CYBERSECURTIY INTERNSHIP REPORT

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TryHackMe Room: Hello World

Objective

The "Hello World" room on TryHackMe is designed to introduce new users to the platform and its features. It helps beginners get comfortable with navigating the site, understanding its structure, and learning the basics of cybersecurity. This room serves as a perfect entry point for those just starting their journey into ethical hacking and cyber defense.

% Tools & Features Used

- Web Browser: Used to access the TryHackMe platform.
- **TryHackMe Dashboard:** Explored the main interface, including rooms, learning paths, and progress tracking.
- Basic Navigation Skills: Learned how to join rooms, interact with tasks, and complete
 objectives.

Key Concepts Covered

1. Platform Familiarization

• Gained an overview of TryHackMe's learning approach and available content.

2. Room Navigation & Interaction

- Learned how to join a room, go through tasks step-by-step, and monitor progress.
- Understood how to mark tasks as completed after reviewing or practicing content.

3. Cybersecurity Fundamentals

- Introduced to core cybersecurity concepts and ethical hacking practices.
- Developed an understanding of why hands-on practice is critical in this field.

₩ Walkthrough – My Process

Step 1: Getting Started

- Logged into my TryHackMe account.
- Navigated to the **Hello World** room using the search function or direct link.

Step 2: Engaging with Content

- Followed the guided instructions within the room.
- Read through explanations that introduced key concepts and platform functionality.

Step 3: Hands-On Practice

- Completed beginner-friendly exercises that demonstrated basic cybersecurity principles.
- Interacted with the room's features to reinforce learning.

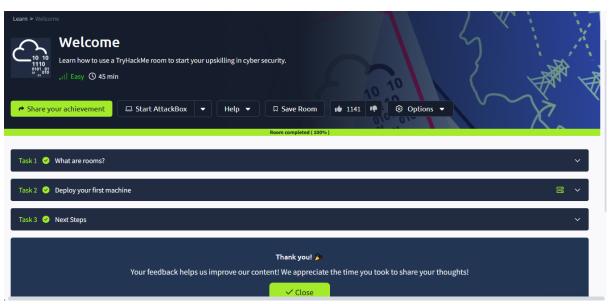
Step 4: Completion

Marked each section as complete after successfully understanding the content.

○ Reflections

- **Perfect for Beginners:** This room offers a smooth and friendly introduction to the world of cybersecurity.
- **Hands-On Learning is Key:** Trying things out for yourself makes the concepts much easier to understand.
- **Well-Designed Platform:** The interface is intuitive and makes learning feel more like an exploration than a chore.
- **Encourages Further Learning:** After completing this room, I feel motivated to dive deeper into more technical topics and advanced rooms.





TryHackMe Room: How to Use TryHackMe

6 Learning Objective

The "How to Use TryHackMe" room is designed to guide new users through the platform's core features and functionality. It offers a step-by-step introduction to navigating the platform, accessing labs, completing tasks, and connecting to TryHackMe's secure network. This room serves as a foundation for effectively using the platform to learn cybersecurity through interactive, hands-on experiences.

% Tools & Features Explored

- TryHackMe Dashboard: Explored the main interface and navigation options.
- Interactive Labs: Learned how to deploy and interact with virtual machines (VMs).
- VPN Configuration: Understood how to securely connect to TryHackMe labs using OpenVPN.

Key Concepts Covered

1. Platform Features

- Gained an overview of core features such as:
 - Learning Paths for structured progression
 - o Practice Rooms for skill-building
 - o Leaderboards and point systems to gamify learning
- Learned how gamification boosts engagement through streaks, badges, and XP.

2. Room Navigation

- Understood how to:
 - o Join and navigate rooms
 - o Complete tasks, including answer submissions and interactive challenges
 - o Differentiate between room types: walkthroughs, tutorials, and challenges

3. Hands-On Lab Access

- Practiced deploying virtual machines within rooms.
- Used built-in AttackBox or personal VPN to engage with labs in a secure, isolated environment.

4. Security Basics

- Learned to set up a VPN connection via OpenVPN.
- Understood the importance of VPNs for securely accessing remote environments.

