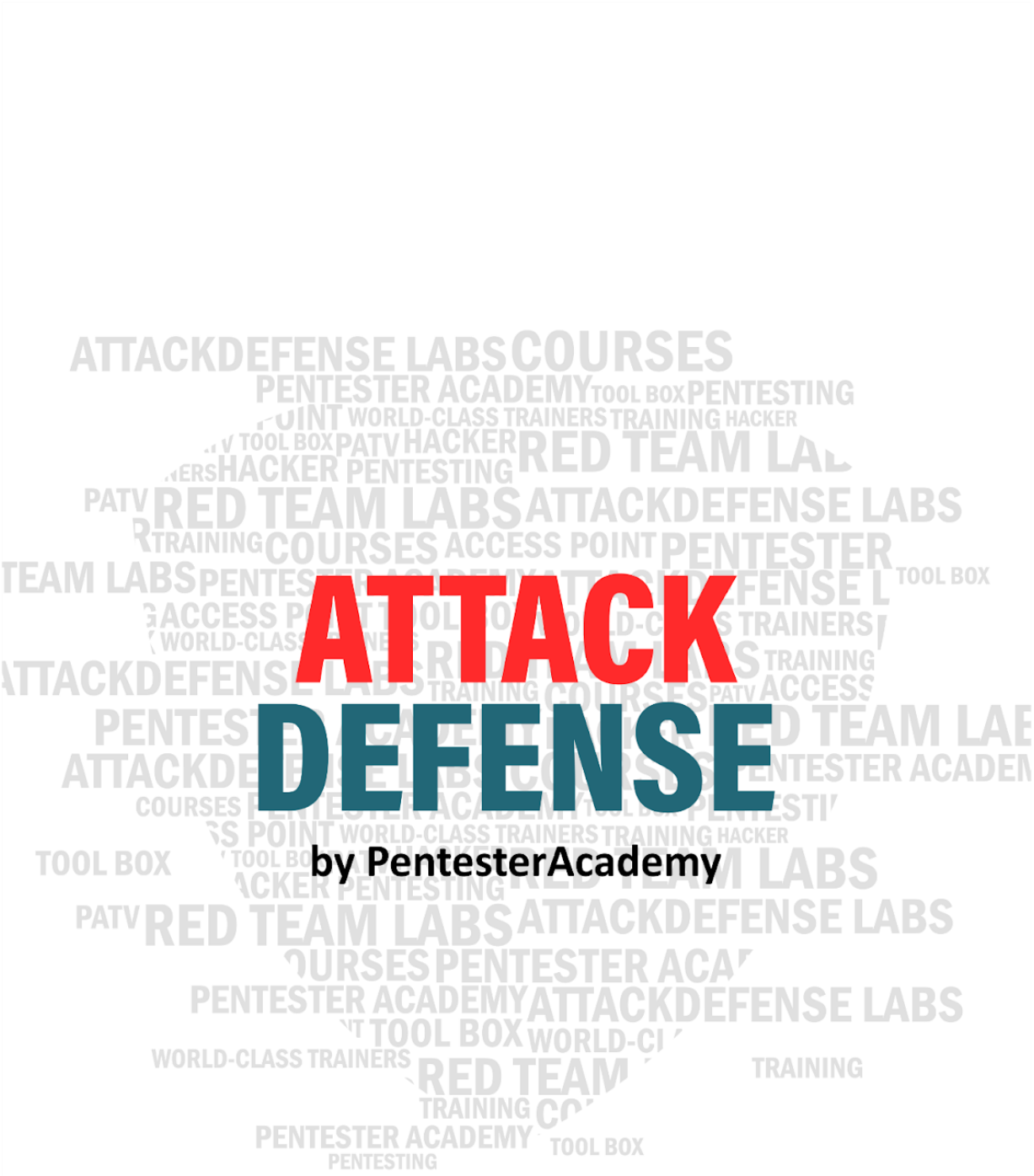

ATTACK
DEFENSE
by PentesterAcademy

Name	Encoded Cookie Value
URL	https://attackdefense.com/challengedetails?cid=2116
Type	OWASP Top 10 : Sensitive Data Exposure

Important Note: This document illustrates all the important steps required to complete this lab. This is by no means a comprehensive step-by-step solution for this exercise. This is only provided as a reference to various commands needed to complete this exercise and for your further research on this topic. Also, note that the IP addresses and domain names might be different in your lab.

