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ICS 482

11/25/2019

InfoSec Lab: Reflected XSS

The image is a composite of two screenshots from a web browser and a terminal window, illustrating a Reflected XSS lab exercise.

Top Screenshot:

- Web Browser:** The address bar shows `https://lab.infoseclearning.com/lab/reflected-xss`. The page title is "Reflected XSS". The content displays a message: "You have reached a device in the urbank domain. If you have reached this device in error please terminate the session. Unauthorized access is strictly prohibited. Violators will be subject to the full extent of the law. support@urbank.com's password:". Below this, a terminal window is shown with the command `support@Web:~$ LAB05A` and the prompt `[sudo] password for support:`. A red arrow points to the password input field. A note states: "Note: If you submit an incorrect password, then script may only partially run and you may have to restart the session. Also note: you should wait for the script to complete before continuing." Below the terminal, a green button labeled "Challenge #1" is visible.
- Terminal Window:** The terminal shows the output of the script, including setting up libraries, creating config files, and granting access to the database. The output ends with `support@Web:~$`.

Bottom Screenshot:

- Web Browser:** The address bar shows `https://lab.infoseclearning.com/lab/reflected-xss`. The page title is "Reflected XSS". The content displays a message: "There are certain characteristics that make this attack a locally reflected XSS attack. For example, one characteristic that makes it locally reflected, is that the information is displayed back to the user who executed the JavaScript." Below this, a terminal window is shown with the command `support@Web:~$ LAB05A` and the prompt `[sudo] password for support:`. A red arrow points to the password input field. A note states: "Note: If you submit an incorrect password, then script may only partially run and you may have to restart the session. Also note: you should wait for the script to complete before continuing." Below the terminal, a green button labeled "Challenge #2" is visible.
- Terminal Window:** The terminal shows the output of the script, including setting up libraries, creating config files, and granting access to the database. The output ends with `support@Web:~$`.

https://lab.infoseclearning.com/lab/reflected-xss

Reflected XSS

Verify Background Image
Select All
View Page Source
View Page File
Inspect Element (E)

VIEWING PAGE SOURCE

8 Verify the inserted code on line 9.

```
<body>
<div style="text-align:right; width:95%; ">
<script>alert('Owned')</script></div>
</div>
<br><br><br>
```

INJECTED JAVASCRIPT

9 Close the browser tab for the page source.

UrBank x http://urbank.com/

CLOSING PAGE SOURCE TAB

CONCLUSION:

In this section, we learned that if the user is allowed to add their own JavaScript and the site allows it to execute, then the site is susceptible to XSS. We also learned the characteristics that make it a locally reflected XSS attack:

- Insertion occurs only in the client-side file.
- Information is displayed back to the user who executed the JavaScript.

