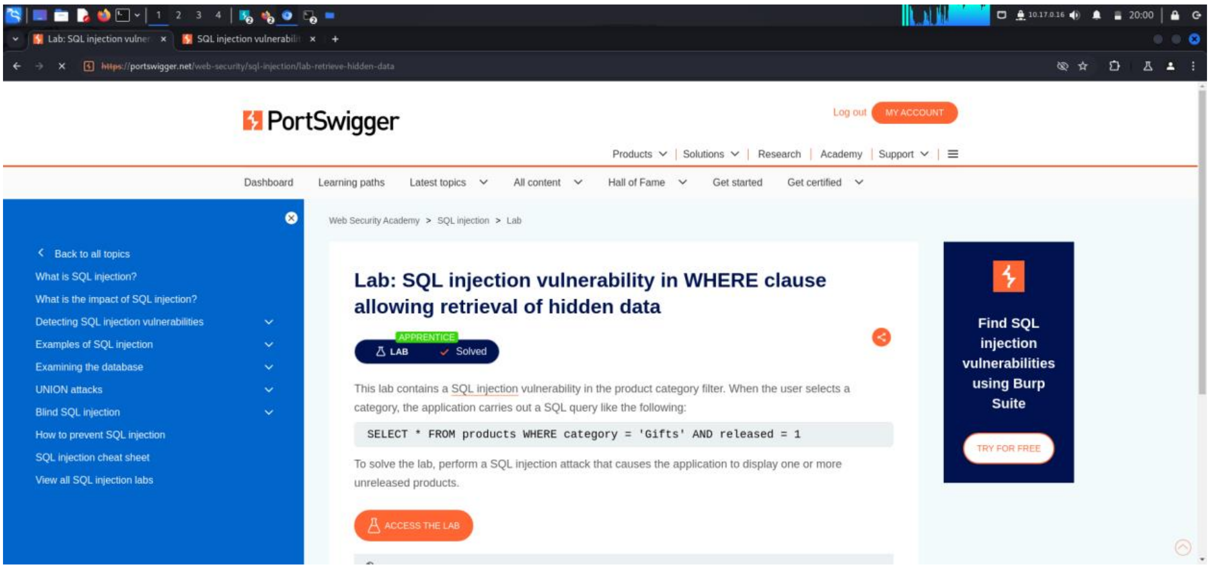
PORTSWIGGER LABS

SQL injection

SQL injection vulnerability in WHERE clause allowing retrieval of hidden data


Lab: SQL injection vulner
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https://portswigger.net/web-security/sql-injection/lab-retrieve-hidden-data
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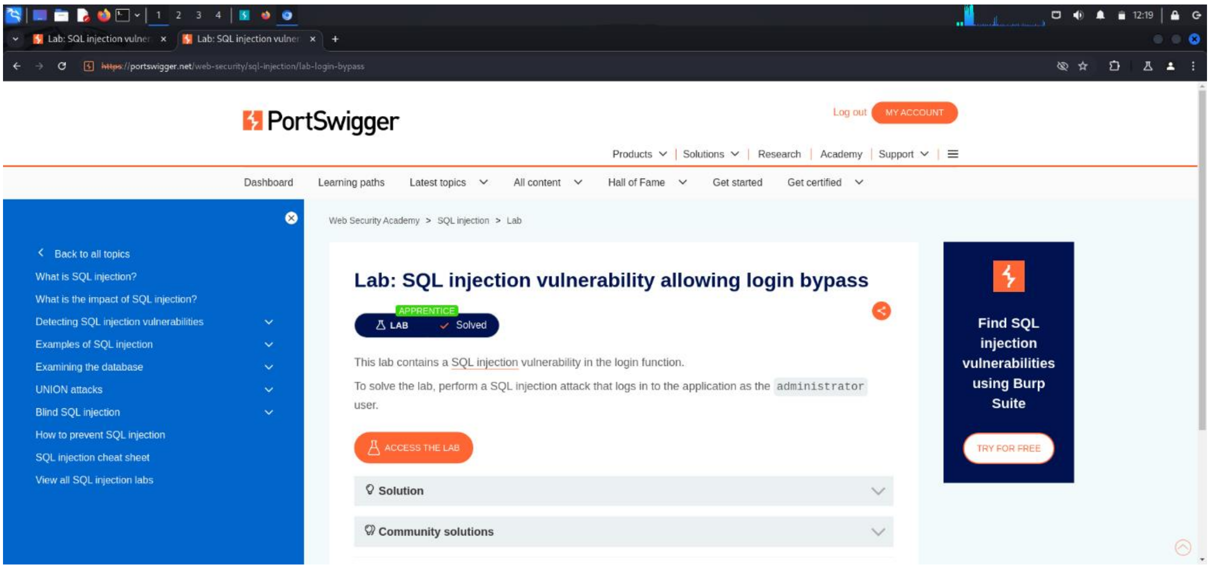
Lab: SQL injection vulnerability in WHERE clause allowing retrieval of hidden data