Step 1: Identifying IP address of the target machine

Command: ip addr

```
root@attackdefense:~# ip addr
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
10391: eth0@if10392: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default
    link/ether 02:42:0a:01:01:03 brd ff:ff:ff:ff:ff:ff link-netnsid 0
    inet 10.1.1.3/24 brd 10.1.1.255 scope global eth0
       valid_lft forever preferred_lft forever
10394: eth1@if10395: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default
    link/ether 02:42:c0:2e:80:02 brd ff:ff:ff:ff:ff:ff link-netnsid 0
    inet 192.46.128.2/24 brd 192.46.128.255 scope global eth1
       valid_lft forever preferred_lft forever
root@attackdefense:~#
```

The IP address of the attacker machine is 192.46.128.2. The target machine is located at the IP address 192.46.128.3

Step 2: Identify the open ports on the target machine.

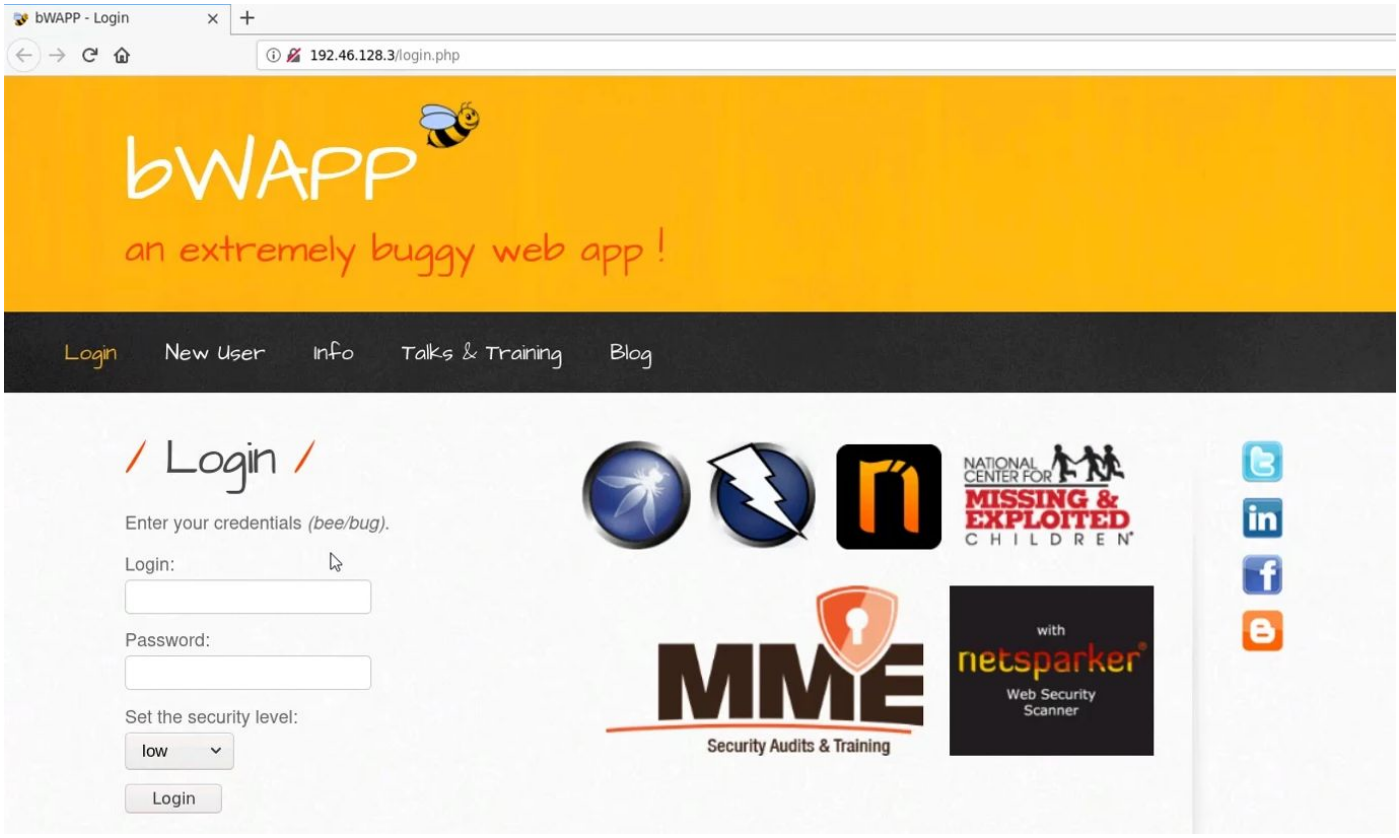
Command: nmap 192.46.128.3

```
root@attackdefense:~# nmap 192.46.128.3
Starting Nmap 7.70 ( https://nmap.org ) at 2020-06-03 13:24 IST
Nmap scan report for target-1 (192.46.128.3)
Host is up (0.000017s latency).
Not shown: 998 closed ports
PORT     STATE SERVICE
80/tcp   open  http
3306/tcp open  mysql
MAC Address: 02:42:C0:2E:80:03 (Unknown)

Nmap done: 1 IP address (1 host up) scanned in 0.26 seconds
root@attackdefense:~#
```

