Intern Name: Aditya Vilas Dongare

Program: Digisuraksha Parhari Foundation Internship

Issued By: Digisuraksha Parhari Foundation

Supported By: Infinisec Technologies Pvt. Ltd.

Report Submission Date: 18th April 2025

## Internship Report

TryHackMe Room: Hello World

Room Link: <a href="https://tryhackme.com/room/hello">https://tryhackme.com/room/hello</a>

## **Example 2** Learning Objective:

To understand the basic structure of a TryHackMe room and how to interact with it by answering simple questions based on the provided text.

#### **★** Key Tools/Commands Used:

- Web Browser: User to access the TryHackMe platform.
- TryHackMe Dashbord: Explored the interface and features.
- Basic Navigation Commands: Learned how to move through rooms and access content.

#### **Concepts Learned:**

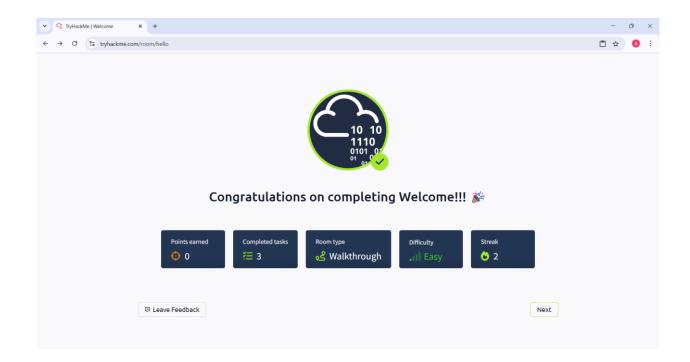
- Introduction to Tasks: Learned that rooms are broken down into manageable tasks, each presenting information or a challenge.
- Understanding Questions: Recognized that each task often culminates in a question designed to test comprehension of the provided material.
- Concept of Flags: Understood that correct answers are often referred to as "flags" and are typically in a specific format.
- Submitting Answers: Learned how to input answers into the designated fields and submit them for verification.
- Basic UI Navigation: Became familiar with the layout of a TryHackMe room, including task lists, information panels, and answer submission areas.

### Q Walkthrough / How You Solved It:

- Navigated to the "Hello World" room and started with Task 1.
- Read the introductory text, which explained the purpose of the room.
- Proceeded through each subsequent task, carefully reading the information presented.
- Identified the question associated with each task and formulated an answer based on the provided text.
- Entered the answer into the submission box and clicked "Submit."

#### **Reflections or Notes:**

This room provided a very gentle and encouraging start to using TryHackMe. It effectively demonstrated the core loop of reading, understanding, and answering questions to progress.



# **V** How to Use TryHackMe

Room Link: <a href="https://tryhackme.com/room/howtousetryhackme">https://tryhackme.com/room/howtousetryhackme</a>

## **Example 2** Learning Objective:

To learn about the different features and functionalities available on the TryHackMe platform, such as deploying virtual machines, using the attack box, and understanding different task types.

#### **%** Key Tools/Commands Used:

- TryHackMe AttackBox (interacting with the in-browser virtual machine)
- Deploying and terminating machines.

## **Concepts Learned:**

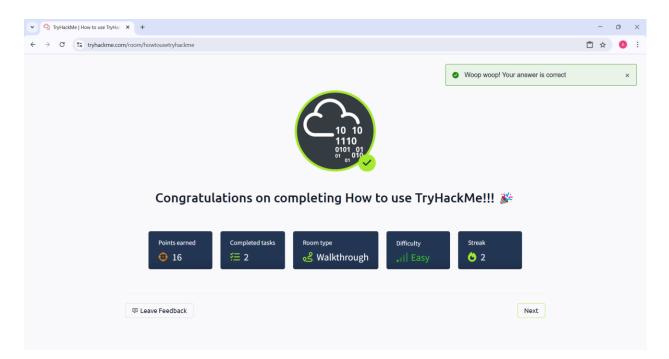
- Purpose of the AttackBox: Understood that the AttackBox is a pre-configured virtual machine in the browser, equipped with common penetration testing tools.
- Deploying Machines: Learned how to initiate and manage virtual machines associated with specific rooms using the "Deploy" button.
- Terminating Machines: Understood the importance of terminating machines after use to conserve resources.
- Types of Challenges: Gained initial exposure to different formats of challenges, some requiring interaction with a deployed machine.
- Room Structure Variety: Noticed that rooms can have different layouts and functionalities beyond just reading and answering questions.