This lab contains a SQL injection vulnerability in the product category filter. When the user selects a category, the application carries out a SQL query like the following:

```
SELECT * FROM products WHERE category = 'Gifts' AND released = 1
```

To solve the lab, perform a SQL injection attack that causes the application to display one or more unreleased products.

SQL injection vulnerability allowing login bypass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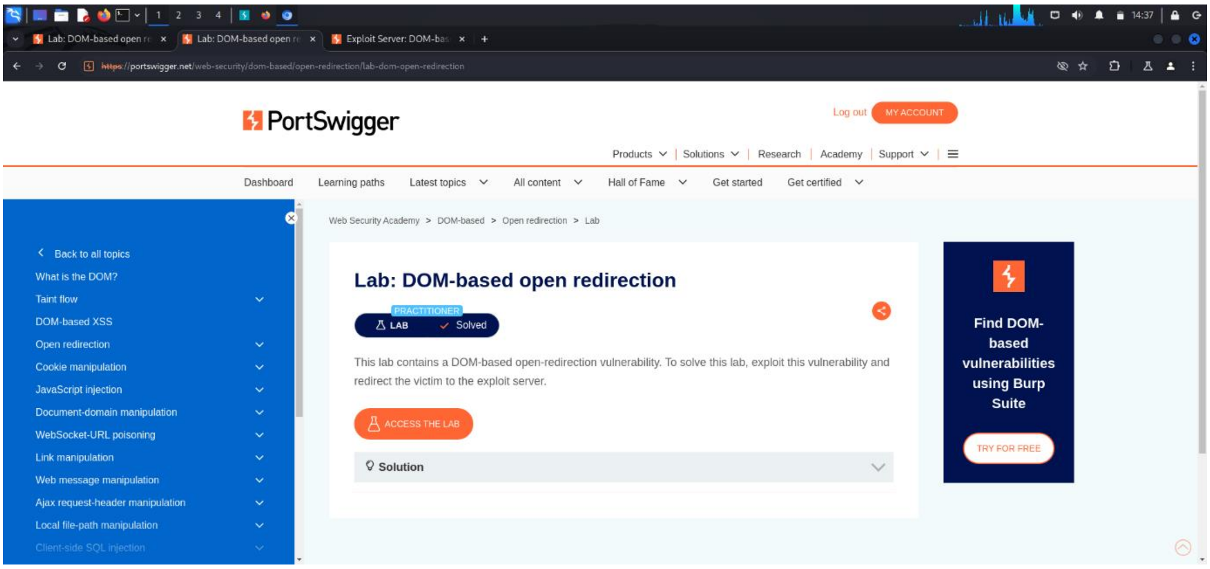
Lab: SQL injection vulnerability allowing login bypass

This lab contains a SQL injection vulnerability in the login function.

To solve the lab, perform a SQL injection attack that logs in to the application as the `administrator` user.

