

Wapiti

Introduction

In Kali Linux, Wapiti is a free and open-source tool. Wapiti allows you to audit the security of your websites or web applications. It performs "black-box" scans (it does not study the source code) of the web application by crawling the webpages of the deployed web app, looking for scripts and forms where it can inject data. Once it gets the list of URLs, forms, and their inputs, Wapiti acts like a fuzzer, injecting payloads to see if a script is vulnerable. Wapiti supports both GET and POST HTTP methods for attacks. It also supports multipart forms and can inject payloads in filenames (upload). Warnings are raised when an anomaly is found (for example 500 errors and timeouts) Wapiti is able to make the difference between permanent and reflected XSS vulnerabilities.

Features

The following are the features of the Wapiti:

- Generates vulnerability reports in various formats (HTML, XML, JSON, TXT, CSV)
- Can suspend and resume a scan or an attack (session mechanism using sqlite3 databases)
- Can give you colors in the terminal to highlight vulnerabilities
- Different levels of verbosity
- Fast and easy way to activate/deactivate attack modules
- Adding a payload can be as easy as adding a line to a text file
- Configurable number of concurrent tasks to perform HTTP requests

Installation

Wapiti tools are installed in Kali Linux by default.

Usage

To know about Wapiti tool we can execute the following command:

Wapiti

```
File Actions Edit View Help

(kali@kali)-[~]
$ wapiti --update
[5000] password for kali:
Get:1 http://kali.cs.nctu.edu.tw/kali kali-rolling InRelease [30.6 kB]
Get:2 http://kali.cs.nctu.edu.tw/kali kali-rolling main amd64 Packages [18.7
48]
Get:3 http://kali.cs.nctu.edu.tw/kali kali-rolling main amd64 Contents [96]
[43.4 kB]
Fetched 143.9 kB in 1s (143.9 kB/s)
Wapiti-3.0.4 (wapiti.sourceforge.io)
usage: wapiti [-h] [-u URL] [--scope {page,folder,domain,url,punk}]
              [-m MODULES_LIST] [--list-modules] [--update] [-l LEVEL]
              [-p PROXY_URL] [--tor] [-a CREDENTIALS]
              [--auth-type {basic,digest,kerberos,ntlm,post}]
              [-c COOKIE_FILE] [--skip-crawl] [--resume-crawl]
              [--flush-attacks] [--flush-session] [--store-session PATH]
              [--store-config PATH] [-s URL] [-x URL] [-r PARAMETER]
              [--skip PARAMETER] [-d DEPTH] [--max-links-per-page MAX]
              [--max-files-per-dir MAX] [--max-scan-time SECONDS]
              [--max-attack-time SECONDS] [--max-parameters MAX] [-S FORCE]
              [-t SECONDS] [-H HEADER] [-A AGENT] [--verify-ssl {0,1}]
              [--color] [-v LEVEL] [-f FORMAT] [-o OUPUT_PATH]
              [--external-endpoint EXTERNAL_ENDPOINT_URL]
              [--internal-endpoint INTERNAL_ENDPOINT_URL]
              [--endpoint ENDPOINT_URL] [--no-bugreport] [--version]
wapiti: error: one of the arguments -u/--url --list-modules --update is requi
```

To check or scan the “demolaze.com” website HTML report using the Wapiti tool we can execute the following command:

```
wapiti -u https://demolaze.com/
```

File Actions Edit View Help

(kali@kali)-[~]

\$ wapiti -u https://demoblaze.com/

→ sudo apt update

[sudo] password for kali:

Get:1 http://kali.cs.nctu.edu.tw/kali_rolling/InRelease [30.6 kB]

Get:2 http://kali.cs.nctu.edu.tw/kali_rolling/main amd64 Packages [18.7 MB]

Get:3 http://kali.cs.nctu.edu.tw/kali_rolling/main amd64 Contents (deb) [43.4 MB]

Wapiti-3.0.4 (wapiti.sourceforge.io):

[*] Saving scan state, please wait...

Building dependency tree... Done

Note: Reading state information... Done

==== Packages can be upgraded. Run 'apt list --upgradable' to see them.

This scan has been saved in the file /home/kali/.wapiti/scans/demoblaze.com_folder_80e46cf9.db

[*] Wapiti found 12 URLs and forms during the scan

[*] Loading modules: ... Done

Building backup, blindsql, brute_login_form, buster, cookieflags, crlf, csp, csrf, exec, file, htaccess, http_headers, methods, nikto, permanentxss, redirect, shellshock, sql, ssrf, wapp, xss, xxe installed:

Problem with local wapp database.

Downloading from the web... will be installed:

flameshot grim

[*] Launching module cspalled, 0 to remove and 1054 not upgraded.

CSP is not set 0 KB of archives.

After this operation, 3,492 kB of additional disk space will be used.

File Actions Edit View Help

```
[*] Launching module http_headers
Checking X-Frame-Options :
X-Frame-Options is not set
Checking X-XSS-Protection :
X-XSS-Protection is not set
Checking X-Content-Type-Options :
X-Content-Type-Options is not set
Checking Strict-Transport-Security :
Strict-Transport-Security is not set
[*] Launching module cookieflags
[*] Launching module exec
[*] Launching module file
[*] Launching module sql
[*] Launching module xss
[*] Launching module ssrf
[*] Asking endpoint URL https://wapiti3.ovh/get_ssrf.php?id=jkfvp5 for results, please wait...
[*] Launching module redirect
```

```
[*] Launching module redirect. Run 'apt list --upgradable' to see them.
[*] Launching module blindsql
[*] Launching module permanentxss
Report
A report has been generated in the file /home/kali/.wapiti/generated_report
Open /home/kali/.wapiti/generated_report/demoblaze.com_10192022_1256.html with a browser to see this report.
(kali@kali)-[~]
$
```

References

1. <https://wapiti-scanner.github.io/>