

```
(venv)jackal@kali: ~/caldera
File Actions Edit View Help

(jackal@kali)-[~]
$ sudo apt install python3
[sudo] password for jackal:
python3 is already the newest version (3.13.5-1).
The following packages were automatically installed and are no longer required:
  libgdata-common libhdf4-0-alt libsoup-2.4-1 libvpx9 python3-pyinstaller-hooks-contrib python3-zapv2
  libgdata22 libqt5ct-common1.8 libsoup2.4-common python3-packaging-whl python3-wheel-whl
Use 'sudo apt autoremove' to remove them.

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

(jackal@kali)-[~]
$ python3 --version
Python 3.13.6

(jackal@kali)-[~]
$ git clone https://github.com/mitre/caldera.git --recursive
fatal: destination path 'caldera' already exists and is not an empty directory.

(jackal@kali)-[~]
$ cd caldera

(jackal@kali)-[~/caldera]
$ pip3 install -r requirements.txt
error: externally-managed-environment

⚠ This environment is externally managed
➡ To install Python packages system-wide, try apt install
  python3-xyz, where xyz is the package you are trying to
  install.

  If you wish to install a non-Kali-packaged Python package,
  create a virtual environment using python3 -m venv path/to/venv.
  Then use path/to/venv/bin/python and path/to/venv/bin/pip. Make
  sure you have pypy3-venv installed.

  If you wish to install a non-Kali-packaged Python application,
  it may be easiest to use pipx install xyz, which will manage a
  virtual environment for you. Make sure you have pipx installed.
```

```
jackal@kali: ~  
File Actions Edit View Help  
GNU nano 8.4 /etc/suricata/rules/local.rules  
drop ip 192.168.1.100 any -> any any (msg:"Block Malicious IP"; sid:1000001;)  
[ Wrote 1 line ]  
^G Help      ^O Write Out  ^F Where Is   ^K Cut        ^T Execute    ^C Location   M-U Undo     M-A Set Mark  M-J To Bracket  
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^/ Go To Line  M-E Redo     M-G Copy      ^B Where Was
```

(venv)jackal@kali: ~/caldera

File Actions Edit View Help

```
(jackal@kali)-[~/caldera]
$ python3 -m venv venv
```

```
(jackal@kali)-[~/caldera]
$ source venv/bin/activate
```

```
(venv)-(jackal@kali)-[~/caldera]
$ pip install --upgrade pip
Requirement already satisfied: pip in ./venv/lib/python3.13/site-packages (25.2)
```

```
(venv)-(jackal@kali)-[~/caldera]
$ pip install -r requirements.txt
Collecting aiohttp-jinja2=1.5.1 (from -r requirements.txt (line 1))
  Using cached aiohttp_jinja2-1.5.1-py3-none-any.whl.metadata (8.1 kB)
Collecting aiohttp=3.10.11 (from -r requirements.txt (line 2))
  Using cached aiohttp-3.10.11-cp313-cp313-manylinux_2_17_aarch64.manylinux2014_aarch64.whl.metadata (7.7 kB)
Collecting aiohttp_session=2.12.0 (from -r requirements.txt (line 3))
  Using cached aiohttp_session-2.12.0-py3-none-any.whl.metadata (8.4 kB)
Collecting aiohttp_security=0.4.0 (from -r requirements.txt (line 4))
  Using cached aiohttp_security-0.4.0-py3-none-any.whl.metadata (2.9 kB)
Collecting aiohttp_apisppec=3.0.0b2 (from -r requirements.txt (line 5))