DOM-based vulnerabilities

DOM-based open redirection

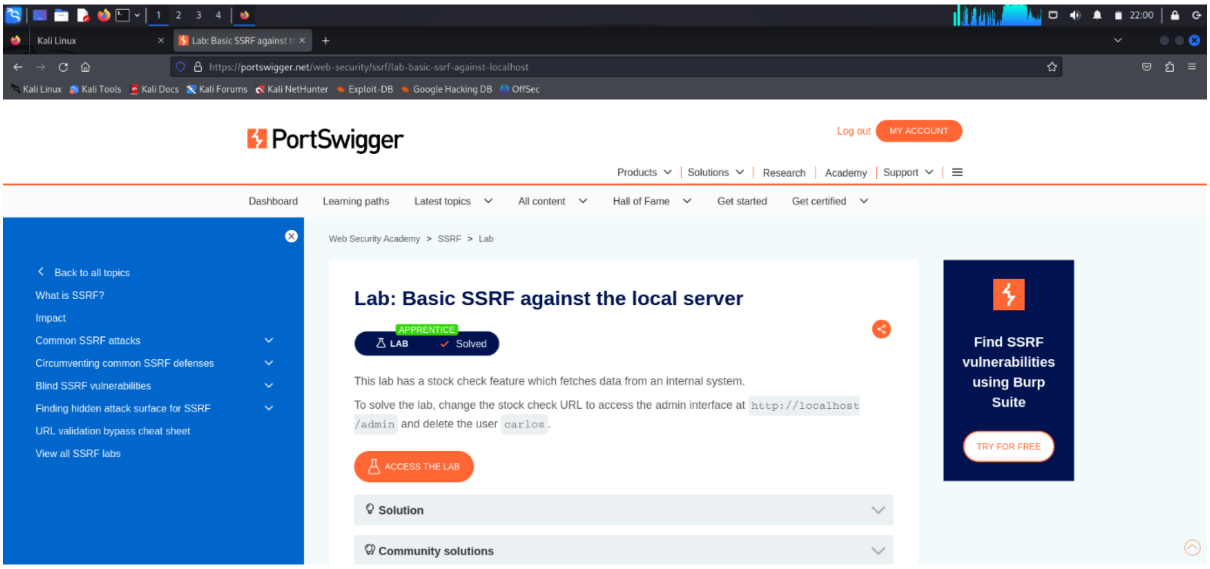


Lab: DOM-based open redirection

This lab contains a DOM-based open-redirection vulnerability. To solve this lab, exploit this vulnerability and redirect the victim to the exploit server.

Server-side request forgery (SSRF)

Basic SSRF against the local server



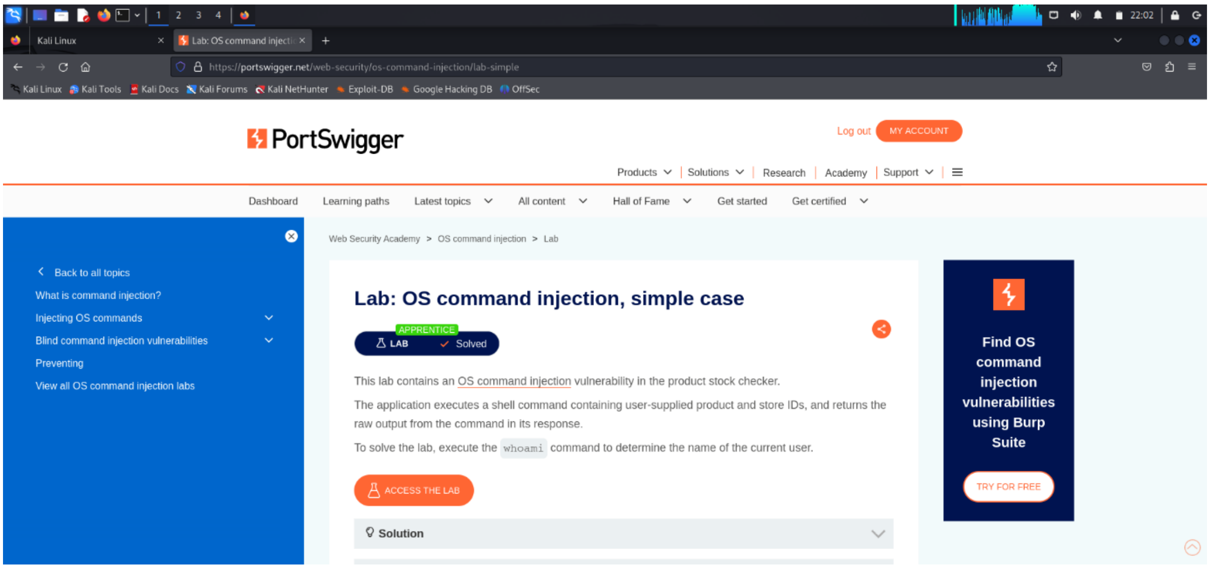
Lab: Basic SSRF against the local server

This lab has a stock check feature which fetches data from an internal system.

To solve the lab, change the stock check URL to access the admin interface at `http://localhost/admin` and delete the user `carlos`.

