

WEBSITE STATUS CHECKER

Trisha Tandel:2JI23CS411

In some cases, we have the largest of domains and sub domains which need to be tested for security flaws. the first step is to check the activeness in the domains on the internet. A recce tool is an automated tool that is developed in the Python language which has the potential to scan 11k domains in just 3 minutes and return their status. Recce tool also supports saving the results in text formatted tile. This tool is available on GitHub for free. It's open-source so anyone can contribute to it.

Recce refers to several different tools, so website status checker information depends on which tool is being referenced. The two most relevant are a website/domain status checker for security testing and a data validation tool for data teams.

Recce (unstabl3/recce)—Website status checker

This is an open-source Python tool for security professionals and ethical hackers.

- **Primary function:** Scans domains and subdomains from a list to check if they are "alive" or active on the internet.
- **Purpose:** Primarily used for the initial reconnaissance (or "recce") phase of penetration testing to quickly identify a large number of active domains that need further testing.
- **Key features:**
 - **High performance:** Can scan thousands of domains in minutes.
 - **Python-based:** Developed in Python, making it accessible for users familiar with scripting.
 - **List processing:** Takes a list of domains from a text file (domains.txt).
 - **Result saving:** Saves the output of active domains to a text file (results.txt).

Website status check process:

- 1.The tool reads a list of domains from a provided text file.
- 2.It sends automated requests to each domain to determine its live status.
- 3.The results are then compiled and displayed.

Note: Make Sure You have Python Installed on your System, as this is a python-based tool.

```
kali-linux-2022.4-virtualbox-amd64 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

root@kali: /home/kali/recce

File Actions Edit View Help
(kali@kali)-[~]
$ sudo su
[sudo] password for kali:
(root@kali)-[/home/kali]
# python --version
Python 3.10.8
```

Installation of Recce Tool on Kali Linux OS:

Step 1: Use the following command to install the tool in your Kali Linux operating system.

```
kali-linux-2022.4-virtualbox-amd64 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

root@kali: /home/kali/recce

File Actions Edit View Help
(kali@kali)-[~]
$ sudo su
[sudo] password for kali:
(root@kali)-[/home/kali]
# python --version
Python 3.10.8

(root@kali)-[/home/kali]
# git clone https://github.com/unstabl3/recce
Cloning into 'recce' ...
remote: Enumerating objects: 154, done.
remote: Counting objects: 100% (8/8), done.
remote: Compressing objects: 100% (8/8), done.
remote: Total 154 (delta 1), reused 0 (delta 0), pack-reused 146 (from 1)
Receiving objects: 100% (154/154), 42.77 KiB | 380.00 KiB/s, done.
Resolving deltas: 100% (75/75), done.
```

Step 2: Now use the following command to move into the directory of the tool. You have to move in the directory in order to run the tool.

```
kali-linux-2022.4-virtualbox-amd64 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

root@kali: /home/kali/recce

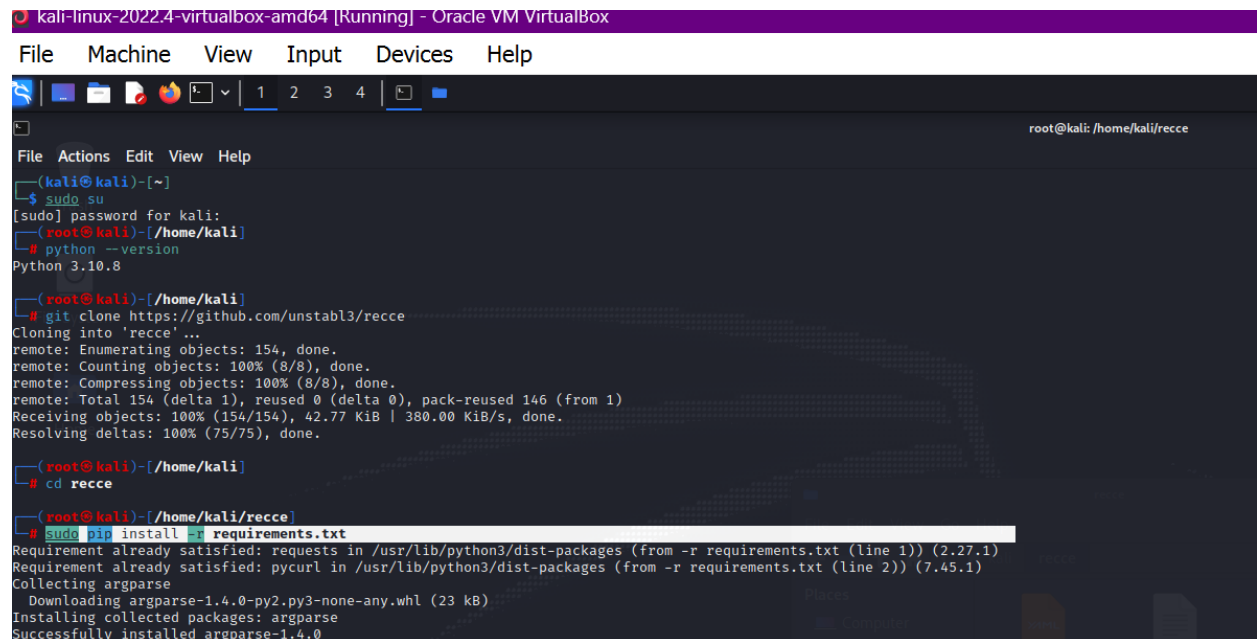
File Actions Edit View Help
(kali@kali)-[~]
$ sudo su
[sudo] password for kali:
(root@kali)-[/home/kali]
# python --version
Python 3.10.8

(root@kali)-[/home/kali]
# git clone https://github.com/unstabl3/recce
Cloning into 'recce' ...
remote: Enumerating objects: 154, done.
remote: Counting objects: 100% (8/8), done.
remote: Compressing objects: 100% (8/8), done.
remote: Total 154 (delta 1), reused 0 (delta 0), pack-reused 146 (from 1)
Receiving objects: 100% (154/154), 42.77 KiB | 380.00 KiB/s, done.
Resolving deltas: 100% (75/75), done.

(root@kali)-[/home/kali]
# cd recce

(root@kali)-[/home/kali/recce]
```