  Using cached aiohttp_apisppec-3.0.0b2.tar.gz (2.7 MB)
  Installing build dependencies ... done
  Getting requirements to build wheel ... done
  Preparing metadata (pyproject.toml) ... done
Collecting jinja2=3.1.6 (from -r requirements.txt (line 6))
  Using cached jinja2-3.1.6-py3-none-any.whl.metadata (2.9 kB)
Collecting pyyaml=6.0.1 (from -r requirements.txt (line 7))
  Using cached PyYAML-6.0.1.tar.gz (125 kB)
  Installing build dependencies ... done
  Getting requirements to build wheel ... done
  Preparing metadata (pyproject.toml) ... done
Collecting cryptography=44.0.1 (from -r requirements.txt (line 8))
  Using cached cryptography-44.0.1-cp39-abi3-manylinux_2_34_aarch64.whl.metadata (5.7 kB)
Collecting websockets=15.0 (from -r requirements.txt (line 9))
  Using cached websockets-15.0-cp313-cp313-manylinux_2_17_aarch64.manylinux2014_aarch64.whl.metadata (6.8 kB)
Collecting Sphinx=7.1.2 (from -r requirements.txt (line 10))
  Using cached sphinx-7.1.2-py3-none-any.whl.metadata (5.8 kB)
Collecting sphinx_rtd_theme=1.3.0 (from -r requirements.txt (line 11))
  Using cached sphinx_rtd_theme-1.3.0-py2.py3-none-any.whl.metadata (4.5 kB)
```

```
(venv)jackal@kali: ~/caldera
File Actions Edit View Help

(venv)-(jackal@kali)-[~/caldera]
$ sudo apt install libxml2-dev libxslt-dev python3-dev
Note, selecting 'libxslt1-dev' instead of 'libxslt-dev'
libxml2-dev is already the newest version (2.14.5+dfsg-0.1).
libxml2-dev set to manually installed.
python3-dev is already the newest version (3.13.5-1).
The following packages were automatically installed and are no longer required:
  libgdata-common libhdf4-0-alt libsoup-2.4-1 libvpx9 python3-pyinstaller-hooks-contrib python3-zapv2
  libgdata22 libqt5ct-common1.8 libsoup2.4-common python3-packaging-whl python3-wheel-whl
Use 'sudo apt autoremove' to remove them.

Installing:
  libxslt1-dev

Summary:
  Upgrading: 0, Installing: 1, Removing: 0, Not Upgrading: 1
  Download size: 345 kB
  Space needed: 2,597 kB / 9,442 MB available

Continue? [Y/n] y
Get:1 http://kali.download/kali kali-rolling/main arm64 libxslt1-dev arm64 1.1.35-1.2 [345 kB]
Fetched 345 kB in 7s (49.5 kB/s)
Selecting previously unselected package libxslt1-dev:arm64.
(Reading database ... 436665 files and directories currently installed.)
Preparing to unpack .../libxslt1-dev_1.1.35-1.2_arm64.deb ...
Unpacking libxslt1-dev:arm64 (1.1.35-1.2) ...
Setting up libxslt1-dev:arm64 (1.1.35-1.2) ...
Processing triggers for man-db (2.13.1-1) ...
Processing triggers for kali-menu (2025.3.0) ...
Processing triggers for doc-base (0.11.2) ...
Processing 1 added doc-base file ...
Scanning processes ...
Scanning processor microcode ...
Scanning linux images ...

Running kernel seems to be up-to-date.

Failed to check for processor microcode upgrades.

No services need to be restarted.
```

```
(venv)jackal@kali: ~/caldera
File Actions Edit View Help

No VM guests are running outdated hypervisor (qemu) binaries on this host.

