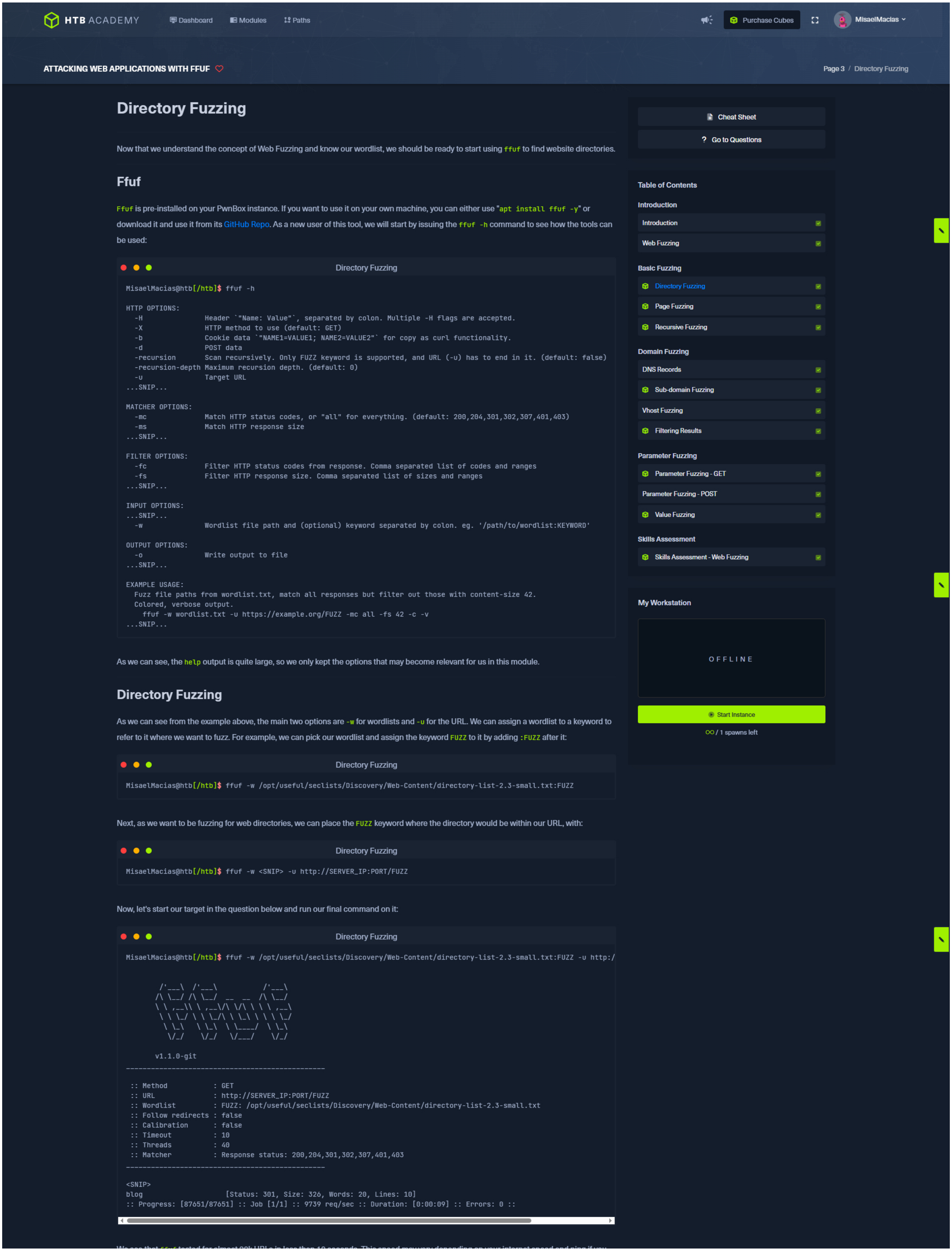


Directory Fuzzing

Now that we understand the concept of Web Fuzzing and know our wordlist, we should be ready to start using `ffuf` to find website directories.

Ffuf

`Ffuf` is pre-installed on your PwnBox instance. If you want to use it on your own machine, you can either use "`apt install ffuf -y`" or download it and use it from its GitHub Repo. As a new user of this tool, we will start by issuing the `ffuf -h` command to see how the tools can be used:

Directory Fuzzing

```
MisaelMacias@htb[/htb]$ ffuf -h

HTTP OPTIONS:
  -H               Header `"Name: Value"`, separated by colon. Multiple -H flags are accepted.
  -X               HTTP method to use (default: GET)
  -b               Cookie data `"NAME1=VALUE1; NAME2=VALUE2"` for copy as curl functionality.
  -d               POST data
  -recursion       Scan recursively. Only FUZZ keyword is supported, and URL (-u) has to end in it. (default: false)
  -recursion-depth Maximum recursion depth. (default: 0)
  -u               Target URL
...SNIP...

MATCHER OPTIONS:
  -mc              Match HTTP status codes, or "all" for everything. (default: 200,204,301,302,307,401,403)
  -ms              Match HTTP response size
...SNIP...

FILTER OPTIONS:
  -fc              Filter HTTP status codes from response. Comma separated list of codes and ranges
  -fs              Filter HTTP response size. Comma separated list of sizes and ranges
...SNIP...

INPUT OPTIONS:
...SNIP...
  -w               Wordlist file path and (optional) keyword separated by colon. eg. '/path/to/wordlist:KEYWORD'

OUTPUT OPTIONS:
  -o               Write output to file
...SNIP...

EXAMPLE USAGE:
  Fuzz file paths from wordlist.txt, match all responses but filter out those with content-size 42.
  Colored, verbose output.
    ffuf -w wordlist.txt -u https://example.org/FUZZ -mc all -fs 42 -c -v
...SNIP...
```