Step 3: You are in the directory of the recce. Now you have to install a dependency of the recce using the following command.

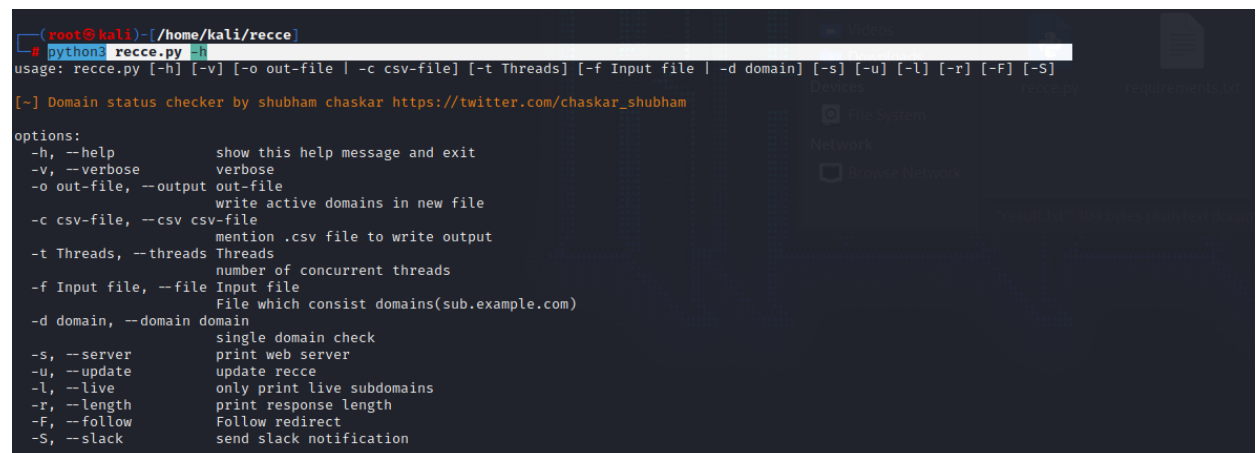


```
kali-linux-2022.4-virtualbox-amd64 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

root@kali: /home/kali/recce

File Actions Edit View Help
(kali@kali)~$ sudo su
[sudo] password for kali:
(root@kali)~$ python --version
Python 3.10.8
(root@kali)~$ git clone https://github.com/unstabl3/recce
Cloning into 'recce'...
remote: Enumerating objects: 154, done.
remote: Counting objects: 100% (8/8), done.
remote: Compressing objects: 100% (8/8), done.
remote: Total 154 (delta 1), reused 0 (delta 0), pack-reused 146 (from 1)
Receiving objects: 100% (154/154), 42.77 KiB | 380.00 KiB/s, done.
Resolving deltas: 100% (75/75), done.
(root@kali)~$ cd recce
(root@kali)~/recce$ sudo pip install -r requirements.txt
Requirement already satisfied: requests in /usr/lib/python3/dist-packages (from -r requirements.txt (line 1)) (2.27.1)
Requirement already satisfied: pycurl in /usr/lib/python3/dist-packages (from -r requirements.txt (line 2)) (7.45.1)
Collecting argparse
  Downloading argparse-1.4.0-py2.py3-none-any.whl (23 kB)
Installing collected packages: argparse
Successfully installed argparse-1.4.0
```

Step 4: All the dependencies have been installed in your Kali Linux operating system.

