

THE HARVESTER

Uses of the Harvester Tool:

1. **Information Gathering:** Harvester is designed to collect email addresses, subdomains, and other relevant information associated with a specific domain or organization.
2. **OSINT (Open Source Intelligence):** It is a crucial tool for OSINT, allowing security professionals and ethical hackers to collect publicly available information that can help in assessing the security posture of a target.
3. **Domain Enumeration:** Harvester can be used to identify subdomains and services associated with a target domain, helping in the reconnaissance phase of penetration testing.
4. **Email Harvesting:** It can scrape email addresses from various sources like search engines, social media platforms, and public websites, useful for building attack vectors like phishing.
5. **Identifying Vulnerabilities:** By gathering extensive information, security professionals can identify potential vulnerabilities in the organization's digital footprint.
6. **Social Engineering:** The information collected can assist in planning social engineering attacks, as it provides insights into the organization's structure and key personnel.

Features:

- **Multiple Data Sources:** The tool can pull data from various sources, including search engines (Google, Bing), social networks, and public databases.
- **Command-Line Interface:** Harvester typically operates via a command line, making it flexible and scriptable for advanced users.
- **Customizable Queries:** Users can tailor queries to gather specific information based on their needs.

Considerations:

- **Ethical Use:** While the tool is powerful for gathering intelligence, it must be used ethically and legally, ensuring compliance with applicable laws and regulations.
- **Data Privacy:** Users should be mindful of the privacy implications of collecting and using personal information.