(venv)-(jackal@kali)-[~/caldera]
$ pip install -r requirements.txt
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  Using cached aiohttp_jinja2-1.5.1-py3-none-any.whl.metadata (8.1 kB)
Collecting aiohttp==3.10.11 (from -r requirements.txt (line 2))
  Using cached aiohttp-3.10.11-cp313-cp313-manylinux_2_17_aarch64.manylinux2014_aarch64.whl.metadata (7.7 kB)
Collecting aiohttp_session==2.12.0 (from -r requirements.txt (line 3))
  Using cached aiohttp_session-2.12.0-py3-none-any.whl.metadata (8.4 kB)
Collecting aiohttp_security==0.4.0 (from -r requirements.txt (line 4))
  Using cached aiohttp_security-0.4.0-py3-none-any.whl.metadata (2.9 kB)
Collecting aiohttp_apispec==3.0.0b2 (from -r requirements.txt (line 5))
  Using cached aiohttp_apispec-3.0.0b2.tar.gz (2.7 MB)
  Installing build dependencies ... done
  Getting requirements to build wheel ... done
  Preparing metadata (pyproject.toml) ... done
Collecting jinja2==3.1.6 (from -r requirements.txt (line 6))
  Using cached jinja2-3.1.6-py3-none-any.whl.metadata (2.9 kB)
Collecting pyyaml==6.0.1 (from -r requirements.txt (line 7))
  Using cached PyYAML-6.0.1.tar.gz (125 kB)
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Collecting Sphinx==7.1.2 (from -r requirements.txt (line 10))
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Collecting sphinx_rtd_theme==1.3.0 (from -r requirements.txt (line 11))
  Using cached sphinx_rtd_theme-1.3.0-py2.py3-none-any.whl.metadata (4.5 kB)
Collecting myst-parser==2.0.0 (from -r requirements.txt (line 12))
  Using cached myst_parser-2.0.0-py3-none-any.whl.metadata (5.4 kB)
Collecting marshmallow==3.20.1 (from -r requirements.txt (line 13))
  Using cached marshmallow-3.20.1-py3-none-any.whl.metadata (7.8 kB)
Collecting dirhash==0.2.1 (from -r requirements.txt (line 14))
  Using cached dirhash-0.2.1-py3-none-any.whl.metadata (5.0 kB)
Collecting marshmallow_enum==1.5.1 (from -r requirements.txt (line 15))
  Using cached marshmallow_enum-1.5.1-py2.py3-none-any.whl.metadata (2.5 kB)
```

```
(venv)jackal@kali: ~/caldera
File Actions Edit View Help
Asset management application for Python web development
Library to interface with STALL WIFFI devices
Parser for Xiaomi BLE devices
Library to authenticate with YoLink devices
system for managing development buildouts
Communication library for deCONZ-based Zigbee devices
Zigbee communication library for ZiGate-based devices
python3.13-dev/kali-rolling,now 3.13.6-1 arm64 [installed,automatic]

(venv)-(jackal@kali)-[~/caldera]
$ sudo apt install python3.13-dev
python3.13-dev is already the newest version (3.13.6-1).
python3.13-dev set to manually installed.
The following packages were automatically installed and are no longer required:
 libgdata-common libhdf4-0-alt libsoup-2.4-1 libvpx9 python3-pyinstaller-hooks-contrib python3-zapv2
 libgdata22 libqt5ct-common1.8 libsoup2.4-common python3-packaging-whl python3-wheel-whl
Use 'sudo apt autoremove' to remove them.

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

(venv)-(jackal@kali)-[~/caldera]
$ sudo apt intsall libxml2-dev libxslt1-dev build-essential
Error: Invalid operation intsall

(venv)-(jackal@kali)-[~/caldera]
$ sudo apt install libxml2-dev libxslt1-dev build-essential
libxml2-dev is already the newest version (2.14.5+dfsg-0.1).
libxslt1-dev is already the newest version (1.1.35-1.2).
build-essential is already the newest version (12.12).
build-essential set to manually installed.
The following packages were automatically installed and are no longer required:
 libgdata-common libhdf4-0-alt libsoup-2.4-1 libvpx9 python3-pyinstaller-hooks-contrib python3-zapv2
 libgdata22 libqt5ct-common1.8 libsoup2.4-common python3-packaging-whl python3-wheel-whl
Use 'sudo apt autoremove' to remove them.

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

(venv)-(jackal@kali)-[~/caldera]
$
```