Walkthrough – My Process

Step 1: Accessing the Room

• Logged into TryHackMe and opened the "How to Use TryHackMe" room.

Step 2: Exploring the Dashboard

- Familiarized myself with dashboard components:
 - o "Learn," "Practice," "Compete," and "Networks" tabs
 - Learning paths, activity streaks, and room categories

Step 3: Completing Guided Tasks

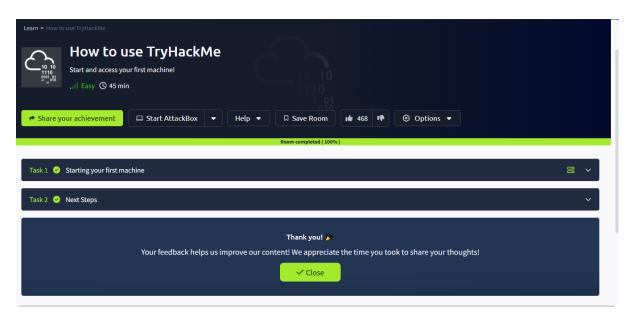
- Followed step-by-step instructions to complete each task.
- Deployed virtual machines and connected securely using OpenVPN.

Step 4: Submitting Answers

- Entered answers based on task instructions and verified each one.
- Marked tasks as complete after reviewing explanations and outcomes.

Reflections

- **Great Starting Point:** This room is ideal for newcomers, offering a structured and beginner-friendly introduction to the platform.
- **Engaging Learning Experience:** Gamified elements like XP, streaks, and leaderboards keep motivation high.
- Link: TryHackMe | How to use TryHackMe



TryHackMe Room: Getting Started

6 Learning Objective

The "Getting Started" room on TryHackMe is designed to help new users understand the platform's core features and walk them through the first steps of their cybersecurity learning journey. It introduces key elements such as lab access, room navigation, and basic security concepts in an easy-to-follow format.

% Tools & Technologies Used

- TryHackMe Dashboard: Explored interactive features and learning areas.
- **Virtual Machines (VMs):** Learned how to deploy and interact with virtual environments for hands-on training.
- **VPN Setup:** Configured a secure VPN connection using OpenVPN to safely access TryHackMe labs.

Concepts Covered

1. Platform Navigation

- Discovered how to find and join rooms, complete exercises, and monitor progress.
- Gained an overview of key sections like *Learn, Practice, Compete,* and *Networks*.

2. Hands-On Labs

- Practiced deploying virtual machines for real-world-style hacking challenges.
- Understood the importance of VPNs for secure, isolated lab environments.

3. Cybersecurity Fundamentals

- Introduced to ethical hacking and system security principles.
- Built awareness of how cybersecurity training environments simulate real-world scenarios.

4. Gamification & Community Features

- Learned about points, streaks, leaderboards, and how they enhance motivation.
- Explored how gamification can turn learning into an engaging, competitive experience.

Walkthrough – My Process

Step 1: Room Access

 Logged into TryHackMe and entered the "Getting Started" room using the provided link or search feature.

Step 2: Guided Exploration

- Followed step-by-step content designed to explain how the platform works.
- Completed tasks that demonstrated key features like deploying labs and navigating learning paths.

Step 3: Practical Exercises

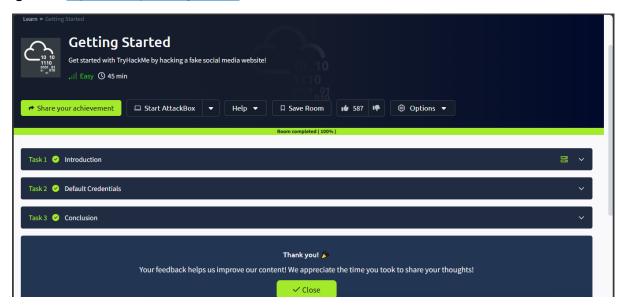
- Launched and interacted with virtual machines to complete hands-on activities.
- Successfully configured a VPN to securely connect to TryHackMe's remote labs.