Harvester is widely used by penetration testers and security analysts to gather initial reconnaissance data, aiding in vulnerability assessments and threat modeling.

```
kali@kali: ~  
File Actions Edit View Help  
[kali@kali]~  
$ sudo apt-get install python3-pip  
[sudo] password for kali:  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  libjs-sphinxdoc python3-pip-whl  
The following packages will be upgraded:  
  libjs-sphinxdoc python3-pip python3-pip-whl  
3 upgraded, 0 newly installed, 0 to remove and 1113 not upgraded.  
Need to get 3,086 kB of archives.  
After this operation, 73.7 kB disk space will be freed.  
Do you want to continue? [Y/n] y  
Get:1 http://kali.download/kali kali-rolling/main amd64 libjs-sphinxdoc all 7.4.7-3 [158 kB]  
Get:2 http://kali.org/kali kali-rolling/main amd64 python3-pip all 24.2+dfsg-1 [1,434 kB]  
Get:3 http://kali.org/kali kali-rolling/main amd64 python3-pip-whl all 24.2+dfsg-1 [1,494 kB]  
Fetched 3,086 kB in 6s (485 kB/s)  
(Reading database ... 395913 files and directories currently installed.)  
Preparing to unpack .../libjs-sphinxdoc_7.4.7-3_all.deb ...  
Unpacking libjs-sphinxdoc (7.4.7-3) over (7.3.7-3) ...  
Preparing to unpack .../python3-pip_24.2+dfsg-1_all.deb ...  
Unpacking python3-pip (24.2+dfsg-1) over (24.1.1+dfsg-1) ...  
Preparing to unpack .../python3-pip-whl_24.2+dfsg-1_all.deb ...  
Unpacking python3-pip-whl (24.2+dfsg-1) over (24.1.1+dfsg-1) ...  
Setting up python3-pip-whl (24.2+dfsg-1) ...  
Setting up python3-pip (24.2+dfsg-1) ...  
Setting up libjs-sphinxdoc (7.4.7-3) ...  
Processing triggers for man-db (2.12.1-2) ...  
Processing triggers for kali-menu (2024.3.1) ...  
[kali@kali]~  
$ sudo pip3 install virtualenv  
Requirement already satisfied: virtualenv in /usr/lib/python3/dist-packages (20.26.2)  
Requirement already satisfied: distlib<1, >=0.3.7 in /usr/lib/python3/dist-packages (from virtualenv) (0.3.8)  
Requirement already satisfied: filelock<4, >=3.12.2 in /usr/lib/python3/dist-packages (from virtualenv) (3.15.4)  
Requirement already satisfied: platformdirs<5, >=3.9.1 in /usr/lib/python3/dist-packages (from virtualenv) (4.2.1)  
WARNING: Running pip as the 'root' user can result in broken permissions and conflicting behaviour with the system package manager, possibly rendering your system unusable. It is recommended to use a virtual environment instead: https://pip.pypa.io/warnings/venv. Use the --root-user-action option if you know what you are doing and want to suppress this warning.  
[kali@kali]~  
$ virtualenv venv
```

```
kali@kali: ~/theHarvester  
File Actions Edit View Help  
Setting up libjs-sphinxdoc (7.4.7-3) ...  
Processing triggers for man-db (2.12.1-2) ...  
Processing triggers for kali-menu (2024.3.1) ...  
[kali@kali]~  
$ sudo pip3 install virtualenv  
Requirement already satisfied: virtualenv in /usr/lib/python3/dist-packages (20.26.2)  
Requirement already satisfied: distlib<1, >=0.3.7 in /usr/lib/python3/dist-packages (from virtualenv) (0.3.8)  
Requirement already satisfied: filelock<4, >=3.12.2 in /usr/lib/python3/dist-packages (from virtualenv) (3.15.4)  
Requirement already satisfied: platformdirs<5, >=3.9.1 in /usr/lib/python3/dist-packages (from virtualenv) (4.2.1)  
WARNING: Running pip as the 'root' user can result in broken permissions and conflicting behaviour with the system package manager, possibly rendering your system unusable. It is recommended to use a virtual environment instead: https://pip.pypa.io/warnings/venv. Use the --root-user-action option if you know what you are doing and want to suppress this warning.  
[kali@kali]~  
$ virtualenv venv  
created virtual environment CPython3.11.9.final.0-64 in 1176ms  
creator CPython3Posix(dest=/home/kali/venv, clear=False, no_vcs_ignore=False, global=False)  
seeder FromAppData(download=False, pip=bundle, setuptools=bundle, wheel=bundle, via=copy, app_data_dir=/home/kali/.local/share/virtualenv)  
added seed packages: pip=24.2, setuptools=68.1.2, wheel=0.43.0  
activators BashActivator,CShellActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator  
[kali@kali]~  
$ git clone https://github.com/laramies/theHarvester.git  
Cloning into 'theHarvester' ...  
remote: Enumerating objects: 15093, done.  
remote: Counting objects: 100% (2622/2622), done.  
remote: Compressing objects: 100% (461/461), done.  
remote: Total 15093 (delta 2395), reused 2294 (delta 2161), pack-reused 12471 (from 1)  
Receiving objects: 100% (15093/15093), 7.76 MiB | 516.00 KiB/s, done.  
Resolving deltas: 100% (9588/9588), done.  
[kali@kali]~  
$ cd theHarvester  
[kali@kali]~/theHarvester  
$ pip3 install -r requirements.txt  
Defaulting to user installation because normal site-packages is not writeable  
Ignoring winloop: markers 'platform_system == "Windows"' don't match your environment  
Requirement already satisfied: aiodns==3.2.0 in /usr/lib/python3/dist-packages (from -r requirements/base.txt (line 1)) (3.2.0)  
Requirement already satisfied: aiofiles==24.1.0 in /usr/lib/python3/dist-packages (from -r requirements/base.txt (line 2)) (24.1.0)  
