# App Installation in Linux

## Project description

Using command line to install app, uninstall app and to list installed app

## Ensure that APT is installed

The following code demonstrates how I used Linux commands to ensure Advance Package Tool (APT) is installed on the Linux OS.

```
analyst@851e790240bf:~$ apt
apt 1.8.2.3 (amd64)
Usage: apt [options] command

apt is a commandline package manager and provides commands for
searching and managing as well as querying information about packages.
It provides the same functionality as the specialized APT tools,
like apt-get and apt-cache, but enables options more suitable for
interactive use by default.

Most used commands:
  list - list packages based on package names
  search - search in package descriptions
  show - show package details
  install - install packages
  reinstall - reinstall packages
  remove - remove packages
  autoremove - Remove automatically all unused packages
  update - update list of available packages
  upgrade - upgrade the system by installing/upgrading packages
  full-upgrade - upgrade the system by removing/installing/upgrading packages
  edit-sources - edit the source information file

See apt(8) for more information about the available commands.
Configuration options and syntax is detailed in apt.conf(5).
Information about how to configure sources can be found in sources.list(5).
Package and version choices can be expressed via apt_preferences(5).
Security details are available in apt-secure(8).
                                        This APT has Super Cow Powers.
analyst@851e790240bf:~$
```

The first line of the screenshot displays the command I entered, and the other lines display the output. The code lists all contents of the app. I used the `apt` command to check if the apt is installed on the machine. The output of my command indicates that the Advanced Package Tool is installed, it shows the app definition and most used combine command.

## Install and uninstall the Suricata application

The following code demonstrates how I used Linux commands to install and uninstall suricata on the Linux OS.

```
analyst@8adb1fa734e9:~$ sudo apt install suricata
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  geoip-database libauthen-sasl-perl libdata-dump-perl libencode-locale-perl libevent-2.1-6
  libevent-core-2.1-6 libevent-pthreads-2.1-6 libfile-listing-perl libfont-afm-perl
  libgeoip1 libhiredis0.14 libhtml-form-perl libhtml-format-perl libhtml-parser-perl
  libhtml-tagset-perl libhtml-tree-perl libhtp2 libhttp-cookies-perl libhttp-daemon-perl
  libhttp-date-perl libhttp-message-perl libhttp-negotiate-perl libhyperscan5
  libio-html-perl libio-socket-ssl-perl libjansson4 libltdl7 libluajit-5.1-2
  libluajit-5.1-common liblwp-mediatypes-perl liblwp-protocol-https-perl libmailtools-perl
  libnet-http-perl libnet-smtp-ssl-perl libnet-ssleay-perl libnet1 libnetfilter-log1
  libnetfilter-queue1 libnfnetlink0 libnspr4 libnss3 libpcap0.8 libprelude23
  libpython-stdlib libpython2-stdlib libpython2.7-minimal libpython2.7-stdlib
  libtimedate-perl libtry-tiny-perl liburi-perl libwww-perl libwww-robotrules-perl
  libyaml-0-2 oinkmaster perl-openssl-defaults prelude-utils python python-minimal
  python-simplejson python2 python2-minimal python2.7 python2.7-minimal snort-rules-default
  suricata-oinkmaster
Suggested packages:
  libdigest-hmac-perl libgssapi-perl geoip-bin libcrypt-ssleay-perl libauthen-ntlm-perl
```

The first line of the screenshot displays the command I entered, and the other lines display the output. I used the `sudo apt install suricata` command to install suricata on the machine. The output of my command indicates the installation process.

```
analyst@8adb1fa734e9:~$ suricata
Suricata 4.1.2
USAGE: suricata [OPTIONS] [BPF FILTER]

        -c <path>                           : path to configuration file
        -T                                  : test configuration file (use with -c)
        -i <dev or ip>                      : run in pcap live mode
        -F <bpf filter file>                : bpf filter file
        -r <path>                           : run in pcap file/offline mode
        -q <qid>                            : run in inline nfqueue mode
        -s <path>                           : path to signature file loaded in addition to s
uricata.yaml settings (optional)
        -S <path>                           : path to signature file loaded exclusively (opt
ional)
        -l <dir>                            : default log directory
        -D                                  : run as daemon
        -k [all|none]                       : force checksum check (all) or disabled it (non
e)
        -V                                  : display Suricata version
        -v[v]                               : increase default Suricata verbosity
        --list-app-layer-protos             : list supported app layer protocols
        --list-keywords[=all|csv|<kword>]   : list keywords implemented by the engine
        --list-runmodes                     : list supported runmodes
        --runmode <runmode_id>              : specific runmode modification the engine shoul
d run.  The argument
                                              supplied should be the id for the runmode obta
ined by running
```