Step 4: Completing the Room

- Answered review questions based on the content.
- Marked tasks as complete after understanding each topic.

Reflections

- **Beginner-Friendly:** The room does an excellent job of breaking down the essentials for new users.
- Hands-On First: Emphasizing practice from the start helps reinforce theoretical concepts.
- Motivating Format: The gamified system makes learning feel more like a challenge than a chore.
- **Confident Next Steps:** After completing this room, I feel ready to dive into more complex labs and start building real cybersecurity skills.
- Link: <u>TryHackMe</u> | <u>Getting Started</u>



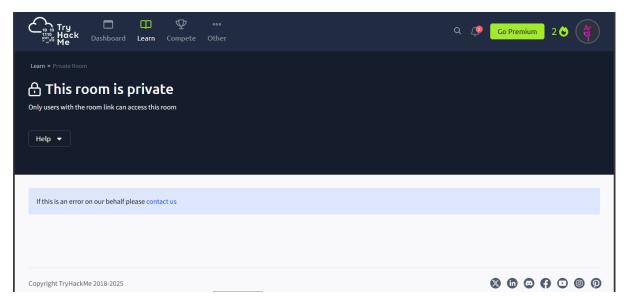
TryHackMe Room: Welcome

learning Objective

The "Welcome" room on TryHackMe serves as an introductory space for new users to understand the platform's vision and purpose. It offers a high-level overview of what TryHackMe provides and how it supports learners in gaining practical, hands-on experience in cybersecurity.

This room helps users understand not only how the platform works but also *why* it exists—to make learning cybersecurity more accessible, fun, and interactive.

Link: <u>TryHackMe | Room details</u>



TryHackMe Room: TryHackMe Tutorial

learning Objective

The **"TryHackMe Tutorial"** room is designed to introduce users to the fundamental features of the TryHackMe platform. It walks learners through key concepts, navigation methods, and interactive elements essential for engaging effectively with cybersecurity content on the platform.

This room is a practical guide for understanding how to work with TryHackMe's tasks, tools, and lab environments.

Key Tools & Features Explored

- TryHackMe Interface: Navigated the main dashboard and various sections of the platform.
- Task Completion System: Learned how to answer questions, submit responses, and track progress.
- Interactive Components: Used hints, deployed machines, and attack boxes during exercises.

Key Concepts Covered

1. Room Structure & Layout

- Gained an understanding of how TryHackMe rooms are organized into tasks, questions, and hints.
- Identified various task formats: multiple-choice, short-answer, and hands-on challenges.

2. Task Interaction

• Learned how to use in-room resources such as hints and explanations.

• Understood how to correctly submit answers and monitor completion.

3. Hands-On Learning

- Deployed virtual machines (VMs) for practical exercises.
- Used attack boxes to perform simulated attacks or solve challenges.

4. Navigation & Workflow

- Practiced efficiently moving between tasks, rooms, and learning paths.
- Developed a smooth workflow for progressing through content.

Walkthrough – My Process

Step 1: Accessing the Room

 Logged into TryHackMe and opened the "TryHackMe Tutorial" room via the dashboard or direct link.

Step 2: Exploring the Tutorial

- Followed each step in the tutorial to learn how to navigate the room structure and use features effectively.
- Made use of hints where needed for clarification.

Step 3: Engaging in Hands-On Practice

- Deployed the provided virtual machines and used the attack box to complete practical tasks.
- Submitted answers to challenge questions and tracked overall progress.

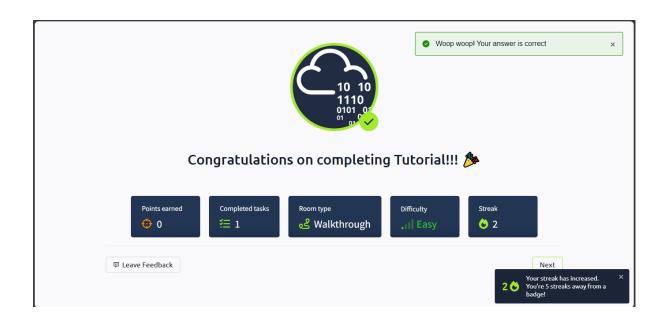
Step 4: Completion & Review

- Reviewed all completed tasks to ensure a clear understanding of the platform's capabilities.
- Marked the room as complete after successfully finishing all sections.