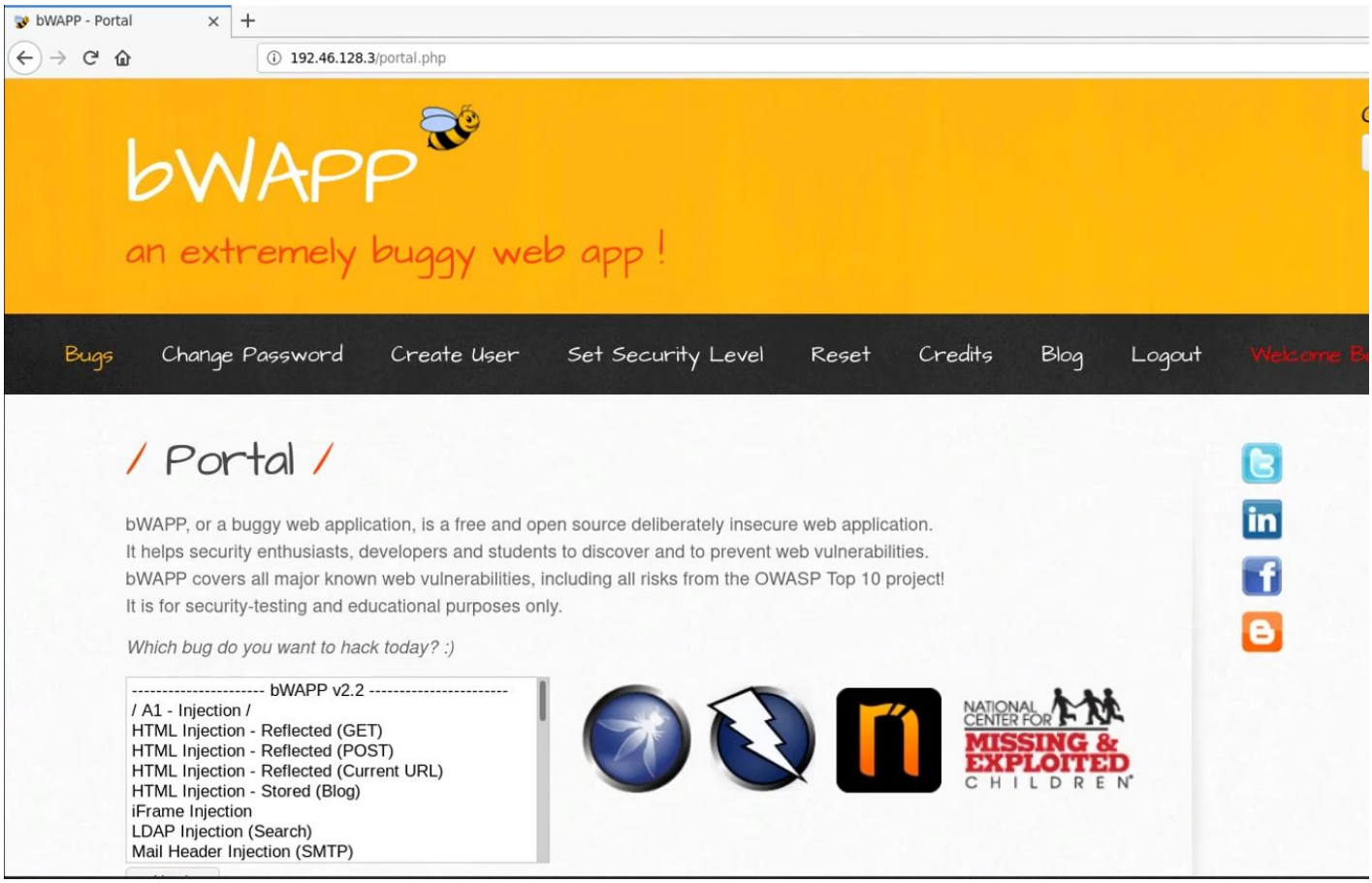
Port 80 and 3306 are open on the target machine.

