

Paths completed: 2
Targets compromised: 307
Ranking: Top 1%

PATHS COMPLETED

PROGRESS

Local Privilege Escalation
2 Modules Medium

Privilege escalation is a vital phase of the penetration testing process, one we may revisit multiple times during an engagement. During our assessments, we will encounter a large variety of operating systems and applications. Most often, if we can exploit a vulnerability and gain a foothold on a host, it will be running some version of Windows or Linux. Both present a large attack surface with many tactics and techniques available to us for escalating privileges. This path teaches the core concepts of local privilege escalation necessary for being successful against Windows and Linux systems. The path covers manual enumeration and exploitation and the use of tools to aid in the process.

100% Completed



Penetration Tester
28 Modules Medium

The Penetration Tester Job Role Path is for newcomers to information security who aspire to become professional penetration testers. This path covers core security assessment concepts and provides a deep understanding of the specialized tools, attack tactics, and methodology used during penetration testing. Armed with the necessary theoretical background and multiple practical exercises, students will go through all penetration testing stages, from reconnaissance and enumeration to documentation and reporting. Upon completing this job role path, you will have obtained the practical skills and mindset necessary to perform professional security assessments against enterprise-level infrastructure at an intermediate level. The Information Security Foundations skill path can be considered prerequisite knowledge to be successful while working through this job role path.

100% Completed



MODULE

PROGRESS

Intro to Academy
8 Sections Fundamental General

Your first stop in Hack The Box Academy to become acquainted with the platform, its features, and its learning process.

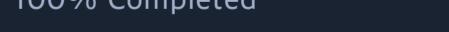
100% Completed



Network Enumeration with Nmap
12 Sections Easy Offensive

Nmap is one of the most used networking mapping and discovery tools because of its accurate results and efficiency. The tool is widely used by both offensive and defensive security practitioners. This module covers fundamentals that will be needed to use the Nmap tool for performing effective network enumeration.

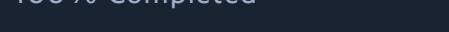
100% Completed



File Transfers
10 Sections Medium Offensive

During an assessment, it is very common for us to transfer files to and from a target system. This module covers file transfer techniques leveraging tools commonly available across all versions of Windows and Linux systems.

100% Completed





SQL Injection Fundamentals

17 Sections Medium Offensive

Databases are an important part of web application infrastructure and SQL (Structured Query Language) to store, retrieve, and manipulate information stored in them. SQL injection is a code injection technique used to take advantage of coding vulnerabilities and inject SQL queries via an application to bypass authentication, retrieve data from the back-end database, or achieve code execution on the underlying server.

100% Completed



Web Requests

8 Sections Fundamental General

This module introduces the topic of HTTP web requests and how different web applications utilize them to communicate with their backends.

100% Completed



File Inclusion

11 Sections Medium Offensive

File Inclusion is a common web application vulnerability, which can be easily overlooked as part of a web application's functionality.

100% Completed



Using the Metasploit Framework

15 Sections Easy Offensive

The Metasploit Framework is an open-source set of tools used for network enumeration, attacks, testing security vulnerabilities, evading detection, performing privilege escalation attacks, and performing post-exploitation.

100% Completed



Linux Privilege Escalation

28 Sections Easy Offensive

Privilege escalation is a crucial phase during any security assessment. During this phase, we attempt to gain access to additional users, hosts, and resources to move closer to the assessment's overall goal. There are many ways to escalate privileges. This module aims to cover the most common methods emphasizing real-world misconfigurations and flaws that we may encounter in a client environment. The techniques covered in this module are not an exhaustive list of all possibilities and aim to avoid extreme "edge-case" tactics that may be seen in a Capture the Flag (CTF) exercise.

100% Completed



Attacking Web Applications with Ffuf

13 Sections Easy Offensive

This module covers the fundamental enumeration skills of web fuzzing and directory brute forcing using the Ffuf tool. The techniques learned in this module will help us in locating hidden pages, directories, and parameters when targeting web applications.

100% Completed



Login Brute Forcing

13 Sections Easy Offensive

The module contains an exploration of brute-forcing techniques, including the use of tools like Hydra and Medusa, and the importance of strong password practices. It covers various attack scenarios, such as targeting SSH, FTP, and web login forms.

84.62% Completed



SQLMap Essentials

11 Sections Easy Offensive

The SQLMap Essentials module will teach you the basics of using SQLMap to discover various types of SQL Injection vulnerabilities, all the way to the advanced enumeration of databases to retrieve all data of interest.

