













VMware Workstation window showing a Kali Linux virtual machine. The main terminal window displays the following commands and output:

```
root@kali: /home/kali
# apt update
Get:1 http://kali.download/kali kali-rolling InRelease [34.0 kB]
Get:2 http://kali.download/kali kali-rolling/main amd64 Packages [20.9 MB]
Get:3 http://kali.download/kali kali-rolling/main amd64 Contents (deb) [52.6 MB]
Get:4 http://kali.download/kali kali-rolling/contrib amd64 Packages [114 kB]
Get:5 http://kali.download/kali kali-rolling/contrib amd64 Contents (deb) [2.5 kB]
Get:6 http://kali.download/kali kali-rolling/non-free amd64 Packages [189 kB]
Get:7 http://kali.download/kali kali-rolling/non-free amd64 Contents (deb) [94 kB]
Get:8 http://kali.download/kali kali-rolling/non-free-firmware amd64 Package [11.9 kB]
Get:9 http://kali.download/kali kali-rolling/non-free-firmware amd64 Content (deb) [28.7 kB]
Fetched 75.1 MB in 26s (2,929 kB/s)
411 packages can be upgraded. Run 'apt list --upgradable' to see them.

root@kali: /home/kali
# apt install curl
curl is already the newest version (8.17.0-3).
curl set to manually installed.
The following package was automatically installed and is no longer required:
  libheif
Use 'apt autoremove' to remove it.

Summary:
  Upgrading: 0, Installing: 0, Removing: 0, Not Upgrading: 411

root@kali: /home/kali
# apt install tree
tree is already the newest version (2.2.1-4).
tree set to manually installed.
The following package was automatically installed and is no longer required:
  libheif
Use 'apt autoremove' to remove it.

Summary:
  Upgrading: 0, Installing: 0, Removing: 0, Not Upgrading: 411

root@kali: /home/kali
```

A secondary terminal window on the right shows the output of the following commands:

```
kali@kali: ~
# curl --version
curl 8.17.0 (x86_64-pc-linux-gnu) libcurl/8.17.0 OpenSSL/3.5.4 zlib/1.3.1 brotli/1.1.0 zstd/1.5.7 libidn2/2.3.0 libpsl/0.21.2 libssh2/1.11.1 nghttp2/1.64.0 nghttp/1.16.0 nghttp3/1.12.0 librtmp/2.3 mit-krb5/1.22.1 OpenLDAP/2.6.10
Release-Date: 2025-11-05, security patched: 8.17.0-3
Protocols: dict file ftp ftps gopher gophers http https imap imaps ipfs ipns ldap ldaps mqtt pop3 pop3s rtsp scp sftp smb smbs smtp smtps telnet tft ws wss
Features: alt-svc AsynchDNS brotli GSS-API HSTS HTTP2 HTTP3 HTTPS-proxy IDN PVP Kerberos Largefile libz NTLM PSL SPNEGO SSL threadsafe TLS-SRP UnixSockets zstd

# tree --version
tree v2.2.1 © 1996 - 2024 by Steve Baker, Thomas Moore, Francesc Rocher, Florian Sesser, Kyosuke Tokoro

#
```

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.





VMware Workstation window showing a Kali Linux virtual machine. The terminal displays the installation of htop and the system status output.

**Terminal Output:**

```
root@kali: /home/kali
# apt install htop
# apt install htop
The following package was automatically installed and is no longer required:
libysel0
Use 'apt autoremove' to remove it.

Installing:
 htop

Suggested packages:
 strace

Summary:
 Upgrading: 0, Installing: 1, Removing: 0, Not Upgrading: 411
 Download size: 171 kB
 Space needed: 434 kB / 39.9 GB available

Get:: http://mirrors.esito.network/kali kali-rolling/main amd64 htop amd64 3.4.1-5 [171 kB]
Fetched 171 kB in 2s (95.2 kB/s)
Selecting previously unselected package htop.
(Reading database ... 433112 files and directories currently installed.)
Preparing to unpack .../htop_3.4.1-5_amd64.deb ...
Unpacking htop (3.4.1-5) ...
Setting up htop (3.4.1-5) ...
Processing triggers for mailcap (3.75) ...
Processing triggers for kali-menu (2025.4.2) ...
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) ...

root@kali: /home/kali
# htop
A signal 2 (Interrupt) was received, exiting without persisting settings to htoprc
root@kali: /home/kali
```

**System Status Output:**

```
kali@kali:~$ htop
Tasks: 84, 247 thr, 132 kthr; 1
Load average: 0.14 0.16 0.11
Uptime: 00:13:09
Mem: 828M/5.74G
Swap: 0K/954M
```

Main	T/O	PRI	NI	VI	IN	RES	SHR	S	CP	PM	MEM	TIME	+	-
944	root	20	0	359M	126M	0	0	0	0.7	2.2	0	0:01.41	/	
951	root	20	0	359M	126M	0	0	0	0.7	2.2	0	0:01.41	/	
1246	kali	20	0	1156M	128M	88968	5	0	0.7	2.2	0	0:03.35	x	
1308	kali	20	0	383M	62408	20800	5	0	0.7	1.0	0	0:01.34	/	
7953	kali	20	0	783M	64772	46200	5	0	0.7	1.1	0	0:00.14	/	
1	root	20	0	24276	15280	18992	5	0	0.0	0.3	0	0:00.87	/	
484	root	20	0	30384	18380	10952	5	0	0.0	0.3	0	0:00.31	/	
420	root	20	0	154M	1744	1628	5	0	0.0	0.0	0	0:00.00	v	
422	root	20	0	154M	1744	0	5	0	0.0	0.0	0	0:00.00	v	
423	root	20	0	154M	1744	0	5	0	0.0	0.0	0	0:00.00	v	
426	systemd-t	20	0	90112	7456	6316	5	0	0.0	0.1	0	0:00.04	/	
430	root	20	0	30820	17464	6168	5	0	0.0	0.2	0	0:00.26	/	
431	systemd-t	20	0	90112	7456	0	5	0	0.0	0.1	0	0:00.00	/	
563	root	20	0	8388	5264	1752	5	0	0.0	0.1	0	0:00.17	/	
572	root	20	0	111M	9808	8228	5	0	0.0	0.2	0	0:00.96	/	
583	root	20	0	381M	7328	6528	5	0	0.0	0.1	0	0:00.04	/	
307	messagebus	20	0	10280	7520	5316	5	0	0.0	0.1	0	0:00.30	/	

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.





VMware Workstation window showing a Kali Linux virtual machine. The terminal displays the following commands and output:

```
root@kali: /home/kali
[root@kali]~# apt install net-tools
net-tools is already the newest version (2.10-2).
net-tools set to manually installed.
The following package was automatically installed and is no longer required:
  libyselpg
Use 'apt autoremove' to remove it.

Summary:
  Upgrading: 0, Installing: 0, Removing: 0, Not Upgrading: 411

[root@kali]~# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.80.128 netmask 255.255.255.0  broadcast 192.168.80.255
        inet6 fe80::28f1ad79:cdda:f6c0 prefixlen 64  scopeid 0<link>
        ether 00:0c:29:6e:56:e9  txqueuelen 1000  (Ethernet)
        RX packets 52493  bytes 78082738 (74.4 MiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 6433  bytes 391637 (382.4 KiB)
        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 0<host>
        loop  txqueuelen 1000  (local loopback)
        RX packets 8  bytes 480 (480.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 8  bytes 480 (480.0 B)
        TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0

[root@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
```

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