Collecting aiohttp==3.10.10 (from -r requirements/base.txt (line 3))  
  Downloading aiohttp-3.10.10-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x86_64.whl.metadata (7.6 kB)
```

```
kali@kali: ~/theHarvester

File Actions Edit View Help

mitmproxy 10.2.3 requires asgiref<3.8, ≥3.2.10, but you have asgiref 3.8.1 which is incompatible.
mitmproxy 10.2.3 requires pyopenssl<24.1, ≥22.1, but you have pyopenssl 24.1.0 which is incompatible.
mitmproxy 10.2.3 requires zstandard<0.23, ≥0.11, but you have zstandard 0.23.0.dev0 which is incompatible.
crackmapexec 5.4.0 requires aioconsole<0.4.0, ≥0.3.3, but you have aioconsole 0.7.0 which is incompatible.
crackmapexec 5.4.0 requires masky<0.2.0, ≥0.1.1, but you have masky 0.2.0 which is incompatible.
crackmapexec 5.4.0 requires minikerberos==0.3.3, but you have minikerberos 0.4.4 which is incompatible.
crackmapexec 5.4.0 requires neo4j<5.0.0, ≥4.1.1, but you have neo4j 5.22.dev0 which is incompatible.
crackmapexec 5.4.0 requires paramiko<3.0.0, ≥2.7.2, but you have paramiko 3.4.0 which is incompatible.
crackmapexec 5.4.0 requires pyspkr<0.8.0, ≥0.7.0, but you have pyspkr 0.8.1 which is incompatible.
crackmapexec 5.4.0 requires termcolor<2.0.0, ≥1.1.0, but you have termcolor 2.4.0 which is incompatible.
crackmapexec 5.4.0 requires xmlltodict<0.13.0, ≥0.12.0, but you have xmlltodict 0.13.0 which is incompatible.
gspdp-openvas 22.7.1 requires redis>4.5.0, but you have redis 4.3.4 which is incompatible.
gropbox 12.0.2 requires stone<3.3.3, ≥2, but you have stone 3.3.7 which is incompatible.
getexec 1.2.0+git20240529.7ece667 requires aioconsole<0.7.0, ≥0.6.2, but you have aioconsole 0.7.0 which is incompatible.
getexec 1.2.0+git20240529.7ece667 requires aiosqlite<0.18.0, ≥0.17.0, but you have aiosqlite 0.20.0 which is incompatible.
getexec 1.2.0+git20240529.7ece667 requires lsassy>3.1.11, but you have lsassy 3.1.10 which is incompatible.
getexec 1.2.0+git20240529.7ece667 requires pyasn1-modules<0.3.0, ≥0.2.8, but you have pyasn1-modules 0.3.0 which is incompatible.
getexec 1.2.0+git20240529.7ece667 requires termcolor==1.1.0, but you have termcolor 2.4.0 which is incompatible.
gploot 2.7.3 requires lxml=4.9.3, but you have lxml 5.3.0 which is incompatible.
faraday-agent-dispatcher 3.2.1 requires python-socketio==5.8.0, but you have python-socketio 5.11.2 which is incompatible.
theharvester 4.6.0 requires aioudns==3.1.1, but you have aioudns 3.2.0 which is incompatible.
theharvester 4.6.0 requires aiofiles==23.2.1, but you have aiofiles 24.1.0 which is incompatible.
theharvester 4.6.0 requires aiohttp==3.9.3, but you have aiohttp 3.10.10 which is incompatible.
theharvester 4.6.0 requires aiomultiprocess==0.9.0, but you have aiomultiprocess 0.9.1 which is incompatible.
theharvester 4.6.0 requires censys==2.2.11, but you have censys 2.2.15 which is incompatible.
theharvester 4.6.0 requires certifi==2024.2.2, but you have certifi 2024.8.30 which is incompatible.
theharvester 4.6.0 requires dnspython==2.6.1, but you have dnspython 2.7.0 which is incompatible.
theharvester 4.6.0 requires fastapi==0.110.0, but you have fastapi 0.115.2 which is incompatible.
theharvester 4.6.0 requires lxml=5.1.0, but you have lxml 5.3.0 which is incompatible.
theharvester 4.6.0 requires netaddr==1.2.1, but you have netaddr 1.3.0 which is incompatible.
theharvester 4.6.0 requires playwright==1.42.0, but you have playwright 1.47.0 which is incompatible.
theharvester 4.6.0 requires PyYAML==6.0.1, but you have pyyaml 6.0.2 which is incompatible.
theharvester 4.6.0 requires requests==2.31.0, but you have requests 2.32.3 which is incompatible.
theharvester 4.6.0 requires setuptools==69.2.0, but you have setuptools 68.1.2 which is incompatible.
theharvester 4.6.0 requires ujson==5.9.0, but you have ujson 5.10.0 which is incompatible.
theharvester 4.6.0 requires uvicorn==0.28.0, but you have uvicorn 0.32.0 which is incompatible.
theharvester 4.6.0 requires uvloop==0.19.0; platform_system != "Windows", but you have uvloop 0.21.0 which is incompatible.
Successfully installed PyYAML-6.0.2 aiohappyeyeballs-2.4.3 aiohttp-3.10.10 aiomultiprocess-0.9.1 aiosqlite-0.20.0 censys-2.2.15 certifi-2024.8.30 dnspython-2.7.0 fastapi-0.115.2 greenlet-3.0.3 lxml-5.3.0 netaddr-1.3.0 playwright-1.47.0 propcache-0.2.0 pyee-12.0.0 python-dateutil-2.9.0.post0 requests-2.32.3 re-trying-1.3.4 slowapi-0.1.9 uvicorn-0.32.0 uvloop-0.21.0 yarl-1.15.5

(kali@kali)~[~/theHarvester]
$
```

```
kali@kali: ~/theHarvester

File Actions Edit View Help

(kali@kali)~[~]
$ cd theHarvester

(kali@kali)~[~/theHarvester]
$ ./theHarvester.py -v
Created default proxies.yaml at /home/kali/.theHarvester/proxies.yaml
*****
* theHarvester 4.7.0
* Coded by Christian Martorella
* Edge-Security Research
* cmartorella@edge-security.com
*
*****
usage: theHarvester.py [-h] -d DOMAIN [-l LIMIT] [-s START] [-p] [-s] [--screenshot SCREENSHOT] [-v] [-e DNS_SERVER] [-t] [-r [DNS_RESOLVE]] [-n] [-c]
                        [-f FILENAME] [-b SOURCE]
theHarvester.py: error: the following arguments are required: -d/--domain

(kali@kali)~[~/theHarvester]
$
```