Step 3: Accessing the web application in Mozilla Firefox.

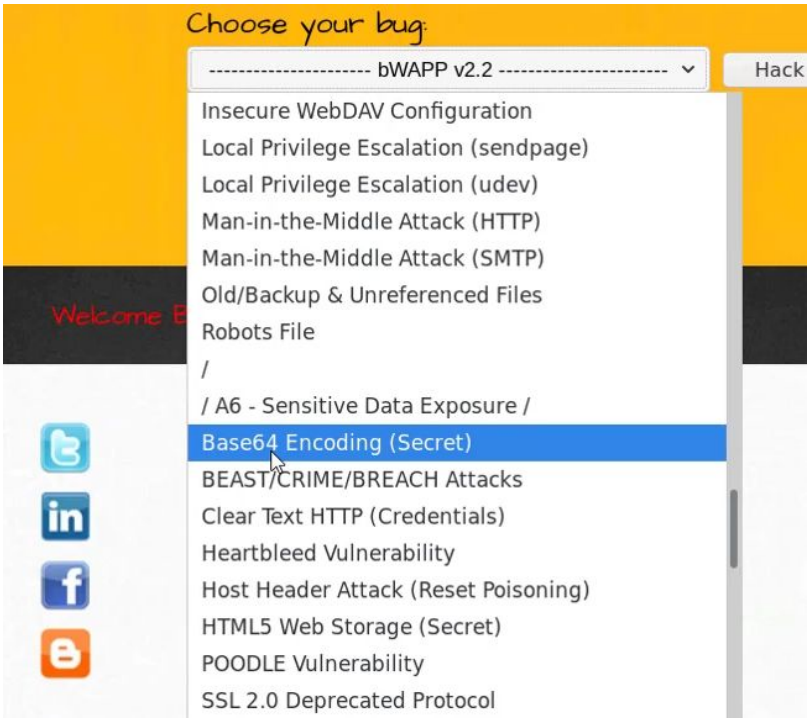


Step 4: Logging into the web application. The login credentials are provided on the web page.