OS command injection

OS command injection, simple case



Lab: OS command injection, simple case

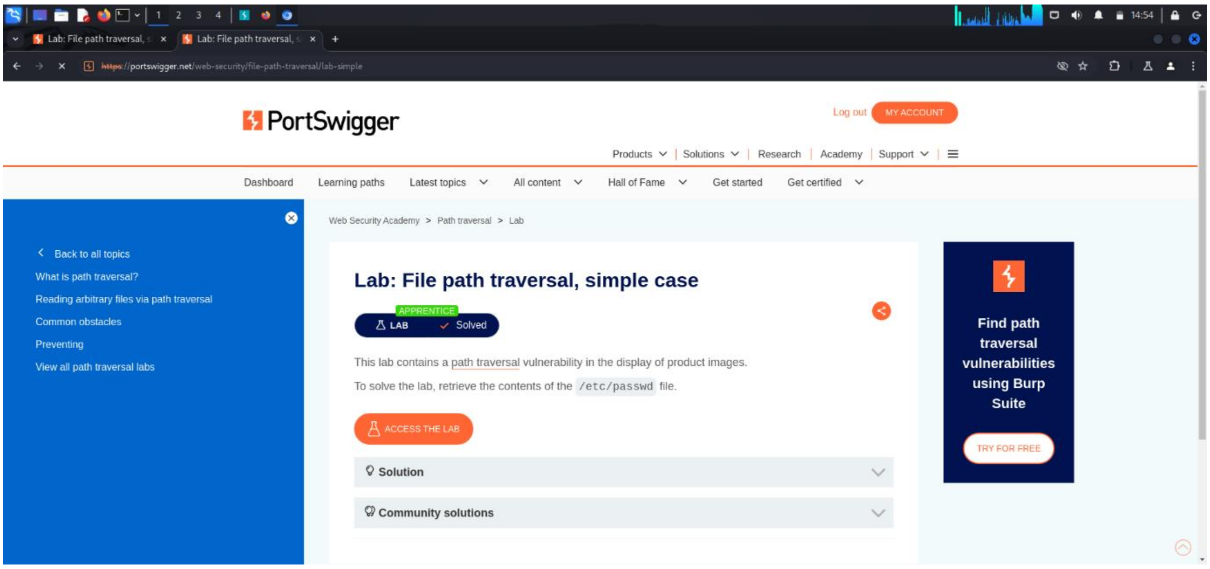
This lab contains an OS command injection vulnerability in the product stock checker.

The application executes a shell command containing user-supplied product and store IDs, and returns the raw output from the command in its response.

To solve the lab, execute the `whoami` command to determine the name of the current user.

Path traversal

File path traversal, simple case



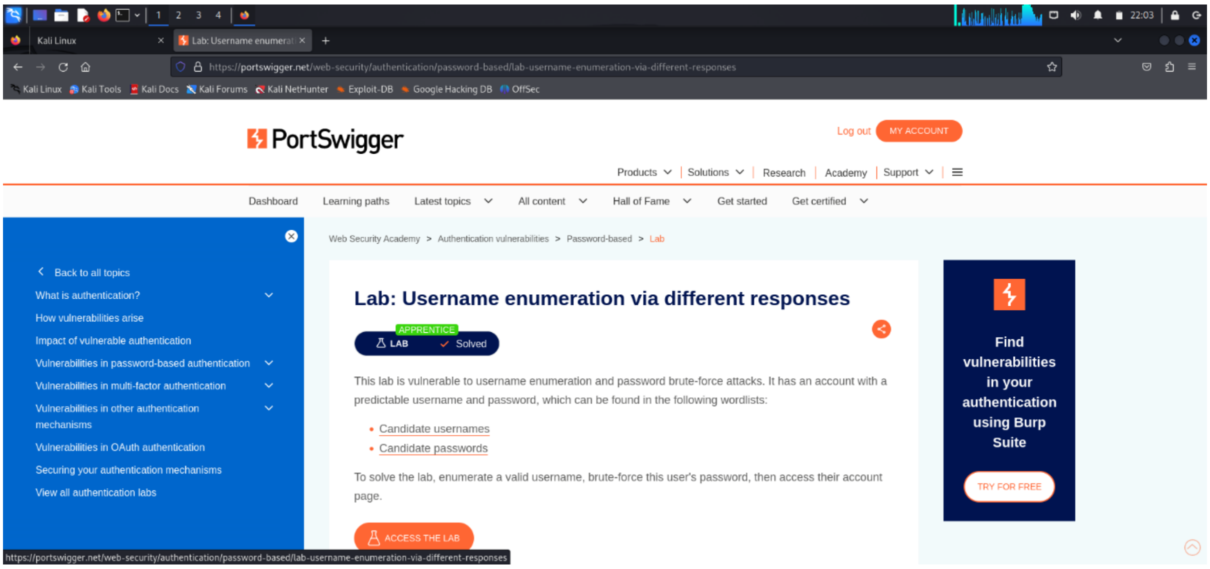
Lab: File path traversal, simple case

This lab contains a path traversal vulnerability in the display of product images.