Reflections

- **Perfect Starting Point:** This tutorial is a must-do for beginners, as it introduces the platform in a structured and user-friendly way.
- **Emphasis on Practice:** The inclusion of hands-on tasks reinforces learning and builds comfort with virtual lab environments.
- **Essential Foundation:** Understanding how TryHackMe works through this tutorial is key to progressing efficiently through more advanced rooms.
- **Confidence Booster:** After completing this room, I feel well-prepared to tackle more technical and challenging topics on the platform.

Link: <u>TryHackMe | Tutorial</u>



TryHackMe Room: OpenVPN - Summary & Reflections

Objective

The "OpenVPN" room on TryHackMe is designed to teach users how to securely connect to the TryHackMe network using a VPN. It walks through downloading configuration files, setting up the OpenVPN client, establishing a connection, and verifying that the VPN is working correctly. This room is essential for accessing certain labs that require a secure and isolated network environment.

% Tools & Commands Used

- OpenVPN Client: Software used to establish the VPN connection.
- Terminal/Command Line: Executed commands to install and run OpenVPN.
- **ifconfig or ip addr:** Verified network interface and confirmed VPN connection status.

Key Concepts Covered

1. VPN Fundamentals

- Gained a clear understanding of what a Virtual Private Network (VPN) is and its role in cybersecurity.
- Learned how VPNs provide encrypted and secure tunnels for safe access to remote resources.

2. OpenVPN Configuration

• Downloaded personalized .ovpn configuration files from TryHackMe.

 Configured the OpenVPN client to establish a secure connection to the TryHackMe environment.

3. Connection Verification

- Verified the connection by checking the new network interface (typically tun0).
- Confirmed an IP address was assigned and ensured access to TryHackMe's internal network was successful.

4. Basic Troubleshooting

- Explored solutions for common VPN issues such as authentication errors, missing interfaces, or DNS problems.
- Learned the importance of permissions (e.g., running OpenVPN with sudo) and checking log output for debugging.

Walkthrough – My Process

Step 1: Accessing the Room

Logged into TryHackMe and opened the "OpenVPN" room.

Step 2: Downloading the Configuration File

Followed the instructions to download my personalized .ovpn file from the Access page.

Step 3: Installing the OpenVPN Client

- Installed OpenVPN using the terminal (e.g., sudo apt-get install openvpn on Linux).
- Ensured the installation completed successfully.

Step 4: Establishing the Connection

- Used the terminal to run the command:
- sudo openvpn <your_username>.ovpn
- Waited for the terminal output to confirm a successful connection.

Step 5: Verifying the Connection

- Ran ifconfig or ip addr to confirm the presence of the tun0 interface.
- Verified the VPN was routing traffic correctly by accessing TryHackMe content that requires VPN.

Step 6: Completing the Room

Answered verification questions based on the VPN setup and marked tasks as complete.

Reflections

• **Critical First Step:** This room is a must-complete for anyone looking to access full-featured labs on TryHackMe.

- Hands-On Learning: The process gave me practical experience with VPN configuration and command-line networking tools.
- **Secure Environment Access:** Successfully setting up OpenVPN ensures a safe, isolated workspace for practicing offensive and defensive techniques.

Link: <u>TryHackMe | OpenVPN</u>



- National TryHackMe Room: Beginner Path Introduction
- **@** Learning Objective

The "Beginner Path Introduction" room on TryHackMe provides users with a structured overview of the Beginner Learning Path. It introduces the core modules, topics, and skills that learners will develop as they progress through the path. This room lays the foundation for a guided journey into cybersecurity, helping users understand what to expect and how each module contributes to their learning.

Key Tools & Features Explored

- TryHackMe Learning Paths: Navigated the layout and flow of the beginner path.
- Module Overviews: Reviewed the objectives and content of each module.
- **Room Previews:** Explored individual rooms and tasks included within the path to understand their purpose and focus.