Final_Kali-2.0 - Internet Explorer

https://lab.infoseclearning.com/lab/console/vm-1129741/Final_Kali-2.0

Final_Kali-2.0

View Fullscreen Send Ctrl+Alt+Delete Reboot

Applications Places Iceweasel Tue 00:23

UrBank x http://urbank.com/?myusername=<sc

view-source:http://urbank.com/?myusername=<sc

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <title>UrBank</title>
5 <meta name="description" content="UrBank online banking">
6 </head>
7 <body>
8 <div style="text-align:right; width:95%; ">
9 <script>alert('Owned')</script></div>
10 <br><br><br>
11 </div>
12 <center>
13 <div> Welcome to UrBank </div>
14 </center>
15 <table width="301" border="0" align="center" cellpadding="0" cellspacing="1" bgcolor="#CCCCC">
16 <tr>
17 <td colspan="2">
18 <form name="form1" method="post" action="checklogin.php">
19 <table width="100%" border="0" cellpadding="3" cellspacing="1" bgcolor="FFFFFF">
20 <tr>
21 <td colspan="2"> Login </td>
22 </tr>
23 <tr>
24 <td width="78">Username</td>
25 <td width="6"><input type="text" id="myusername"></td>
26 </tr>
27 </table>
```

It looks like you haven't started Iceweasel in a while. Do you want to clean it up for a fresh, like-new experience? And by the way, welcome back!

Refresh Iceweasel...

https://lab.infoseclearning.com/lab/reflected-xss

Reflected XSS

UrBank x urbank.com/?myusername=<script>alert(document

NO SESSION ID

3 Click the minimize button on the browser.

Iceweasel Tue 07:22

UrBank - Iceweasel

x urbank.com/?myusername=<script>alert(document

MINIMIZING THE BROWSER

4 Click the terminal icon on the launcher.

Final_Kali-2.0 - Internet Explorer

https://lab.infoseclearning.com/lab/console/vm-1129741/Final_Kali-2.0

Final_Kali-2.0

View Fullscreen Send Ctrl+Alt+Delete Reboot

Applications Places Iceweasel Tue 00:24

UrBank x urbank.com/?myusername=<script>alert(document

view-source:http://urbank.com/?myusername=<script>alert(document

Transferring data from urbank.com...

It looks like you haven't started Iceweasel in a while. Do you want to clean it up for a fresh, like-new experience? And by the way, welcome back!

Refresh Iceweasel...

Reflected XSS

12 From the browser, click the refresh button to read in the changes.

Exploit-DB

Aircrack-ng

REFRESH WEBSITE

13 View the session ID and click OK.

PHPSESSID=pqk74jo96971has7erm@d37oo1

OK

PHP SESSION ID

Challenge #3

Once again this is a locally reflected XSS attack. The information is reflected back to the user that executed the JavaScript, and the insertion only occurred within the client-side file.

14 Right-click the webpage and select View Page Source.

Type here to search

Final_Kali-2.0 - Internet Explorer

https://lab.infoseclearning.com/lab/console/vm-1129741/Final_Kali-2.0

Final_Kali-2.0

View Fullscreen Send Ctrl+Alt+Delete Reboot

Applications Places Icceweasel Tue 00:26

UrBank - Icceweasel

urbank.com/?myusername=<script>alert(document.cookie)

Most Visited Offensive Security Kali Linux Kali Docs Kali Tools Exploit-DB Aircrack-ng

PHPESSID=nmu8ahovi5kjhv0g3ao1tqdi2

OK

Transferring data from urbank.com...

It looks like you haven't started Icceweasel in a while. Do you want to clean it up for a fresh, like-new experience? And by the way, welcome back!

Refresh Icceweasel...

Reflected XSS

VIEWING CLIENT-SIDE FILE

15 View the injected code on line 9.

```
6 </head>
7 <body>
8 <div style="text-align:right; width:95%;">
9 <script>alert(document.cookie)</script></div>
10 </div>
11 <br><br><br>
```

INJECTED CODE

16 Close the tab when finished and minimize the browser.

http://urbank.com/ - Icceweasel

http://urbank.com/

view-source:http://urbank.com/

CLOSING TAB AND MINIMIZING THE BROWSER

CONCLUSION:

In this section, we learned that XSS can be used view to system information, such as session IDs.

BACK

INFOSEC LEARNING

NEXT

Type here to search

Final_Kali-2.0 - Internet Explorer

https://lab.infoseclearning.com/lab/console/vm-1129741/Final_Kali-2.0

Final_Kali-2.0

View Fullscreen Send Ctrl+Alt+Delete Reboot

Applications Places Icceweasel Tue 00:27

UrBank

http://urbank.com/?myusername=%3Cscript%3Ealert(document.cookie)%3C/script%3E - Icceweasel

Most Visited Offensive Security Kali Linux Kali Docs Kali Tools Exploit-DB Aircrack-ng

view-source:http://urbank.com/?myusername=<sc

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9 <script>alert(document.cookie)</script></div>
10 </div>
11 <br><br><br>
12 <center>
13 <h1> Welcome to UrBank </h1><br>
14 </center>
15 <table width="301" border="0" align="center" cellpadding="0" cellspacing="1" bgcolor="#cccccc">
16 <tr>
17 <form name="form1" method="post" action="checklogin.php">
18 <td>
19 <table width="100%" border="0" cellpadding="3" cellspacing="1" bgcolor="ffffff">
20 <tr>
21 <td colspan="3"><div> Login </div></td>
22 </tr>
23 <tr>
24 <td width="78">Username</td>
25 <td width="6"></td>
26 <td width="294"><input name="myusername" type="text" id="myusername"></td>
27 </tr>
```

It looks like you haven't started Icceweasel in a while. Do you want to clean it up for a fresh, like-new experience? And by the way, welcome back!

Refresh Icceweasel...