To solve the lab, retrieve the contents of the `/etc/passwd` file.

Authentication

Username enumeration via different responses


Kali Linux
Lab: Username enumerat
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Lab: Username enumeration via different responses

APPRENTICE LAB Solved

This lab is vulnerable to username enumeration and password brute-force attacks. It has an account with a predictable username and password, which can be found in the following wordlists:

- Candidate usernames
- Candidate passwords

To solve the lab, enumerate a valid username, brute-force this user's password, then access their account page.

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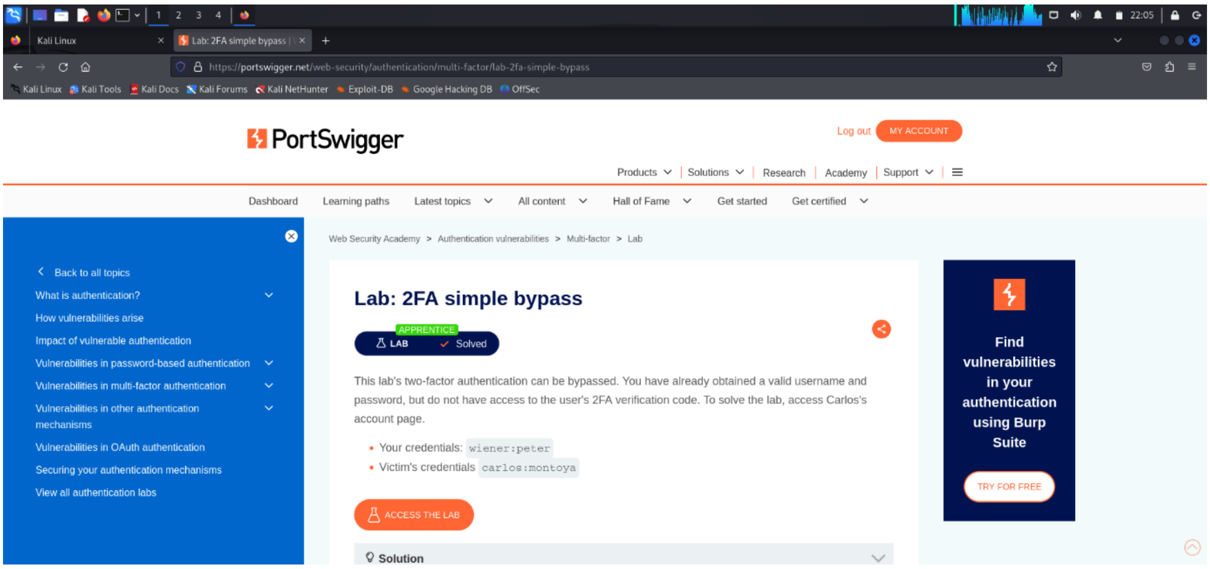
2FA simple bypass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Lab: 2FA simple bypass
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Lab: 2FA simple bypass

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This lab's two-factor authentication can be bypassed. You have already obtained a valid username and password, but do not have access to the user's 2FA verification code. To solve the lab, access Carlos's account page.

- Your credentials: `wiener:peter`
- Victim's credentials `carlos:montoya`

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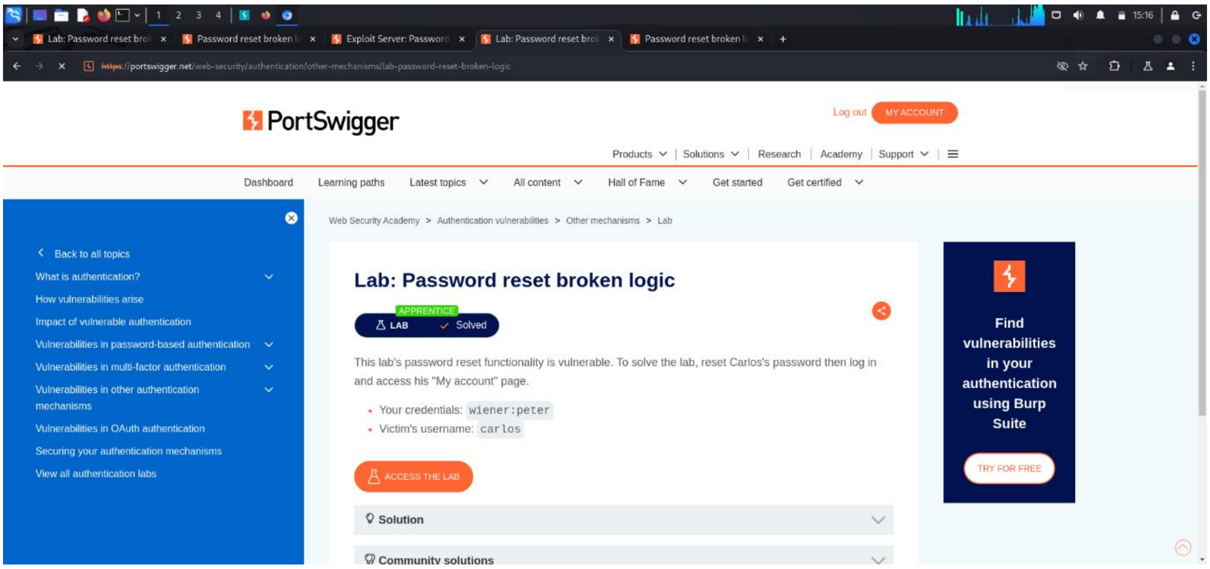
Solution