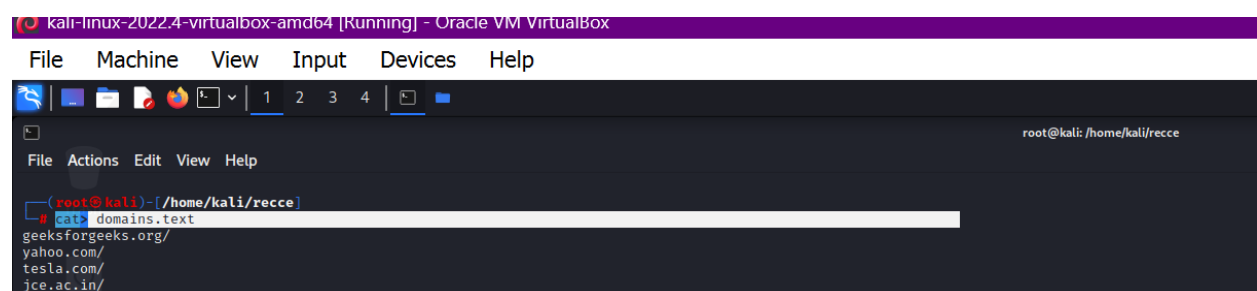


```
(root@kali)~/recce$ python3 recce.py -h
usage: recce.py [-h] [-v] [-o out-file] [-c csv-file] [-t Threads] [-f Input file] [-d domain] [-s] [-u] [-l] [-r] [-F] [-S]

[-] Domain status checker by shubham chaskar https://twitter.com/chaskar_shubham

options:
  -h, --help            show this help message and exit
  -v, --verbose          verbose
  -o out-file, --output out-file
                        write active domains in new file
  -c csv-file, --csv csv-file
                        mention .csv file to write output
  -t Threads, --threads Threads
                        number of concurrent threads
  -f Input file, --file Input file
                        File which consist domains(sub.example.com)
  -d domain, --domain domain
                        single domain check
  -s, --server          print web server
  -u, --update          update recce
  -l, --live            only print live subdomains
  -r, --length          print response length
  -F, --follow          Follow redirect
  -S, --slack           send slack notification
```

We have a list of multiple domains which will be checked for their activeness on the internet.



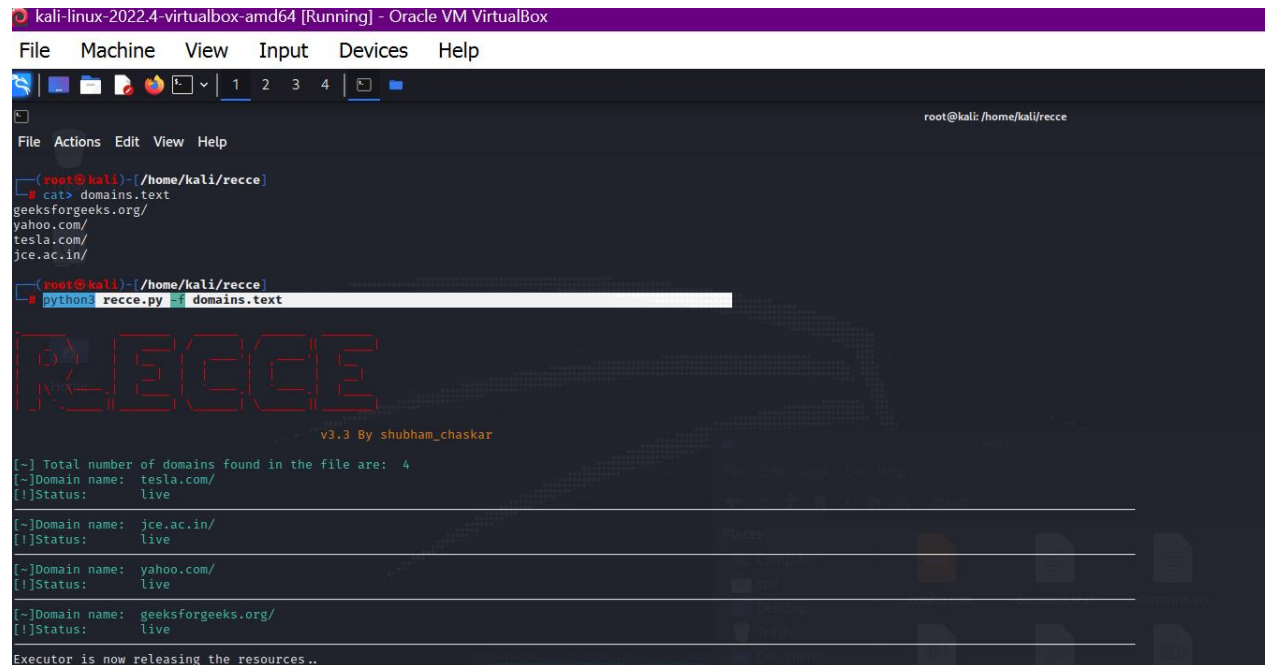
```
kali-linux-2022.4-virtualbox-amd64 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

root@kali: /home/kali/recce

File Actions Edit View Help
(root@kali)~/recce$ cat domains.txt
geeksforgeeks.org/
yahoo.com/
tesla.com/
jce.ac.in/
```

Working with Recce Tool on Kali Linux OS:

