17:35:53,518287 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::SystemPalette
-- (wiredark)[3651]:17:35:53,518287 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::ToolButtonPalette
-- (wiredark)[3651]:17:35:53,512715 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::ButtonPalette
-- (wiredark)[3651]:17:35:53,512730 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::CheckBoxPalette
-- (wiredark)[3651]:17:35:53,512759 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::RadioButtonPalette
-- (wiredark)[3651]:17:35:53,512765 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::HeaderPalette
-- (wiredark)[3651]:17:35:53,513842 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::HeaderViewPalette
-- (wiredark)[3651]:17:35:53,513878 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::MessageBoxPalette
-- (wiredark)[3651]:17:35:53,513892 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::TabBarPalette
-- (wiredark)[3651]:17:35:53,513914 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::GroupBoxPalette
-- (wiredark)[3651]:17:35:53,513916 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::MenuBarPalette
-- (wiredark)[3651]:17:35:53,513918 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::ImageLabelPalette
-- (wiredark)[3651]:17:35:53,513919 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::TextEditorPalette
-- (wiredark)[3651]:17:35:53,513929 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::TextEditPalette
-- (wiredark)[3651]:17:35:53,513950 [GUI] CDRV -- virtual QVariadic QPlatformTheme::ThemeHint::ThemeHint) const
-- (wiredark)[3651]:17:35:53,513983 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::SystemPalette
-- (wiredark)[3651]:17:35:54,059378 [GUI] CDRV -- virtual QVariant QPlatformTheme::ThemeHint::ThemeHint) const
-- (wiredark)[3651]:17:35:54,235658 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::SystemPalette
-- (wiredark)[3651]:17:35:54,310674 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::SystemPalette
-- (wiredark)[3651]:17:35:54,310738 [GUI] CDRV -- virtual const QPalette::QColorTheme::Palette) const QPlatformTheme::SystemPalette
-- (wiredark)[3651]:17:36:09,729828 [Capture MESS001] -- Capture Start ...
-- (wiredark)[3651]:17:36:09,882199 [Capture MESS001] -- Capture started
-- (wiredark)[3651]:17:36:09,882248 [Capture MESS001] -- File: "/tmp/wireshark_0f181043.pcapng"
-- (wiredark)[3651]:17:37:19,012913 [Capture MESS001] -- Capture Stop ...
-- (wiredark)[3651]:17:37:19,013382 [Capture MESS001] -- Capture stopped
-- (wiredark)[3651]:17:37:24,097721 [Capture MESS001] -- Capture Start ...
-- (wiredark)[3651]:17:37:24,099910 [Capture MESS001] -- Capture started
-- (wiredark)[3651]:17:37:29,799492 [Capture MESS001] -- File: "/tmp/wireshark_e013a02c1.bagng"
```

kali@kali:~

File Machine View Input Devices Help



11:20

kali@kali: ~



File Actions Edit View Help

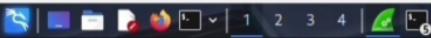
```
(kali㉿kali)-[~] :
```

```
$ echo "hello hacker">>test.txt
```

```
(kali㉿kali)-[~]
```

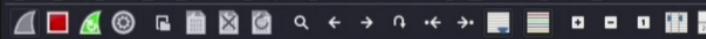
```
$
```

File Machine View Input Devices Help



17:36

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help



Capturing from eth1

+ -

Apply a display filter ... <Ctrl-/>

No.	Time	Source	Destination	Protocol	Length	Info
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