The first line of the screenshot displays the command I entered, and the other lines display the

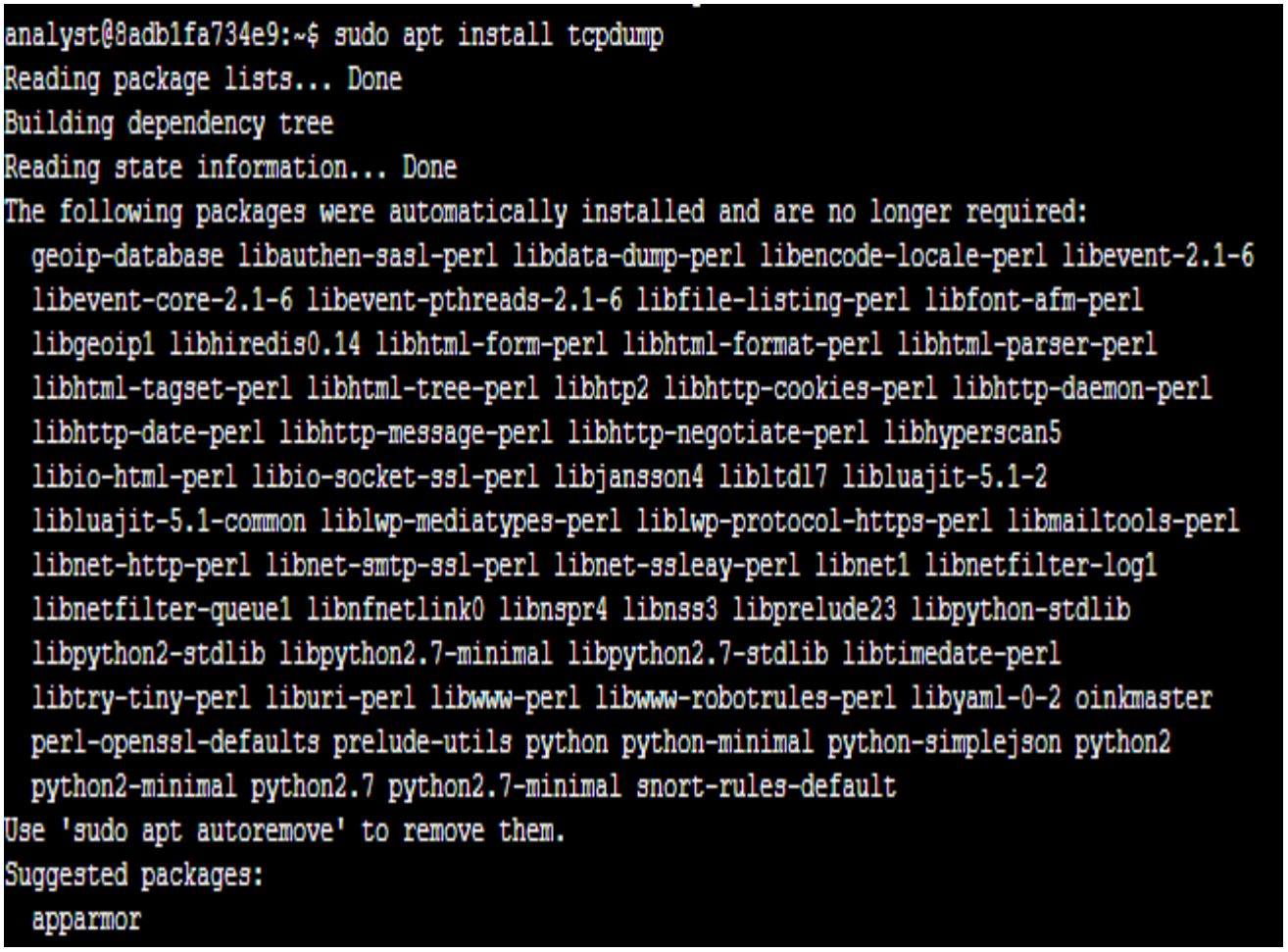
output. I used the `suricata` command to ensure that suricata is installed on the machine. The output of my command indicates that the suricata is installed.

```
analyst@8adb1fa734e9:~$ sudo apt remove suricata
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  geoip-database libauthen-sasl-perl libdata-dump-perl libencode-locale-perl libevent-2.1-6
  libevent-core-2.1-6 libevent-pthreads-2.1-6 libfile-listing-perl libfont-afm-perl
  libgeoip1 libhiredis0.14 libhtml-form-perl libhtml-format-perl libhtml-parser-perl
  libhtml-tagset-perl libhtml-tree-perl libhtp2 libhttp-cookies-perl libhttp-daemon-perl
  libhttp-date-perl libhttp-message-perl libhttp-negotiate-perl libhyperscan5
  libio-html-perl libio-socket-ssl-perl libjansson4 libltdl7 libluajit-5.1-2
  libluajit-5.1-common liblwp-mediatypes-perl liblwp-protocol-https-perl libmailtools-perl
  libnet-http-perl libnet-smtp-ssl-perl libnet-ssleay-perl libnet1 libnetfilter-log1
  libnetfilter-queue1 libnfnetlink0 libnspr4 libnss3 libpcap0.8 libprelude23
  libpython-stdlib libpython2-stdlib libpython2.7-minimal libpython2.7-stdlib
  libtimedate-perl libtry-tiny-perl liburi-perl libwww-perl libwww-robotrules-perl
  libyaml-0-2 oinkmaster perl-openssl-defaults prelude-utils python python-minimal
  python-simplejson python2 python2-minimal python2.7 python2.7-minimal snort-rules-default
Use 'sudo apt autoremove' to remove them.
The following packages will be REMOVED:
  suricata suricata-oinkmaster
0 upgraded, 0 newly installed, 2 to remove and 42 not upgraded.
After this operation, 5298 kB disk space will be freed.
Do you want to continue? [Y/n] Y
(Reading database ... 24795 files and directories currently installed.)
Removing suricata-oinkmaster (1:4.1.2-2+deb10u1) ...
Removing suricata (1:4.1.2-2+deb10u1) ...
invoke-rc.d: could not determine current runlevel
invoke-rc.d: policy-rc.d denied execution of stop.
Processing triggers for man-db (2.8.5-2) ...
analyst@8adb1fa734e9:~$
```