### Q Walkthrough / How You Solved It:

- Started the "How to Use TryHackMe" room and followed the instructions on deploying a machine.
- Located and clicked the green "Deploy" button and observed the machine starting up.
- Explored the AttackBox interface by clicking the "Show Split View" button and launching tools.
- Followed instructions on how to interact with the deployed machine (if the room had such tasks).
- Learned how to terminate the machine using the red "Terminate" button once I had completed the relevant tasks.
- Answered questions related to these functionalities.

#### **Reflections or Notes:**

- This room was essential for transitioning from passive reading to active engagement with the platform's practical elements.
- Understanding machine deployment and the AttackBox is crucial for tackling more advanced rooms.



# **Getting Started**

Room Link: <a href="https://tryhackme.com/room/gettingstarted">https://tryhackme.com/room/gettingstarted</a>

## **\*** Learning Objective:

To gain a foundational understanding of basic cybersecurity concepts and terminology often encountered on TryHackMe.

#### **Key Tools/Commands Used:**

- TryHackMe Dashboard: Explored the interface and interactive sections.
- Virtual Machines: Learned how to deploy and interact with VMs for practical exercises.
- VPN Configuration: Understood hoe to securely connect to TryHackMe labs using OpenVPN.

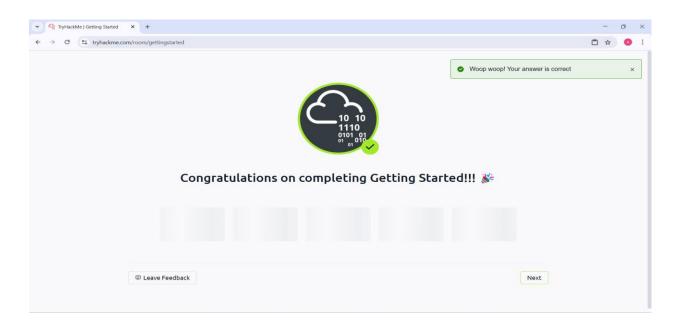
#### **Concepts Learned:**

- Cybersecurity Definition: Understood the broad definition of cybersecurity as protecting digital assets.
- Hacking vs. Ethical Hacking: Differentiated between malicious hacking and ethical hacking (penetration testing) conducted with permission.
- Types of Threats: Became aware of common cyber threats such as malware, phishing, and social engineering.
- Types of Attacks: Learned about different attack vectors like denial-of-service (DoS) and data breaches.
- CIA Triad: Gained a foundational understanding of the core principles of security:
   Confidentiality, Integrity and Availability.

#### Q Walkthrough / How You Solved It:

- Progressed through the tasks, each focusing on a specific fundamental concept.
- Carefully read the explanations and examples provided for each term and principle.
- Answered the questions by recalling the definitions and explanations.
- Ensured my answers aligned with the definitions provided in the room's content.

- This room laid the groundwork for understanding the language and core principles of cybersecurity.
- It highlighted the importance of a strong theoretical foundation before diving into technical details.



## **⊘** Search Skills

# Room Link: <a href="https://tryhackme.com/room/searchskills">https://tryhackme.com/room/searchskills</a>

## **\*** Learning Objective:

To develop effective search skills, particularly using search engine operators (Google dorks) to find specific information online.

#### **%** Key Tools/Commands Used:

- Search Engines: Google.
- Technical Documentation: Manual pages (Man command in Linux).