Password reset broken logic



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Password reset broken l
Exploit Server: Password
Lab: Password reset brok
Password reset broken l
https://portswigger.net/web-security/authentication/other-mechanisms/lab-password-reset-broken-logic
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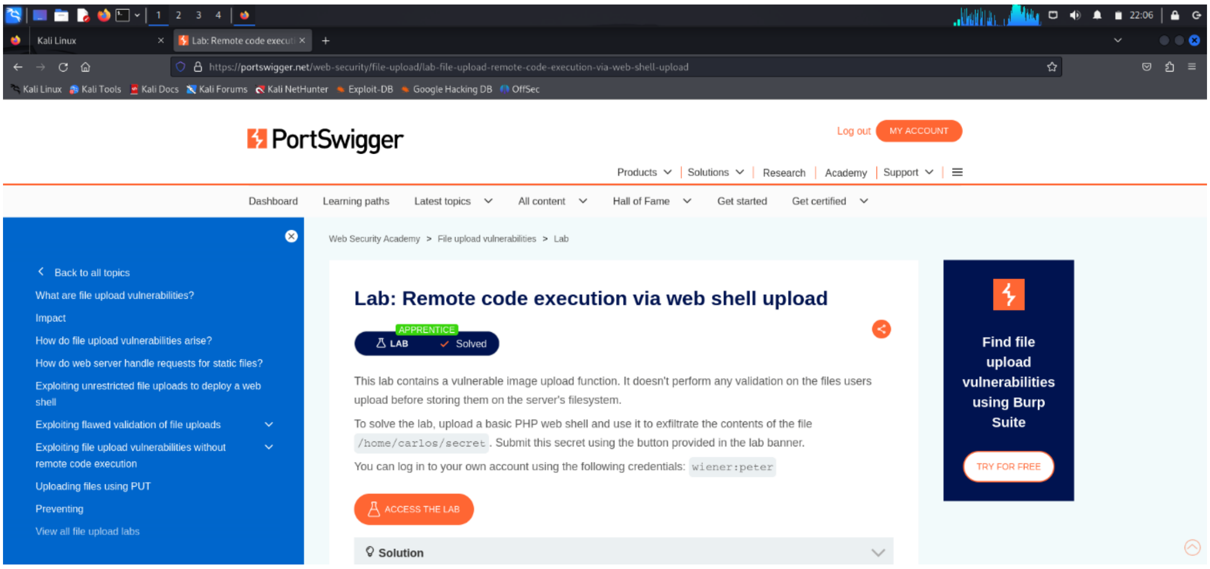
Lab: Password reset broken logic

This lab's password reset functionality is vulnerable. To solve the lab, reset Carlos's password then log in and access his "My account" page.

- Your credentials: `wiener:peter`
- Victim's username: `carlos`

File upload vulnerabilities

Remote code execution via web shell upload



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Exploiting flawed validation of file uploads
Exploiting file upload vulnerabilities without remote code execution
Uploading files using PUT
Preventing
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Lab: Remote code execution via web shell upload

This lab contains a vulnerable image upload function. It doesn't perform any validation on the files users upload before storing them on the server's filesystem.

To solve the lab, upload a basic PHP web shell and use it to exfiltrate the contents of the file `/home/carlos/secret`. Submit this secret using the button provided in the lab banner.

You can log in to your own account using the following credentials: `wiener:peter`