100% Completed





Windows Privilege Escalation

33 Sections Medium Offensive

After gaining a foothold, elevating our privileges will provide more options for persistence and may reveal information stored locally that can further our access in the environment. Enumeration is the key to privilege escalation. When you gain initial shell access to the host, it is important to gain situational awareness and uncover details relating to the OS version, patch level, any installed software, our current privileges, group memberships, and more. Windows presents an enormous attack surface and, being that most companies run Windows hosts in some way, we will more often than not find ourselves gaining access to Windows machines during our assessments. This covers common methods while emphasizing real-world misconfigurations and flaws that we may encounter during an assessment. There are many additional "edge-case" possibilities not covered in this module. We will cover both modern and legacy Windows Server and Desktop versions that may be present in a client environment.

100% Completed



Introduction to Active Directory

16 Sections Fundamental General

Active Directory (AD) is present in the majority of corporate environments. Due to its many features and complexity, it presents a vast attack surface. To be successful as penetration testers and information security professionals, we must have a firm understanding of Active Directory fundamentals, AD structures, functionality, common AD flaws, misconfigurations, and defensive measures.

18.75% Completed



Introduction to Web Applications

17 Sections Fundamental General

In the Introduction to Web Applications module, you will learn all of the basics of how web applications work and begin to look at them from an information security perspective.

23.53% Completed



Getting Started

23 Sections Fundamental Offensive

This module covers the fundamentals of penetration testing and an introduction to Hack The Box.

100% Completed



Penetration Testing Process

15 Sections Fundamental General

This module teaches the penetration testing process broken down into each stage and discussed in detail. We will cover many aspects of the role of a penetration tester during a penetration test, explained and illustrated with detailed examples. The module also covers pre-engagement steps like the criteria for establishing a contract with a client for a penetration testing engagement.

100% Completed



Cross-Site Scripting (XSS)

10 Sections Easy Offensive

Cross-Site Scripting (XSS) vulnerabilities are among the most common web application vulnerabilities. An XSS vulnerability may allow an attacker to execute arbitrary JavaScript code within the target's browser and result in complete web application compromise if chained together with other vulnerabilities. This module will teach you how to identify XSS vulnerabilities and exploit them.

100% Completed



Vulnerability Assessment

17 Sections Easy Offensive

This module introduces the concept of Vulnerability Assessments. We will review the differences between vulnerability assessments and penetration tests, how to carry out a vulnerability assessment, how to interpret the assessment results, and how to deliver an effective vulnerability assessment report.

100% Completed





Command Injections

Command Injections

12 Sections | Medium | Offensive

Command injection vulnerabilities can be leveraged to compromise a hosting server and its entire network. This module will teach you how to identify and exploit command injection vulnerabilities and how to use various filter bypassing techniques to avoid security mitigations.

100% Completed



Using Web Proxies

Using Web Proxies

15 Sections | Easy | Offensive

Web application penetration testing frameworks are an essential part of any web penetration test. This module will teach you two of the best frameworks: Burp Suite and OWASP ZAP.

100% Completed



Footprinting

Footprinting

21 Sections | Medium | Offensive

This module covers techniques for footprinting the most commonly used services in almost all enterprise and business IT infrastructures.

Footprinting is an essential phase of any penetration test or security audit to identify and prevent information disclosure. Using this process, we examine the individual services and attempt to obtain as much information from them as possible.

100% Completed



Attacking Common Applications

Attacking Common Applications

33 Sections | Medium | Offensive

Penetration Testers can come across various applications, such as Content Management Systems, custom web applications, internal portals used by developers and sysadmins, and more. It's common to find the same applications across many different environments. While an application may not be vulnerable in one environment, it may be misconfigured or unpatched in the next. It is important as an assessor to have a firm grasp of enumerating and attacking the common applications discussed in this module. This knowledge will help when encountering other types of applications during assessments.

100% Completed



Shells & Payloads

Shells & Payloads

17 Sections | Medium | Offensive

Gain the knowledge and skills to identify and use shells & payloads to establish a foothold on vulnerable Windows & Linux systems. This module utilizes a fictitious scenario where the learner will place themselves in the perspective of a sysadmin trying out for a position on CAT5 Security's network penetration testing team.