Example 1: Scan domains with input as a file



```
kali-linux-2022.4-virtualbox-amd64 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

root@kali: /home/kali/recce

root@kali: /home/kali/recce
# cat domains.text
geeksforgeeks.org/
yahoo.com/
tesla.com/
jce.ac.in/

root@kali: /home/kali/recce
# python3 recce.py -f domains.text

RECCE
v3.3 By shubham_chaskar

[~] Total number of domains found in the file are: 4
[~]Domain name: tesla.com/
[!]Status: live

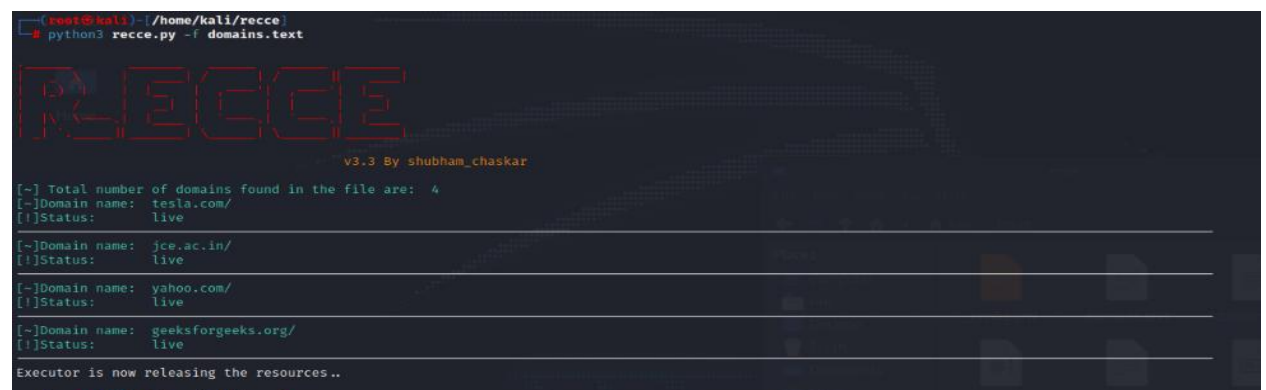
[~]Domain name: jce.ac.in/
[!]Status: live

[~]Domain name: yahoo.com/
[!]Status: live

[~]Domain name: geeksforgeeks.org/
[!]Status: live

Executor is now releasing the resources..
```

We have got the live status of each domain that is being fetched from the domains.text file.



```
root@kali: /home/kali/recce
# python3 recce.py -f domains.text

RECCE
v3.3 By shubham_chaskar

[~] Total number of domains found in the file are: 4
[~]Domain name: tesla.com/
[!]Status: live

[~]Domain name: jce.ac.in/
[!]Status: live

[~]Domain name: yahoo.com/
[!]Status: live

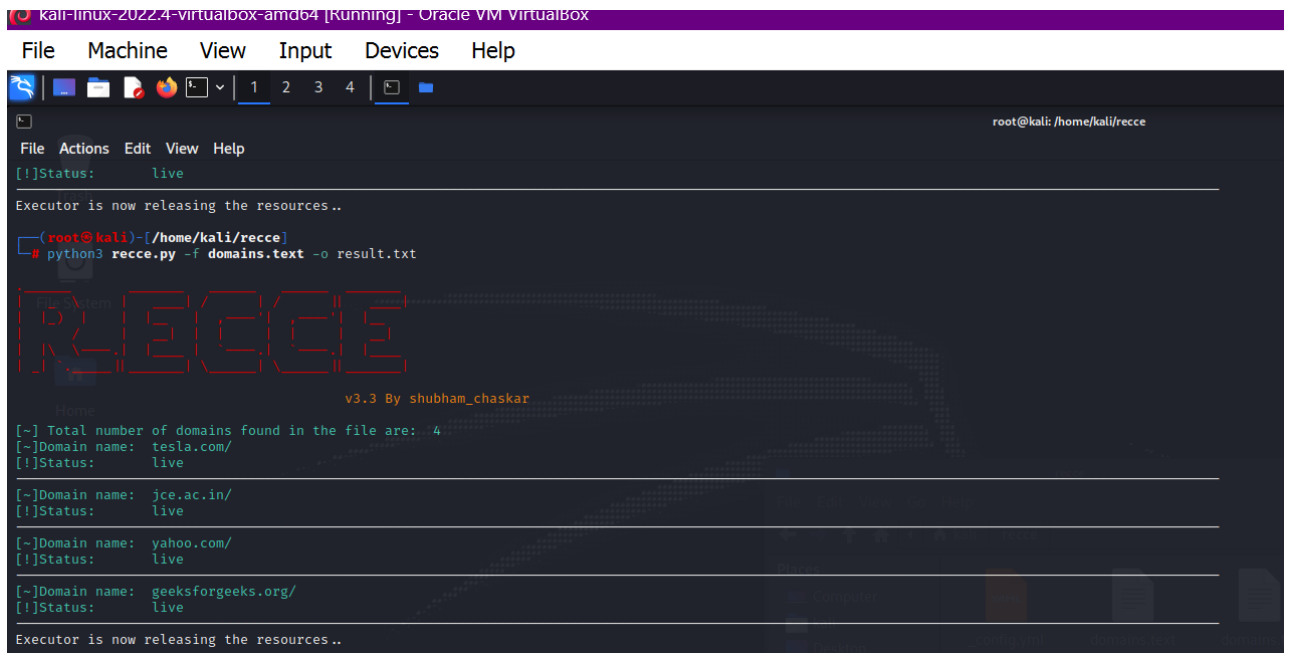
[~]Domain name: geeksforgeeks.org/
[!]Status: live

Executor is now releasing the resources..
```

