Date:11-02-2025

#### **LINUX FUNDEMENTALS**

# **PROCEDURE**

# 1. Log in to TryHackMe

Go to <a href="https://tryhackme.com">https://tryhackme.com</a>, log in with your account, or sign up if you don't have one.

## 2. Search and Join the Room

In the search bar, type "Linux Fundamentals". There are usually three parts:

- Linux Fundamentals Part 1
   Linux Fundamentals Part 2
- Linux Fundamentals Part 3
   Click on the first one and click "Join Room".

#### 3. Start the Machine

Click "Start Machine" to get the target machine's IP address.

#### 4. Connect to the TryHackMe Network Use either:

- AttackBox (web-based terminal) just click to open it, already connected to THM's VPN.
- Your own Kali/Linux VM with OpenVPN download the .ovpn file and connect using:

bash CopyEdit sudo openvpn

your-vpn-file.ovpn

## 5. Go Through Each Task

Each task explains a Linux concept. Carefully read and follow the instructions provided for each task, such as:

- Basic Linux commands
- File navigation and manipulation
- File permissions
- Package management
- Networking commands
- User and group management
- Services and processes

#### 6. Use Linux Commands

Practice commands directly on the target machine, such as:

- Is, cd, cat, nano, touch
- chmod, chown, ps, kill
- apt, dpkg, top, netstat, ping
- adduser, passwd, sudo
- grep, find, locate

# 7. Answer the Questions

Each task has a series of questions. Use the knowledge and command-line results to find and submit correct answers.

#### 8. Mark the Room as Completed

Once all questions are answered correctly, the room will automatically be marked as "Completed".

#### **INTRO**

Note: to actually become familiar with Linux, you need to be using it daily. Make sure you have it installed (whether that be as your host system, a dual reboot, or on a <u>virtual machine</u>). For pentesting, most people prefer to use <u>Kali</u>.

The name "Linux" is actually an umbrella term for multiple OS's that are based on UNIX (another operating system). Thanks to UNIX being open-source, variants of Linux come in all shapes and sizes, suited best for what the system is being used for.

For example, Ubuntu & Debian are some of the more commonplace distributions of Linux because it is so extensible. I.e. you can run Ubuntu as a server (such as websites & web applications) or as a fullyfledged desktop. For this series, we're going to be using Ubuntu.

The first version of Linux was released in 1991.

#### **Basic Commands**

Some basic commands include pwd, ls, cd, and more.

If we wanted to output the text "TryHackMe", what would our command be?

What is the username of who you're logged in as on your deployed Linux machine?

I have listed commands and their usages in my Gitbook here.

# **An Introduction To Shell Operators**

Some shell operators include &, &&, >, and >>.

I have listed commands and their usages in my Gitbook here.

#### **TASKS**

#### Task 2A Bit of Background on Linux

echo TryHackMe

tryhackme

Research: What year was the first release of a Linux operating system?

Task 3Interacting With Your First Linux Machine (In-Browser)

I've deployed my first Linux machine!

No answer needed

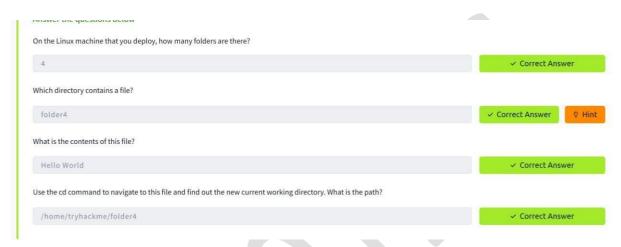
Task 4Running Your First few Commands

✓ Correct Answer

✓ Correct Answer

♥ Hint

# Task 5Interacting With the Filesystem!

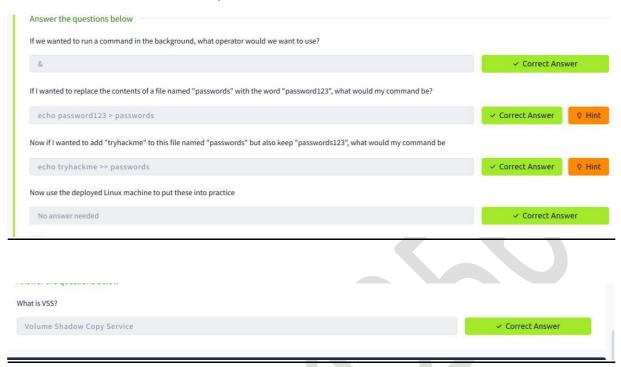


# Task 6Searching for Files

Use grep on "access.log" to find the flag that has a prefix of "THM". What is the flag? **Note:** The "access.log" file is located in the "/home/tryhackme/" directory.



# Task 7An Introduction to Shell Operators



# **RESULT**

Thus the introduction to Linux fundementals has been successfully studied and implemented successfully