🕵️🤖 Identification of Web Technologies

Intro

Once we have identified the web domain or have expanded the attack surface by identifying *subdomains,* the next thing to do is **identify the technologies** that run after those domains. Knowing things like, what *application servers are running*, what *programming languages the web server has been developed*, among others, will later serve as input for the vulnerability analysis and then for the *exploitation of those vulnerabilities*.

For this, different technologies have been developed such as **WhatWeb** and **Web analytics**

🧑‍🌐 WhatWeb

Intro

WhatWeb is a web application scanner that will analyze technologies behind it such as:

- The type of programming language
- The server on which the web application is running
- The web application server
- Web application library types
- Application Server Versions
- Email addresses
- account IDs
- SQL Errors
- Wordpress sections or other content manager
- Session Cookies (this can be used to impersonate a user)
- And more

This is achieved thanks to the fact that it incorporates a list of large *plugins* that are updated through the community

WhatWeb in action 🏃

To use whatweb we only have to execute the command:

whatweb http://target.website

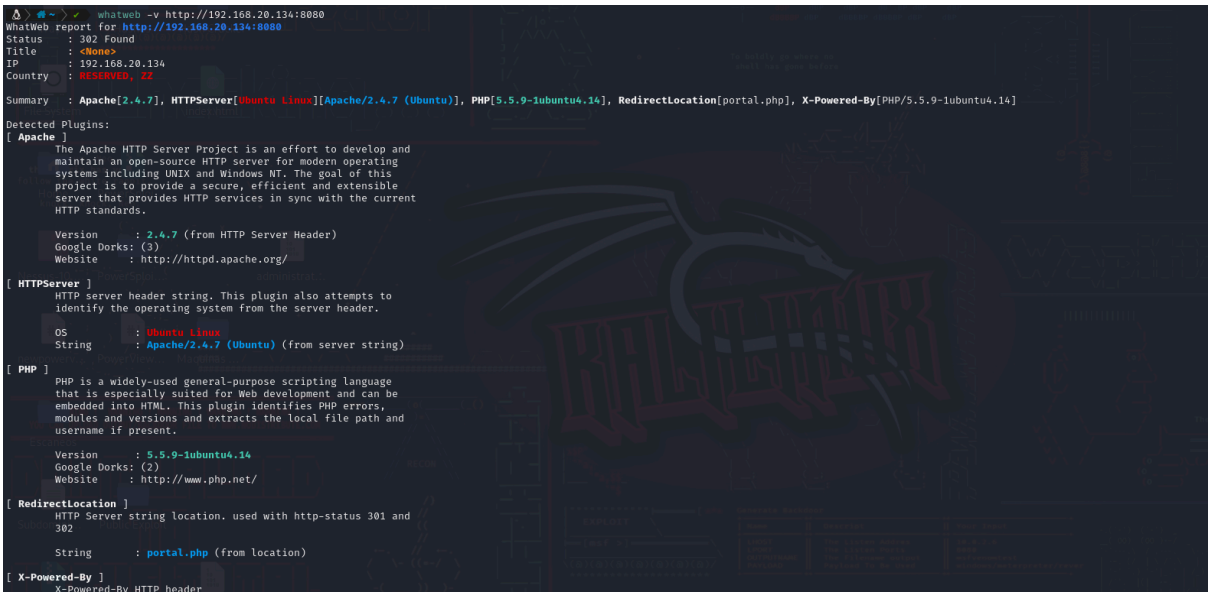
And the result on the screen would be something like this:

```
whatweb http://192.168.20.134:8080                                    ↓0 B/s ↑0 B/s 192.168.20.128
http://192.168.20.134:8080 [302 Found] Apache[2.4.7], Country[RESERVED][ZZ], HTTPServer[Ubuntu Linux][Apache/2.4.7 (Ubuntu)],
IP[192.168.20.134], PHP[5.5.9-1ubuntu4.14], RedirectLocation[portal.php], X-Powered-By[PHP/5.5.9-1ubuntu4.14]
http://192.168.20.134:8080/portal.php [302 Found] Apache[2.4.7], Cookies[PHPSESSID], Country[RESERVED][ZZ], HTTPServer[Ubuntu
Linux][Apache/2.4.7 (Ubuntu)], IP[192.168.20.134], PHP[5.5.9-1ubuntu4.14], RedirectLocation[login.php], X-Powered-By[PHP/5.5.9
-1ubuntu4.14]
http://192.168.20.134:8080/login.php [200 OK] Apache[2.4.7], Cookies[PHPSESSID], Country[RESERVED][ZZ], HTML5, HTTPServer[Ubun
tu Linux][Apache/2.4.7 (Ubuntu)], IP[192.168.20.134], PHP[5.5.9-1ubuntu4.14], PasswordField[password], Script, Title[bWAPP - L
ogin], X-Powered-By[PHP/5.5.9-1ubuntu4.14]
```