Key Concepts Covered

1. Learning Path Structure

- Gained insight into how TryHackMe organizes educational content into structured paths.
- Identified different modules along the Beginner Path, each building on previous knowledge.

2. Module Content & Topics

- Explored the key subjects covered in each module, including:
 - Cybersecurity Fundamentals
 - Linux Basics
 - Web Exploitation
 - Network Security
- Understood how the path progresses from basic to intermediate-level topics in a logical sequence.

3. Skill Development

- Recognized the essential skills that will be built, such as terminal usage, ethical hacking, and basic system/network security.
- Understood how these skills are reinforced through practical, hands-on labs.

4. Resource Utilization

- Identified helpful resources including tutorials, walkthroughs, and additional materials that support learning.
- Learned how to effectively use these tools to enhance understanding and retention.

Walkthrough – My Process

Step 1: Accessing the Room

• Logged into TryHackMe and opened the "Beginner Path Introduction" room.

Step 2: Exploring the Path Overview

- Reviewed the room's introduction to understand the purpose and structure of the beginner path.
- Navigated through different modules to get an overview of the topics and goals.

Step 3: Reviewing Module Content

- Examined the specific focus areas in each module (e.g., Linux Fundamentals, Web Hacking, Networking Basics).
- Observed how the content builds progressively from foundational to more advanced concepts.

Step 4: Identifying Key Resources

- Noted the availability of in-depth tutorials, guided walkthroughs, and lab exercises.
- Learned how to incorporate these resources into a study routine.

Step 5: Task Completion

- Answered the in-room questions related to the path's structure, goals, and content.
- Marked all tasks as complete after understanding the roadmap and learning objectives.

Reflections

- **Excellent Roadmap for Beginners:** This room offers a clear and structured entry point for those new to cybersecurity.
- **Confidence Boosting:** Knowing what lies ahead makes the learning path feel more manageable and purposeful.
- **Highly Organized:** The modular format ensures a logical progression, making it easier to track growth and identify strengths.
- **Essential Orientation:** Understanding the Beginner Path's layout and content helps maximize learning and ensures users get the most out of each module.
- Link: <u>TryHackMe</u> | <u>Learning Cyber Security</u>



● TryHackMe Room: Starting Out in Cyber Security

@ Learning Objective

The "Starting Out in Cyber Security" room is designed to introduce users to the broader cybersecurity field. It offers a high-level overview of various cybersecurity roles, the essential skills each role requires, and the structured learning paths available on TryHackMe. This room helps beginners understand the professional landscape and lays the groundwork for effective career planning in cybersecurity.

% Tools & Features Explored

• **TryHackMe Learning Paths:** Explored tailored learning routes for different cybersecurity roles.

- **Cybersecurity Role Descriptions:** Reviewed responsibilities, required skills, and functions of common positions.
- **Skill Assessment Sections:** Identified core skills aligned with specific roles to guide personal development.

Key Concepts Covered

1. Cybersecurity Roles

- Discovered a range of roles including:
 - Security Analyst
 - o Penetration Tester
 - Security Engineer
- Gained insight into the day-to-day responsibilities and required knowledge for each position.

2. Essential Skills for the Field

- Recognized key competencies such as:
 - o Technical knowledge (networking, Linux, scripting)
 - Analytical thinking
 - o Problem-solving and critical reasoning
 - o Communication and teamwork

3. Learning Pathways

- Explored role-specific learning paths provided by TryHackMe.
- Understood how each path builds essential skills progressively, from foundational knowledge to advanced techniques.

4. Career Planning & Goal Setting

• Identified clear steps to start building the required knowledge, certifications, and hands-on experience for career advancement.

Walkthrough - My Process

Step 1: Accessing the Room

• Logged into TryHackMe and opened the "Starting Out in Cyber Security" room.

Step 2: Exploring Cybersecurity Roles

- Read through role summaries to understand what each job entails.
- Reflected on which roles matched personal interests, strengths, and long-term goals.