Example 2: Writing output in a file

Command: **python3 recce.py -f domains.txt -o result.txt**

We will be saving results in result.txt file.



```
kali-linux-2022.4-virtualbox-amd64 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

[!]Status: live

Executor is now releasing the resources..

(root@kali)-[/home/kali/recce]
# python3 recce.py -f domains.txt -o result.txt

RECCE
v3.3 By shubham_chaskar

[~] Total number of domains found in the file are: 4
[~]Domain name: tesla.com/
[!]Status: live

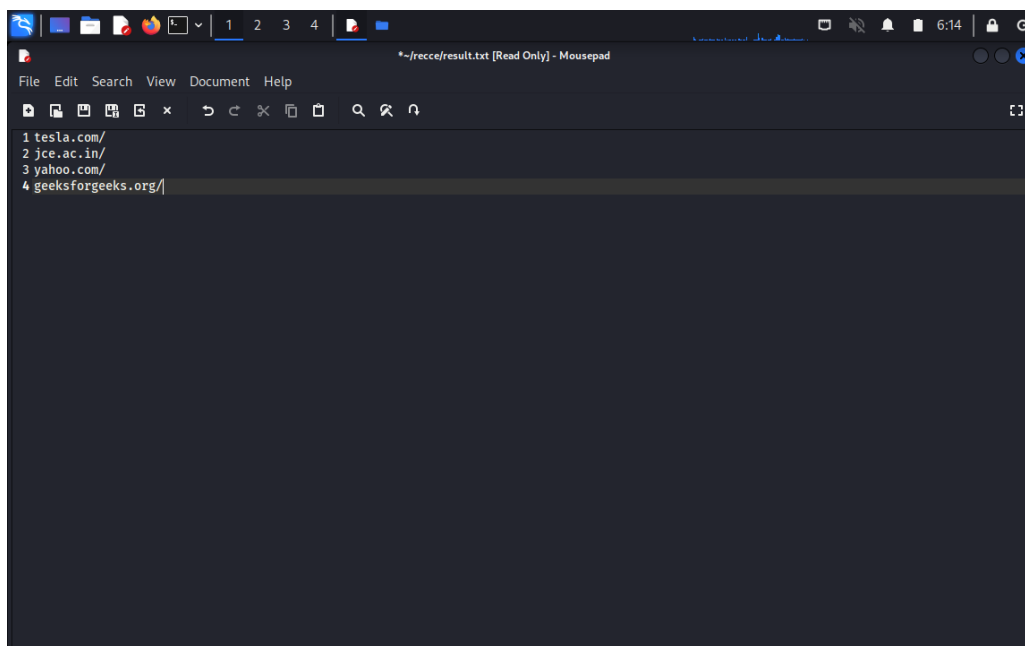
[~]Domain name: jce.ac.in/
[!]Status: live

[~]Domain name: yahoo.com/
[!]Status: live

[~]Domain name: geeksforgeeks.org/
[!]Status: live

Executor is now releasing the resources..
```

We have displayed the results in the text formatted file.



```
*~/recce/result.txt [Read Only] - Mousepad

File Edit Search View Document Help

1 tesla.com/
2 jce.ac.in/
3 yahoo.com/
4 geeksforgeeks.org/
```

Example 3: Verbose mode(to check the status of the live domain) and a number of threads

Command: **python3 recce.py -f domains.txt -o result.txt -t 100 -v**

We will be displaying the results in more verbose mode.

```
(root@kali)~/home/kali/recce
# python3 recce.py -f domains.txt -o result.txt -t 100 -v

RECECE
v3.3 By shubham_chaskar

[~] Verbosity is enabled..
[~] Total number of domains found in the file are: 4
[~]Domain name: tesla.com/
[!]Status: live
[@]Response: 403

[~]Domain name: jce.ac.in/
[!]Status: live
[@]Response: 200

[~]Domain name: yahoo.com/
[!]Status: live
[@]Response: 200

[~]Domain name: geeksforgeeks.org/
[!]Status: live
[@]Response: 200

Executor is now releasing the resources..
```

We have got the status and the response code.

```
(root@kali)~/home/kali/recce
# python3 recce.py -f domains.txt -o result.txt -t 100 -v

RECECE
v3.3 By shubham_chaskar

[~] Verbosity is enabled..
[~] Total number of domains found in the file are: 4
[~]Domain name: tesla.com/
[!]Status: live
[@]Response: 403

[~]Domain name: jce.ac.in/
[!]Status: live
[@]Response: 200

[~]Domain name: yahoo.com/
[!]Status: live
[@]Response: 200

[~]Domain name: geeksforgeeks.org/
[!]Status: live
[@]Response: 200

Executor is now releasing the resources..
```