As we can see, the `help` output is quite large, so we only kept the options that may become relevant for us in this module.

Directory Fuzzing

As we can see from the example above, the main two options are `-w` for wordlists and `-u` for the URL. We can assign a wordlist to a keyword to refer to it where we want to fuzz. For example, we can pick our wordlist and assign the keyword `FUZZ` to it by adding `:FUZZ` after it:

Directory Fuzzing

```
MisaelMacias@htb[/htb]$ ffuf -w /opt/useful/seclists/Discovery/Web-Content/directory-list-2.3-small.txt:FUZZ
```

Next, as we want to be fuzzing for web directories, we can place the `FUZZ` keyword where the directory would be within our URL, with:

Directory Fuzzing

```
MisaelMacias@htb[/htb]$ ffuf -w <SNIP> -u http://SERVER_IP:PORT/FUZZ
```

Now, let's start our target in the question below and run our final command on it:

Directory Fuzzing

```
MisaelMacias@htb[/htb]$ ffuf -w /opt/useful/seclists/Discovery/Web-Content/directory-list-2.3-small.txt:FUZZ -u http:/


        /'___\  /'___\           /'___\
       /\ \__/ /\ \__/  __  __  /\ \__/
       \ \ ,__\\ \ ,__\/\ \/\ \ \ \ ,__\
        \ \ \_/ \ \ \_/\ \ \_\ \ \ \ \_/
         \ \_\   \ \_\  \ \____/  \ \_\
          \/_/    \/_/   \/___/    \/_/

       v1.1.0-git
________________________________________________

 :: Method           : GET
 :: URL              : http://SERVER_IP:PORT/FUZZ
 :: Wordlist         : FUZZ: /opt/useful/seclists/Discovery/Web-Content/directory-list-2.3-small.txt
 :: Follow redirects : false
 :: Calibration      : false
 :: Timeout          : 10
 :: Threads          : 40
 :: Matcher          : Response status: 200,204,301,302,307,401,403
________________________________________________

<SNIP>
blog                    [Status: 301, Size: 326, Words: 20, Lines: 10]
:: Progress: [87651/87651] :: Job [1/1] :: 9739 req/sec :: Duration: [0:00:09] :: Errors: 0 ::
```

We see that `ffuf` tested for almost 90k URLs in less than 10 seconds. This speed may vary depending on your internet speed and ping if you

My Workstation

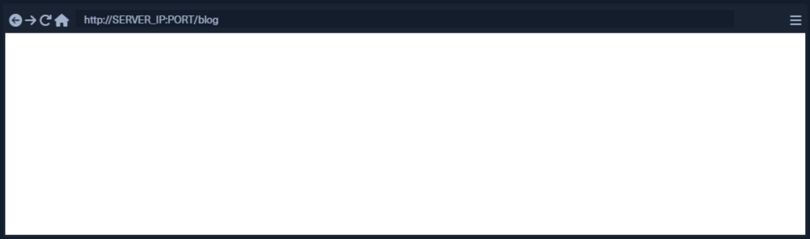
OFFLINE

Start Instance

∞ / 1 spawns left

We see that ffuf tested for almost 90k URLs in less than 10 seconds. This speed may vary depending on your internet speed and ping if you used ffuf on your machine, but it should still be extremely fast.

We can even make it go faster if we are in a hurry by increasing the number of threads to 200, for example, with `-t 200`, but this is not recommended, especially when used on a remote site, as it may disrupt it, and cause a `Denial of Service`, or bring down your internet connection in severe cases. We do get a couple of hits, and we can visit one of them to verify that it exists:



We get an empty page, indicating that the directory does not have a dedicated page, but also shows that we do have access to it, as we do not get an HTTP code `404 Not Found` or `403 Access Denied`. In the next section, we will look for pages under this directory to see whether it is really empty or has hidden files and pages.

Connect to Pwnbox
Your own web-based Parrot Linux instance to play our labs.

Pwnbox Location

UK 161ms

Terminate Pwnbox to switch location

Start Instance

∞ / 1 spawns left

Waiting to start...

Enable step-by-step solutions for all questions

Questions

Cheat Sheet

Answer the question(s) below to complete this Section and earn cubes!

Target(s): Click here to spawn the target system!

+ 0 In addition to the directory we found above, there is another directory that can be found. What is it?

forum

Submit Hint

Previous Next Mark Complete & Next

Powered by HACKTHEBOX