Step 3: Identifying Core Skills

- Reviewed the technical and soft skills needed for each role.
- Conducted a self-assessment to pinpoint current abilities and areas for improvement.

Step 4: Learning Path Exploration

- Explored recommended learning paths based on role interests.
- Noted how the paths are designed to build knowledge incrementally, combining theory with practical labs.

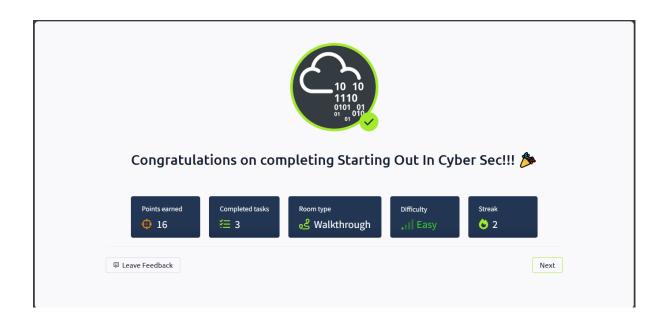
Step 5: Completing the Room

- Answered questions to reinforce learning about roles, skills, and educational paths.
- Marked all tasks as complete after reviewing the material thoroughly.

Reflections

- **Essential for Beginners:** This room is incredibly valuable for those just starting their cybersecurity journey, offering clarity and direction in a vast field.
- **Well-Structured Guidance:** It bridges the gap between curiosity and actionable career planning.
- **Encourages Self-Reflection:** The content prompted me to reflect on my goals and helped me better visualize my ideal cybersecurity career path.

Link: TryHackMe | Starting Out In Cyber Sec



◯ TryHackMe Room: Introduction to Research

@ Learning Objective

The "Introduction to Research" room on TryHackMe is designed to help users develop core research skills essential in cybersecurity. The room focuses on effective search techniques, identifying credible sources, and using public databases to collect accurate information relevant to threats, vulnerabilities, and technical subjects.

This room sets the groundwork for performing security assessments, staying up-to-date with threat intelligence, and making informed decisions based on reliable information.

% Tools & Resources Explored

- Search Engines (Google, DuckDuckGo): Practiced advanced search techniques and query optimization.
- Online Databases (NIST NVD, CVE): Used to locate vulnerability data and detailed security advisories.

Key Concepts Covered

1. Effective Searching

- Learned how to craft precise and targeted search queries using keywords and advanced operators (e.g., site:, filetype:).
- Practiced filtering results to find the most relevant and credible sources quickly.

2. Evaluating Source Credibility

• Identified trusted sources, such as official vendor websites, government-backed databases, academic research, and industry whitepapers.

3. Using Security Databases

- Explored how to search for vulnerabilities using platforms like:
 - NIST National Vulnerability Database (NVD)
 - Common Vulnerabilities and Exposures (CVE)
- Learned how to interpret CVE entries, assess severity, and understand associated references or exploit data.

🗱 Walkthrough – My Process

Step 1: Accessing the Room

 Logged into TryHackMe and entered the "Introduction to Research" room from the dashboard or via direct link.

Step 2: Practicing Search Techniques

- Learned how to use specific operators to narrow down searches.
- Practiced locating specific technical documentation and security advisories.

Step 3: Evaluating Sources

Compared information across multiple sources to assess consistency and credibility.

Step 4: Exploring Security Databases

- Used the NVD and CVE databases to search for known vulnerabilities.
- Reviewed CVE entries to extract key information like severity, CVSS scores, and remediation steps.

Step 5: Task Completion

 Answered scenario-based questions testing knowledge of research strategies and database usage.

Reflections

- **Foundational Skillset:** This room builds essential research skills that every cybersecurity professional needs.
- **Real-World Relevance:** Research is a core part of many job roles, especially in threat hunting, SOC analysis, vulnerability management, and red teaming.
- **Critical Thinking Emphasis:** It taught me to think critically about information sources and assess the validity of data—vital in a field where misinformation can lead to costly errors.

Link: TryHackMe | Introductory Researching