#### **Concepts Learned:**

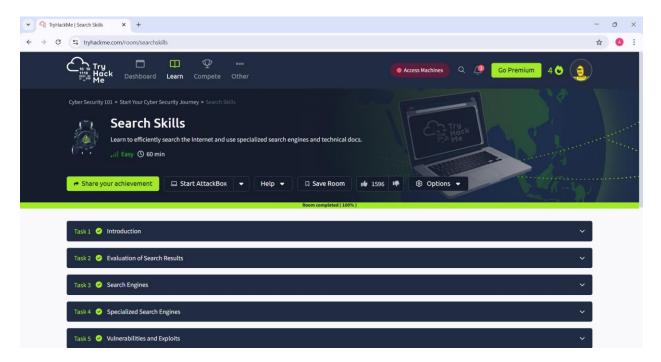
- Importance of effective information gathering.
- Understanding and utilizing various search engine operators to refine search queries.
- Identifying potentially sensitive or publicly exposed information

#### Q Walkthrough / How You Solved It:

This room typically provides examples of Google dorks and challenges you to use them to find specific pieces of information or "flags" hidden within web pages or documents. You experiment with different operators and combinations to narrow down your search results

#### **Reflections or Notes:**

Mastering search skills is fundamental in cybersecurity for reconnaissance and information gathering. This room emphasizes a practical skill that is applicable across various cybersecurity domains.



## **∜** TryHackMe Tutorial

## Room Link: https://tryhackme.com/room/tutorial

## **\*** Learning Objective:

To reinforce the basic mechanics of interacting with TryHackMe rooms through a guided practical exercise.

## **★** Key Tools/Commands Used:

 Basic Linux commands (e.g., ls to list files, cd to change directory, cat to view file content used within the AttackBox).

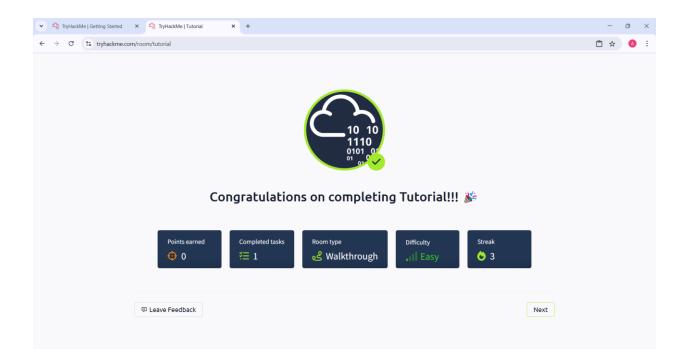
#### **Concepts Learned:**

- Review of Task Interaction: Reaffirmed the process of reading tasks, answering questions, and submitting flags.
- Introduction to Basic Linux: Got a first taste of fundamental Linux commands used for navigating file systems and viewing file content.
- Applying Learned Concepts: Practiced applying the knowledge gained from previous introductory rooms in a slightly more hands-on scenario.
- Understanding Output: Learned to interpret the output of basic Linux commands to find necessary information.

#### Q Walkthrough / How You Solved It:

- Followed the step-by-step instructions provided in each task of the tutorial.
- If the tutorial involved the AttackBox, I would have deployed the machine and connected via the split view.
- Practiced using the suggested Linux commands.
- Extracted information from the command output to answer the questions and obtain the flags.

- This tutorial served as a bridge between the purely informational rooms and the more practical, hands-on challenges.
- It provided an initial glimpse into the importance of Linux in cybersecurity.



## **OpenVPN** Configuration

Room Link: <a href="https://tryhackme.com/room/openvpn">https://tryhackme.com/room/openvpn</a>

## **©** Learning Objective:

To understand what a VPN is, why it's used in cybersecurity, and how to configure an OpenVPN connection to the TryHackMe network.

#### **%** Key Tools/Commands Used:

- Downloading the OpenVPN configuration file (.ovpn file) from the TryHackMe website.
- Command-line interface for connecting to OpenVPN (e.g., sudo openvpn <your\_username>.ovpn on Linux).