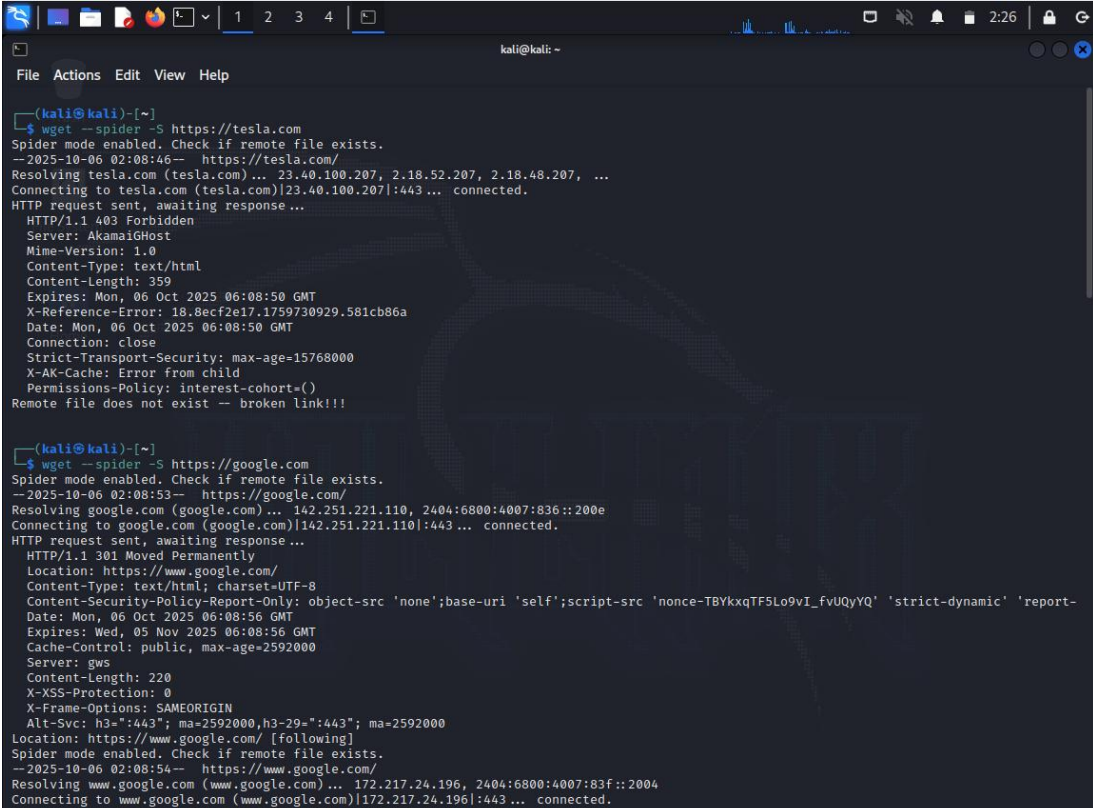
Key information about website status checkers:

- **HTTP status codes:** These three-digit codes are the primary indicator of a website's health.
 - **1xx (Informational):** The request has been received and the process is continuing.
 - **2xx (Success):** The request was successfully received and processed. A "200 OK" code is the ideal response.
 - **3xx (Redirection):** Further action is required to complete the request. A "301 Moved Permanently" is a common example.
 - **4xx (Client error):** The request could not be fulfilled due to a client-side issue, such as a "404 Not Found" error.
 - **5xx (Server error):** The server failed to fulfill a valid request due to an internal server issue, such as a "500 Internal Server Error" or "503 Service Unavailable".

We are also trying some basic commands to check website status using below commands

Primarily a download tool, **wget** can also check for a website's availability without downloading the page's content.