Username: bee
Password: bug

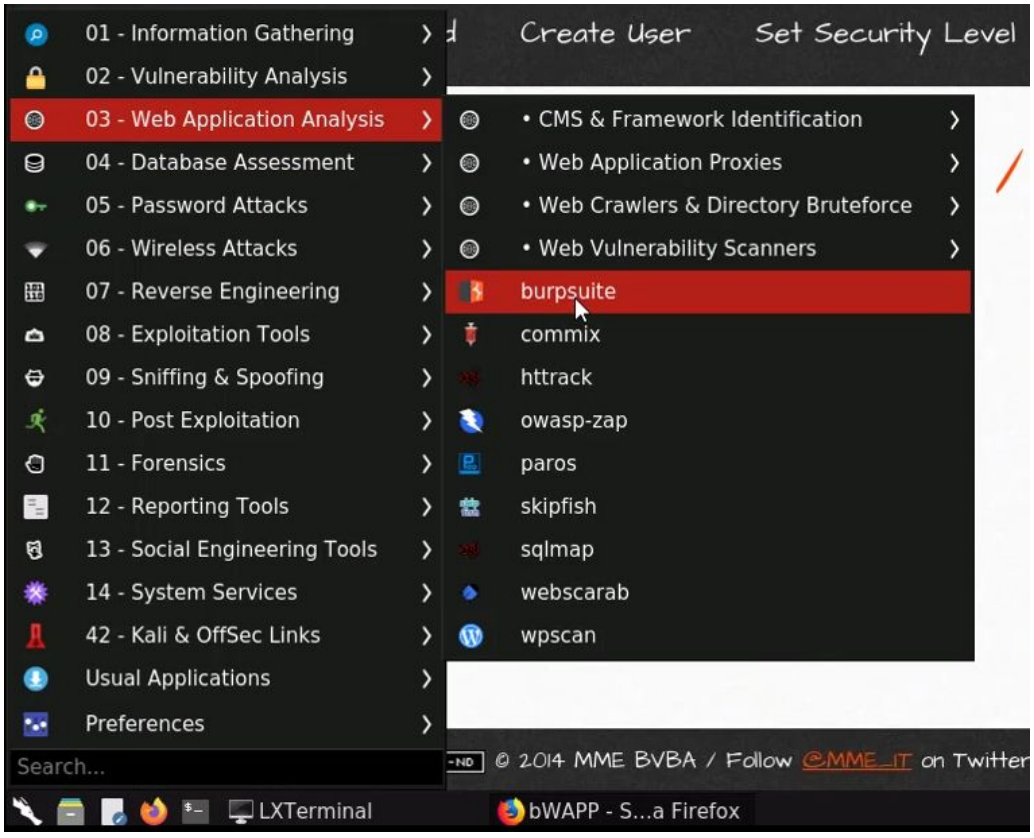


Step 5: Select "Base64 Encoding (Secret)" from "Choose your bug" dropdown and click "Hack"

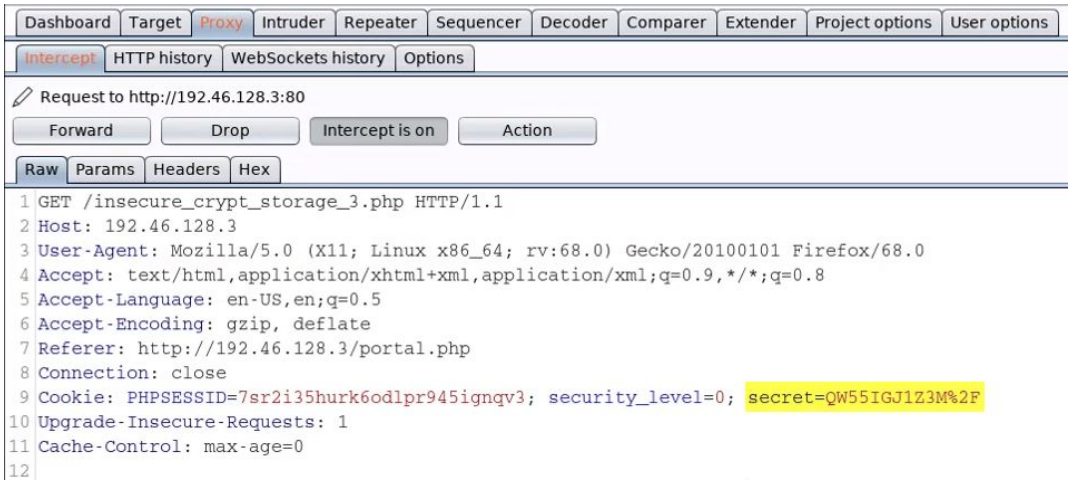


Step 6: Configure Firefox to use Burp Suite. Select "Burp Suite" from FoxyProxy

Step 7: Start Burp Suite. Click on burpsuite from "Web Application Analysis" menu.