#### **Concepts Learned:**

- Purpose of VPN: Understood that a VPN creates a secure tunnel to the TryHackMe network, allowing access to target machines that are not directly exposed to the internet.
- Configuration Files: Learned that OpenVPN uses configuration files containing connection parameters and authentication details.
- Client-Server Model: Grasped the basic client-server model of VPN connections, where your machine acts as the client and TryHackMe's infrastructure as the server.
- Importance of Security: Recognized that using a VPN enhances security and privacy when interacting with the TryHackMe platform.

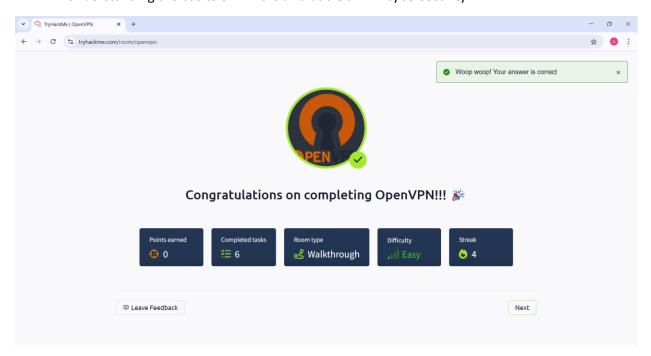
#### Q Walkthrough / How You Solved It:

- Navigated to the OpenVPN configuration page on the TryHackMe website.
- Followed the instructions to generate and download my unique OpenVPN configuration file.

- Installed the OpenVPN client software on my local operating system if I hadn't already.
- Opened the terminal or command prompt and used the openvpn command followed by the path to my downloaded .ovpn file.
- Observed the connection logs and waited for confirmation that the VPN connection was successfully established.
- Verified the connection by accessing a TryHackMe machine or using the "Check Connection" tool on the website.

#### **■** Reflections or Notes:

- Setting up the VPN connection is a critical step for engaging in the more practical and network-based rooms on TryHackMe.
- Understanding the basics of VPNs is a valuable skill in cybersecurity.



# **⊘** Beginner Path Introduction

**∞** Room Link: https://tryhackme.com/room/beginnerpathintro

## **Example 2** Learning Objective:

To understand the structure and content of the TryHackMe Beginner learning path and how it can guide your initial learning in cybersecurity.

## **★** Key Tools/Commands Used:

- TryHackMe Learning Paths: Navigating and understanding the structure of learning paths.
- **Module Overviews:** Reviewing the content and objectives of different modules within the path.
- Room Previews: Exploring individual rooms and tasks included in the beginner path.

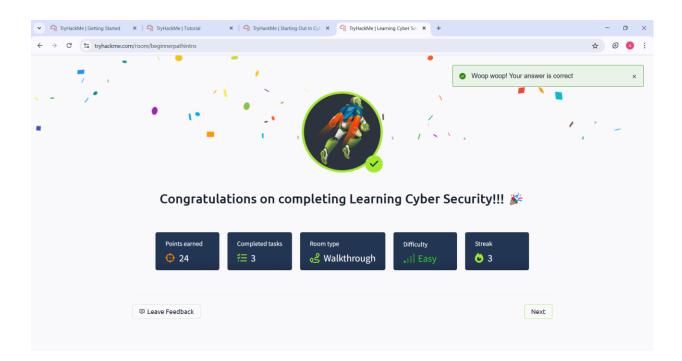
#### **Concepts Learned:**

- Structured Learning: Understood that learning paths provide a curated and sequential approach to mastering cybersecurity topics.
- Modules and Rooms: Learned that paths are divided into modules, which in turn contain individual rooms focused on specific subjects.
- Progress Tracking: Became aware of how TryHackMe allows users to track their progress through learning paths.
- Recommended Order: Understood the importance of following the recommended order of rooms within a path for a logical learning progression.
- Scope of Beginner Path: Gained a general understanding of the foundational topics covered in the Beginner path, such as web fundamentals, network basics, and introductory security tools.

## Q Walkthrough / How You Solved It:

- Navigated to the "Beginner Path Introduction" room and read the overview of the learning path.
- Examined the list of modules and the rooms contained within each module.
- Noted the recommended starting point and the general flow of topics.
- Answered questions related to the structure and content of the Beginner path.