- **Command:** `wget --spider -S https://example.com`
- **Output:** The `--spider` option tells **wget** not to download anything but to display the server's headers and the HTTP status code. Look for a 200 OK status in the output.



```
kali@kali: ~  
File Actions Edit View Help  
  
(kali@kali)~  
$ wget --spider -S https://tesla.com  
Spider mode enabled. Check if remote file exists.  
--2025-10-06 02:08:46-- https://tesla.com/  
Resolving tesla.com (tesla.com)... 23.40.100.207, 2.18.52.207, 2.18.48.207, ...  
Connecting to tesla.com (tesla.com)[23.40.100.207]:443 ... connected.  
HTTP request sent, awaiting response ...  
HTTP/1.1 403 Forbidden  
Server: AkamaiGHost  
Mime-Version: 1.0  
Content-Type: text/html  
Content-Length: 359  
Expires: Mon, 06 Oct 2025 06:08:50 GMT  
X-Reference-Error: 18.8ecf2e17.1759730929.581cb86a  
Date: Mon, 06 Oct 2025 06:08:50 GMT  
Connection: close  
Strict-Transport-Security: max-age=15768000  
X-AK-Cache: Error from child  
Permissions-Policy: interest-cohort=()  
Remote file does not exist -- broken link!!!  
  
(kali@kali)~  
$ wget --spider -S https://google.com  
Spider mode enabled. Check if remote file exists.  
--2025-10-06 02:08:53-- https://google.com/  
Resolving google.com (google.com)... 142.251.221.110, 2404:6800:4007:836::200e  
Connecting to google.com (google.com)[142.251.221.110]:443 ... connected.  
HTTP request sent, awaiting response ...  
HTTP/1.1 301 Moved Permanently  
Location: https://www.google.com/  
Content-Type: text/html; charset=UTF-8  
Content-Security-Policy-Report-Only: object-src 'none';base-uri 'self';script-src 'nonce-TBYkxqTF5Lo9vi_fvUQyYQ' 'strict-dynamic' 'report-  
Date: Mon, 06 Oct 2025 06:08:56 GMT  
Expires: Wed, 05 Nov 2025 06:08:56 GMT  
Cache-Control: public, max-age=2592000  
Server: gws  
Content-Length: 220  
X-XSS-Protection: 0  
X-Frame-Options: SAMEORIGIN  
Alt-Svc: h3=":443"; ma=2592000,h3-29=":443"; ma=2592000  
Location: https://www.google.com/ [following]  
Spider mode enabled. Check if remote file exists.  
--2025-10-06 02:08:54-- https://www.google.com/  
Resolving www.google.com (www.google.com)... 172.217.24.196, 2404:6800:4007:83f::2004  
Connecting to www.google.com (www.google.com)[172.217.24.196]:443 ... connected.
```



```

kali@kali: ~
File Actions Edit View Help

(kali@kali)-[~]
$ wget --spider -S https://google.com
Spider mode enabled. Check if remote file exists.
--2025-10-06 02:08:53-- https://google.com/
Resolving google.com (google.com)... 142.251.221.110, 2404:6800:4007:836::200e
Connecting to google.com (google.com)|142.251.221.110|:443... connected.
HTTP request sent, awaiting response...
HTTP/1.1 301 Moved Permanently
Location: https://www.google.com/
Content-Type: text/html; charset=UTF-8
Content-Security-Policy-Report-Only: object-src 'none';base-uri 'self';script-src 'nonce-TbYkxqTF5Lo9vI_fvUQyYQ' 'strict-dynamic' 'report-
Date: Mon, 06 Oct 2025 06:08:56 GMT
Expires: Wed, 05 Nov 2025 06:08:56 GMT
Cache-Control: public, max-age=2592000
Server: gws
Content-Length: 220
X-XSS-Protection: 0
X-Frame-Options: SAMEORIGIN
Alt-Svc: h3="443"; ma=2592000,h3-29=":443"; ma=2592000
Location: https://www.google.com/ [following]
Spider mode enabled. Check if remote file exists.
--2025-10-06 02:08:54-- https://www.google.com/
Resolving www.google.com (www.google.com)... 172.217.24.196, 2404:6800:4007:83f::2004
Connecting to www.google.com (www.google.com)|172.217.24.196|:443... connected.
HTTP request sent, awaiting response...
HTTP/1.1 200 OK
Content-Type: text/html; charset=ISO-8859-1
Content-Security-Policy-Report-Only: object-src 'none';base-uri 'self';script-src 'nonce-_lwXjRnVdkpVtpasdHg-' 'strict-dynamic' 'report-
Accept-Ch: Sec-CH-Prefers-Color-Scheme
P3P: CP="This is not a P3P policy! See g.co/p3phelp for more info."
Date: Mon, 06 Oct 2025 06:08:57 GMT
Server: gws
X-XSS-Protection: 0
X-Frame-Options: SAMEORIGIN
Expires: Mon, 06 Oct 2025 06:08:57 GMT
Cache-Control: private
Set-Cookie: AEC=AaJma5u-9YHj3As_N_nx32FTxmavmNSY7mwNmGm9LPfmrRzWry0rYjWJ7E; expires=Sat, 04-Apr-2026 06:08:57 GMT; path=/; domain=.google
Set-Cookie: ID=525-HkAl5-UxltC7jKQmNl3R1k8ZMgoIj06C71ktBtRVYUHRND5BnejqPIYCsH5bcU-8gTdoq2C0xuibDcZnyMCFhBETLE9AKJLRx2LpcfmInaE00Q9N_
GMT; path=/; domain=.google.com; HttpOnly
Transfer-Encoding: chunked
Alt-Svc: h3="443"; ma=2592000,h3-29=":443"; ma=2592000
Length: unspecified [text/html]
Remote file exists and could contain further links,
but recursion is disabled -- not retrieving.

```

```

kali@kali: ~
File Actions Edit View Help
but recursion is disabled -- not retrieving.

(kali@kali)-[~]
$ wget --spider -S https://jce.com
Spider mode enabled. Check if remote file exists.
--2025-10-06 02:09:25-- https://jce.com/
Resolving jce.com (jce.com)... 198.185.159.144, 198.185.159.145, 198.49.23.144, ...
Connecting to jce.com (jce.com)[198.185.159.144]:443... connected.
HTTP request sent, awaiting response...
HTTP/1.1 301 Moved Permanently
Age: 177294
Content-Length: 0
Date: Sat, 04 Oct 2025 01:58:26 GMT
Location: https://www.jce.com/
Server: Squarespace
Set-Cookie: crumb=BSuHusYqPUB4NmIxOCQxNzI3M2JhM2U1YjMyYmM5NDE0ZDI3ZGVh;Secure;Path=/
Strict-Transport-Security: max-age=15552000
X-Contextid: P1Nq73tM/23mb1uUy
Location: https://www.jce.com/ [following]
Spider mode enabled. Check if remote file exists.
--2025-10-06 02:09:27-- https://www.jce.com/
Resolving www.jce.com (www.jce.com)... 198.185.159.144, 198.49.23.144, 198.49.23.145, ...
Connecting to www.jce.com (www.jce.com)[198.185.159.144]:443... connected.
HTTP request sent, awaiting response...
HTTP/1.1 200 OK
Accept-Ranges: bytes
Age: 195088
Content-Length: 162121
Content-Type: text/html; charset=utf-8
Date: Fri, 03 Oct 2025 22:16:24 GMT
Etag: W/"9fcf7324a19411d563a57f80ac1d2a92"
Expires: Thu, 01 Jan 1970 00:00:00 GMT
Server: Squarespace
Set-Cookie: crumb=BfczHzzcMES1MGm2ZDk0ZDgxNTY0TEZnZjBiZDU2ZTIxNGFmNDU5;Secure;Path=/
Strict-Transport-Security: max-age=15552000
Vary: Accept-Encoding
X-Content-Type-Options: nosniff
X-Contextid: lw629sr0/bqf1RF0j
X-Frame-Options: SAMEORIGIN
X-Frame-Options: SAMEORIGIN
Length: 162121 (158K) [text/html]
Remote file exists and could contain further links,
but recursion is disabled -- not retrieving.

(kali@kali)-[~]

```


Nikto is an open-source web server scanner that tests for common vulnerabilities and server misconfigurations.