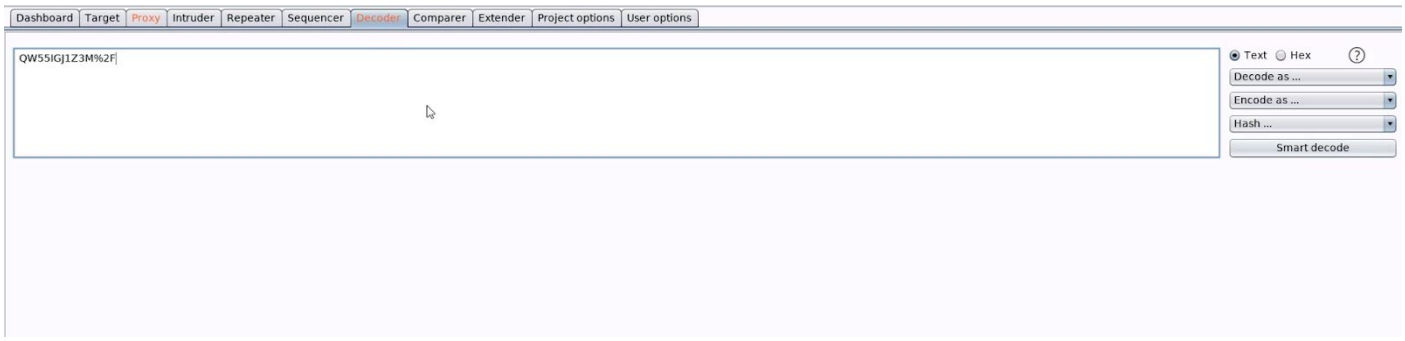


Step 8: Reload the web page in Firefox and the request will be intercepted in Burp Suite

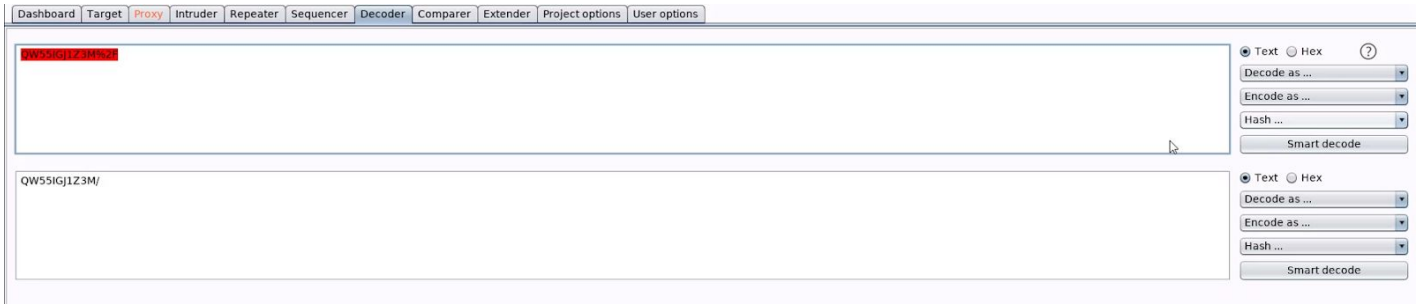


There is a secret cookie with encoded value.

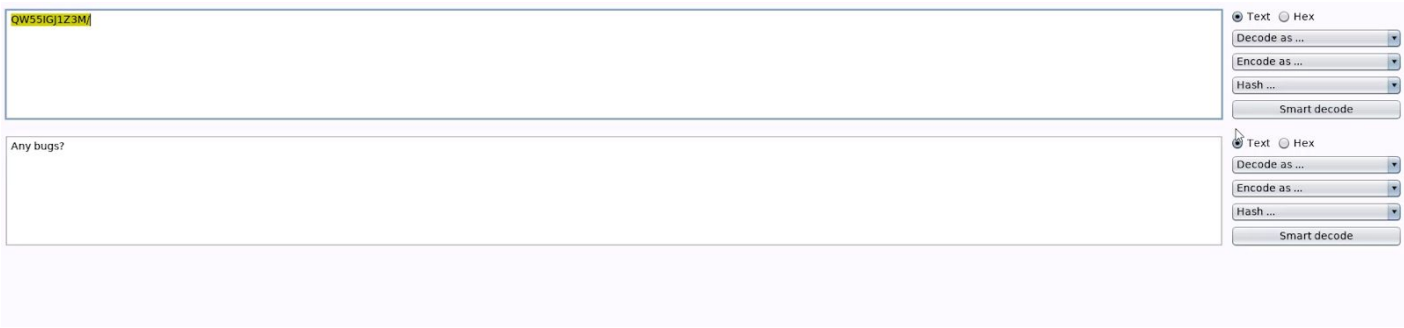
Step 9: Sending the encoded value to decoder. Selected the encoded value, right click on it and click "Send to Decoder".



Step 10: From the panel on the right. Click on "Decode as" and select URL.



Step 11: Click on "Decode as" and select "base64"



The base64 Decoded value was "Any bugs?"

References:

1. bWAPP (http://itsecgames.blogspot.com/)