The first line of the screenshot displays the command I entered, and the other lines display the output. I used the `sudo apt remove suricata` command to uninstall suricata on the machine. The output of my command indicates the uninstallation process.

## Install the tcpdump application

The following code demonstrates how I used Linux commands to install tcpdump on the Linux OS.

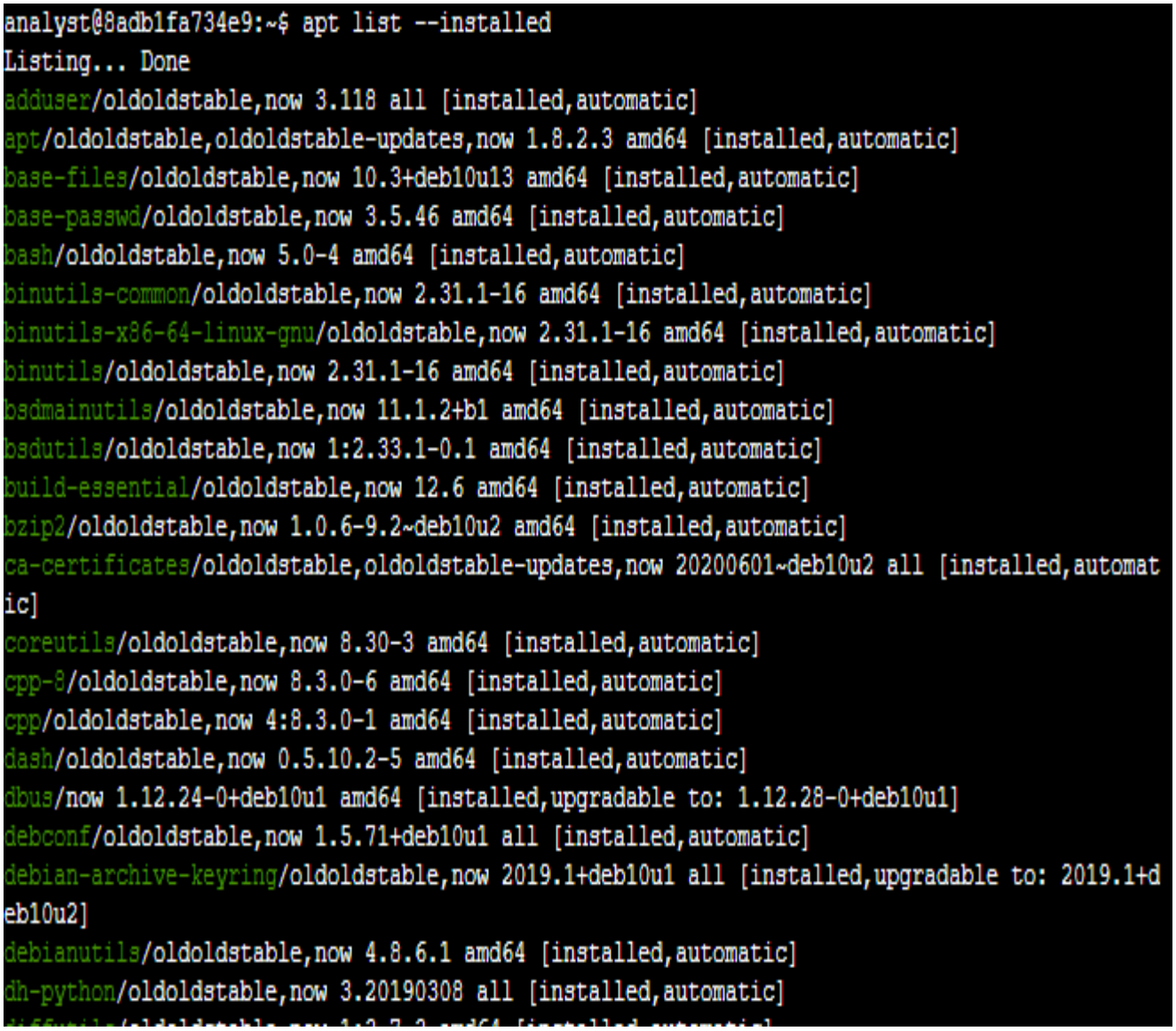


```
analyst@8adb1fa734e9:~$ sudo apt install tcpdump
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  geoip-database libauthen-sasl-perl libdata-dump-perl libencode-locale-perl libevent-2.1-6
  libevent-core-2.1-6 libevent-pthreads-2.1-6 libfile-listing-perl libfont-afm-perl
  libgeoip1 libhiredis0.14 libhtml-form-perl libhtml-format-perl libhtml-parser-perl
  libhtml-tagset-perl libhtml-tree-perl libhtp2 libhttp-cookies-perl libhttp-daemon-perl
  libhttp-date-perl libhttp-message-perl libhttp-negotiate-perl libhyperscan5
  libio-html-perl libio-socket-ssl-perl libjansson4 libltdl7 libluajit-5.1-2
  libluajit-5.1-common liblwp-mediatypes-perl liblwp-protocol-https-perl libmailtools-perl
  libnet-http-perl libnet-smtp-ssl-perl libnet-ssleay-perl libnet1 libnetfilter-log1
  libnetfilter-queue1 libnfnetlink0 libnspr4 libnss3 libprelude23 libpython-stdlib
  libpython2-stdlib libpython2.7-minimal libpython2.7-stdlib libtimedate-perl
  libtry-tiny-perl liburi-perl libwww-perl libwww-robotrules-perl libyaml-0-2 oinkmaster
  perl-openssl-defaults prelude-utils python python-minimal python-simplejson python2
  python2-minimal python2.7 python2.7-minimal snort-rules-default
Use 'sudo apt autoremove' to remove them.
Suggested packages:
  apparmor
```

The first line of the screenshot displays the command I entered, and the other lines display the output. I used the `sudo apt install tcpdump` command to install tcpdumpon the machine. The output of my command indicates the installation process.