- Command: **nikto -h https://example.com**
- Use case: Scans a web server for security issues that could compromise its status.

```
(kali@kali)-[~]
$ nikto -h https://tesla.com
- Nikto v2.1.6

+ Target IP:      23.40.100.207
+ Target Hostname: tesla.com
+ Target Port:    443

+ SSL Info:      Subject: /CN=tesla.com
                  Ciphers: TLS_AES_256_GCM_SHA384
                  Issuer: /C=US/O=Let's Encrypt/CN=R10
+ Message:      Multiple IP addresses found: 23.40.100.207, 2.18.49.207, 2.18.48.207, 23.7.244.207, 2.18.51.207, 2.18.50.207, 2.18.55.
+ Start Time:    2025-10-06 02:14:55 (GMT-4)

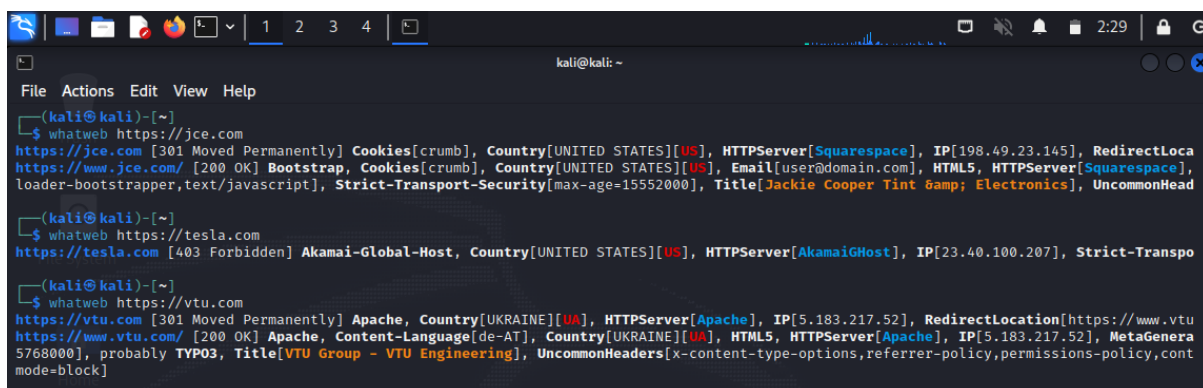
+ Server: AkamaiGHost
+ The anti-clickjacking X-Frame-Options header is not present.
+ The X-XSS-Protection header is not defined. This header can hint to the user agent to protect against some forms of XSS
+ Uncommon header 'x-reference-error' found, with contents: 18.26a81160.1759731300.16df3511
+ Uncommon header 'permissions-policy' found, with contents: interest-cohort=()
+ Uncommon header 'x-ak-cache' found, with contents: Error from child
+ The site uses SSL and Expect-CT header is not present.
+ The X-Content-Type-Options header is not set. This could allow the user agent to render the content of the site in a different fashion to
+ All CGI directories 'found', use '-C none' to test none
+ ERROR: Error limit (20) reached for host, giving up. Last error: opening stream: can't connect: SSL negotiation failed: error:0A000438:SSL
at /var/lib/nikto/plugins/LW2.pm line 5157.
; at /var/lib/nikto/plugins/LW2.pm line 5157.
+ Scan terminated: 20 error(s) and 7 item(s) reported on remote host
+ End Time:      2025-10-06 02:19:56 (GMT-4) (301 seconds)

+ 1 host(s) tested
```

WhatWeb

This advanced tool is a fingerprinting scanner that identifies web technologies used by a website, including its content management system (CMS), server, and JavaScript libraries.

- Command: **whatweb https://example.com**
- Use case: Helps identify outdated software versions, which can be a security risk.



```
(kali@kali)-[~]
$ whatweb https://jce.com
https://jce.com [301 Moved Permanently] Cookies[crumb], Country[UNITED STATES][US], HTTPServer[Squarespace], IP[198.49.23.145], RedirectLoca
https://www.jce.com/ [200 OK] Bootstrap, Cookies[crumb], Country[UNITED STATES][US], Email[user@domain.com], HTML5, HTTPServer[Squarespace],
loader-bootstrapper,text/javascript], Strict-Transport-Security[max-age=15552000], Title[Jackie Cooper Tint 6amp; Electronics], UncommonHead

(kali@kali)-[~]
$ whatweb https://tesla.com
https://tesla.com [403 Forbidden] Akamai-Global-Host, Country[UNITED STATES][US], HTTPServer[AkamaiGHost], IP[23.40.100.207], Strict-Transpo

(kali@kali)-[~]
$ whatweb https://vtu.com
https://vtu.com [301 Moved Permanently] Apache, Country[UKRAINE][UA], HTTPServer[Apache], IP[5.183.217.52], RedirectLocation[https://www.vtu
https://www.vtu.com/ [200 OK] Apache, Content-Language[de-AT], Country[UKRAINE][UA], HTML5, HTTPServer[Apache], IP[5.183.217.52], MetaGenera
5768000], probably TYPO3, Title[VTU Group - VTU Engineering], UncommonHeaders[x-content-type-options,referrer-policy,permissions-policy,cont
mode=block]
```