

Exp no 2

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## **LINUX FUNDEMENTALS**

### **PROCEDURE**

#### **1. Log in to TryHackMe**

Go to <https://tryhackme.com>, 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:

- ls, 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 [virtual machine](#)). For pentesting, most people prefer to use [Kali](#).

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.

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

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

✓ Correct Answer

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

I've deployed my first Linux machine!

✓ Correct Answer

### Task 4 Running Your First few Commands

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

✓ Correct Answer

🔍 Hint

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

✓ Correct Answer

🔍 Hint

## Task 5 Interacting With the Filesystem!

Answer the questions below

On the Linux machine that you deploy, how many folders are there?

✓ Correct Answer

Which directory contains a file?

✓ Correct Answer

🔍 Hint

What is the contents of this file?

✓ Correct Answer

Use the `cd` command to navigate to this file and find out the new current working directory. What is the path?

✓ Correct Answer

## Task 6 Searching 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.

✓ Correct Answer

🔍 Hint

And I still haven't found what I'm looking for!

✓ Correct Answer

## Task 7An Introduction to Shell Operators

Answer the questions below

If we wanted to run a command in the background, what operator would we want to use?

✓ Correct Answer

If I wanted to replace the contents of a file named "passwords" with the word "password123", what would my command be?

✓ Correct Answer

Now if I wanted to add "tryhackme" to this file named "passwords" but also keep "passwords123", what would my command be

✓ Correct Answer

Now use the deployed Linux machine to put these into practice

✓ Correct Answer

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What is VSS?

✓ Correct Answer

## RESULT

Thus the introduction to Linux fundamentals has been sucessfully studied and implemented successfully