In case we want the information in more detail, we just have to execute the command as follows

whatweb -v http://target.website

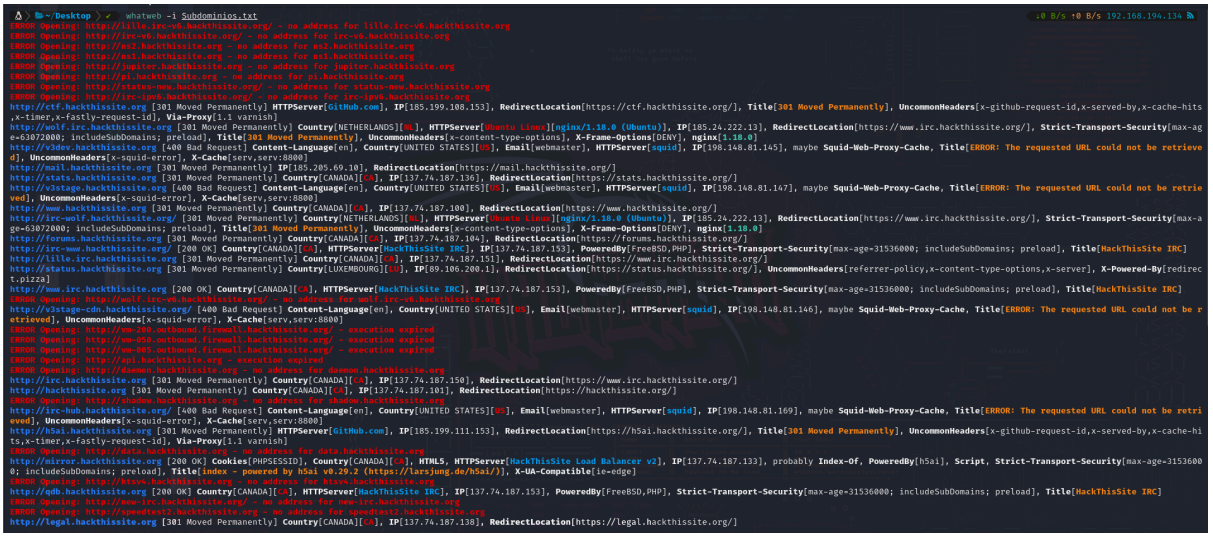
And the result on the screen would be something like this



For cases where we want to analyze several subdomains and have stored them in a.txt file (see the section *Subdomain Identification*) we can pass this file to Whatweb so that, with a single analysis, it can scan all the sites. We do this with it with the command:

whatweb -i Subdomains.txt

And the result would look like this



If we want to see more detailed information, we can add the command **-v**

Be careful, as this merger of can generate a lot of network traffic

🕵️🌐 Web analytics

Intro

Web analytics It is a tool very similar to **whatweb**, which does not allow us to remove the technologies that run behind a web application.

Webalizer is *much simpler than whatweb,* Because it does not have the same number of plugins, it does not analyze as many things as whatweb does, but, since it is simpler, it is faster and since it is less known, many security tools do not detect it. Furthermore, if we have a very large list of subdomains it is *faster* what to use **whatweb**

Webanalyse in action 🏃

The first thing is to install it, since it does not come installed in 🐉 kali but we can install it with the command

go install -v github.com/rverton/webanalyze/cmd/webanalyze@latest

Once downloaded we just have to perform the command

web analysis -host http://target.website

And the result would look like this:

```
~/De/webanalyze-master ✔  webanalyze -host http://192.168.20.134:8080/login.php
 :: webanalyze        : v0.3.9
 :: workers           : 4
 :: technologies      : technologies.json
 :: crawl count       : 0
 :: search subdomains : true
 :: follow redirects  : false

2024/06/24 19:35:39 warning: technologies.json is older than a week
http://192.168.20.134:8080/login.php (0.0s):
    Apache HTTP Server, 2.4.7 (Web servers)
    PHP, 5.5.9 (Programming languages)
    Ubuntu,  (Operating systems)
```