- Understanding the learning paths helps in planning my learning journey and ensuring a solid foundation in cybersecurity.
- Following a structured path can lead to a more comprehensive understanding of the subject matter.



# **Starting Out in Cyber Security**

## Room Link: https://tryhackme.com/room/startingoutincybersec

## **Example 2** Learning Objective:

To gain a high-level overview of the cybersecurity field, different roles within it, and essential skills to develop.

#### **Key Tools/Commands Used:**

- **TryHackMe Learning Paths:** Exploring different learning paths relevant to various cybersecurity roles.
- **Cybersecurity Role Descriptions:** Reviewing the responsibilities and requirements of different roles.
- Skill Assessments: Identifying key skills needed for specific cybersecurity positions.

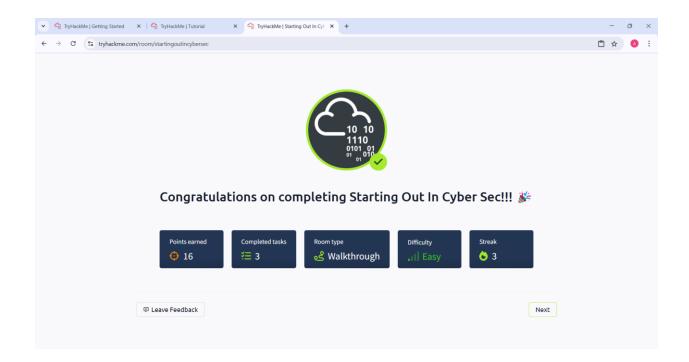
#### **Concepts Learned:**

- Variety of Roles: Became aware of the diverse range of job roles within cybersecurity, such as Penetration Tester, Security Analyst, Security Engineer, and Incident Responder.
- Skill Sets and Responsibilities: Understood the different technical and soft skills required for each role, as well as their primary responsibilities.
- Career Progression: Gained insights into potential career paths and how one might progress through different roles.
- Specializations: Learned that cybersecurity is a broad field with opportunities for specialization in areas like network security, application security, and cloud security.
- Importance of Continuous Learning: Recognized that the cybersecurity landscape is constantly evolving, requiring ongoing learning and professional development.

#### Q Walkthrough / How You Solved It:

- Read the descriptions of each cybersecurity role presented in the room.
- Noted the key responsibilities and required skills for each role.
- Considered which roles might align with my interests and strengths.
- Answered questions related to the different roles.

- This room provided valuable context about the potential career destinations within cybersecurity.
- It helped to motivate my learning by showing the real-world applications of the skills I'm developing.



## **♥** Introduction to Research

Room Link: <a href="https://tryhackme.com/room/introtoresearch">https://tryhackme.com/room/introtoresearch</a>

## **Example 2** Learning Objective:

To understand the importance of research in cybersecurity and learn basic research methodologies and resources.

#### **%** Key Tools/Commands Used:

- Search engines (e.g., Google, DuckDuckGo) focusing on effective search queries.
- Documentation (e.g., man pages in Linux, official tool documentation online).
- Utilized to gather in-depth technical details on specific topics.

## **Concepts Learned:**

- Importance of Research: Understood that effective research is crucial for staying updated, troubleshooting problems, and learning new tools and techniques in cybersecurity.
- Effective Search Queries: Learned strategies for crafting targeted search queries using keywords, operators and specific search engine features.
- Utilizing Documentation: Recognized the value of official documentation for understanding how tools work and their proper usage.
- Identifying Reliable Sources: Gained awareness of how to evaluate the credibility of online sources.
- Practice and Persistence: Understood that research is a skill that improves with practice and requires persistence in finding the right information.

## **Q** Walkthrough / How You Solved It:

This room likely presents scenarios or questions that require you to perform basic research
to find the answers. This might involve using search engines to find information about
specific technologies, vulnerabilities, or commands. The tasks would guide you in practicing
effective research techniques.

- Developing strong research skills is fundamental for independent learning and problemsolving in cybersecurity.
- Knowing how to find and utilize information efficiently will be a lifelong asset in this field.