## List the installed applications

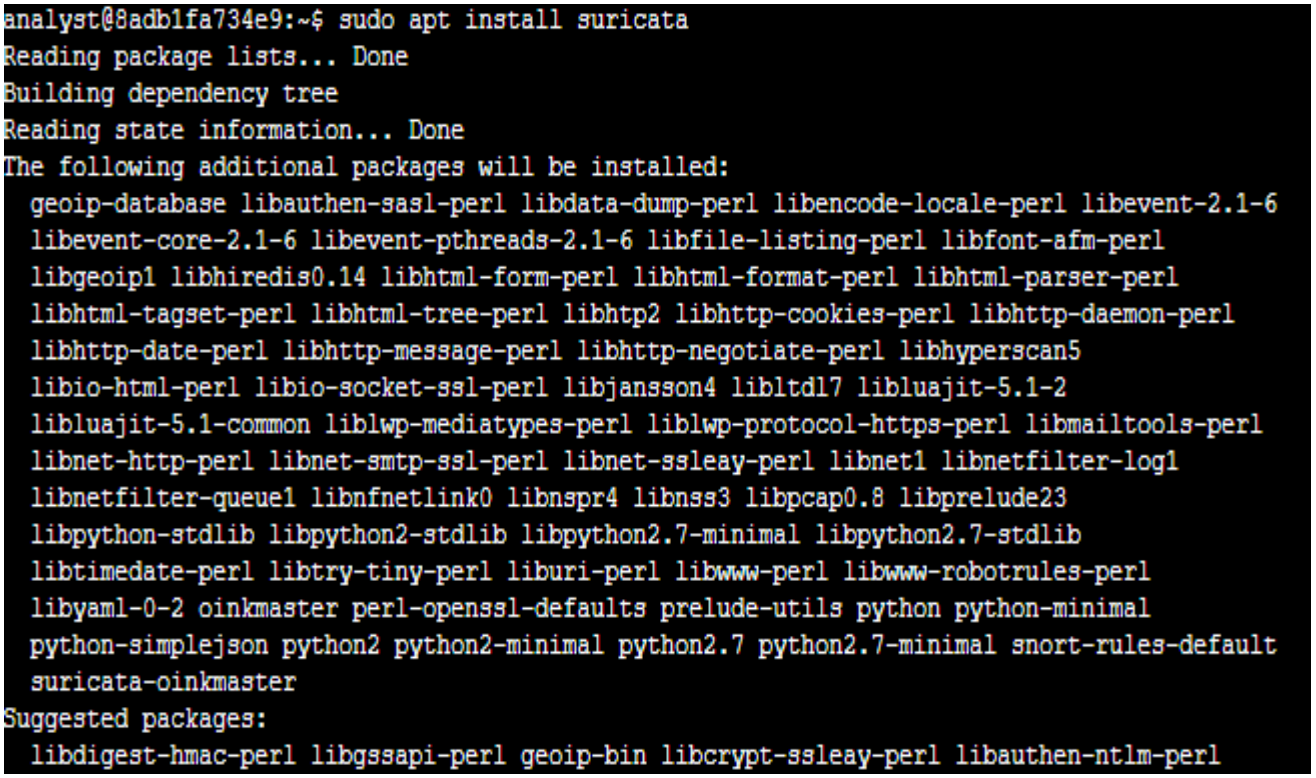
The following code demonstrates how I used Linux commands to ensure Advance Package Tool (APT) is installed on the Linux OS.




The first line of the screenshot displays the command I entered, and the other lines display the output. I used the `sudo apt list –install` command to list all the apps installed on the machine. The output of my command displays the list of apps installed on my Linux OS.

## Reinstall the Suricata application

The following code demonstrates how I used Linux commands to reinstall suricata on the Linux OS.




The first line of the screenshot displays the command I entered, and the other lines display the output. I used the `sudo apt install suricata` command to reinstall suricata on the machine. The output of my command indicates the installation process.