100% Completed



Attacking Common Services

Attacking Common Services

19 Sections | Medium | Offensive

Organizations regularly use a standard set of services for different purposes. It is vital to conduct penetration testing activities on each service internally and externally to ensure that they are not introducing security threats. This module will cover how to enumerate each service and test it against known vulnerabilities and exploits with a standard set of tools.

100% Completed



Web Attacks

Web Attacks

18 Sections | Medium | Offensive

This module covers three common web vulnerabilities, HTTP Verb Tampering, IDOR, and XXE, each of which can have a significant impact on a company's systems. We will cover how to identify, exploit, and prevent each of them through various methods.

100% Completed



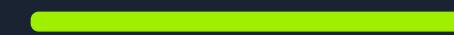
Information Gathering - Web Edition

Information Gathering - Web Edition

19 Sections | Easy | Offensive

This module equips learners with essential web reconnaissance skills, crucial for ethical hacking and penetration testing. It explores both active and passive techniques, including DNS enumeration, web crawling, analysis of web archives and HTTP headers, and fingerprinting web technologies.

100% Completed



File Upload Attacks

File Upload Attacks

11 Sections | Medium | Offensive

Arbitrary file uploads are among the most critical web vulnerabilities. These flaws enable attackers to upload malicious files, execute arbitrary commands on the back-end server, and even take control over the entire server and all web applications hosted on it and potentially gain access to sensitive data or cause a service disruption.

100% Completed



Active Directory Enumeration & Attacks

Active Directory Enumeration & Attacks

36 Sections | Medium | Offensive

Active Directory (AD) is the leading enterprise domain management suite, providing identity and access management, centralized domain administration, authentication, and much more. Due to the many features and complexity of AD, it presents a large attack surface that is difficult to secure properly. To be successful as infosec professionals, we must understand AD architectures and how to secure our enterprise environments. As Penetration testers, having a firm grasp of what tools, techniques, and procedures are available to us for enumerating and attacking AD environments and commonly seen AD misconfigurations is a must.

100% Completed



Password Attacks

Password Attacks

22 Sections | Medium | Offensive

Passwords are still the primary method of authentication in corporate networks. If strong password policies are not in place, users will often opt for weak, easy-to-remember passwords that can often be cracked offline and used to further our access. We will encounter passwords in many forms during our assessments. We must understand the various ways they are stored, how they can be retrieved, methods to crack weak passwords, ways to use hashes that cannot be cracked, and hunting for weak/default password usage.

100% Completed



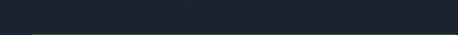
Pivoting, Tunneling, and Port Forwarding

Pivoting, Tunneling, and Port Forwarding

18 Sections | Medium | Offensive

Once a foothold is gained during an assessment, it may be in scope to move laterally and vertically within a target network. Using one compromised machine to access another is called pivoting and allows us to access networks and resources that are not directly accessible to us through the compromised host. Port forwarding accepts the traffic on a given IP address and port and redirects it to a different IP address and port combination. Tunneling is a technique that allows us to encapsulate traffic within another protocol so that it looks like a benign traffic stream.

100% Completed



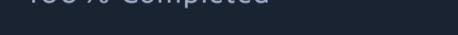
Bug Bounty Hunting Process

Bug Bounty Hunting Process

6 Sections | Easy | General

Bug bounty programs encourage security researchers to identify bugs and submit vulnerability reports. Getting into the world of bug bounty hunting without any prior experience can be a daunting task, though. This module covers the bug bounty hunting process to help you start bug bounty hunting in an organized and well-structured way. It's all about effectiveness and professionally communicating your findings.

100% Completed



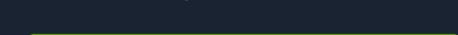
Documentation and Reporting

Documentation & Reporting

8 Sections | Easy | General

Proper documentation is paramount during any engagement. The end goal of a technical assessment is the report deliverable which will often be presented to a broad audience within the target organization. We must take detailed notes and be very organized in our documentation, which will help us in the event of an incident during the assessment. This will also help ensure that our reports contain enough detail to illustrate the impact of our findings properly.

100% Completed





Attacking Enterprise Networks

14 Sections | Medium | Offensive

We often encounter large and complex networks during our assessments. We must be comfortable approaching an internal or external network, regardless of the size, and be able to work through each phase of the penetration testing process to reach our goal. This module will guide students through a simulated penetration testing engagement, from start to finish, with an emphasis on hands-on testing steps that are directly applicable to real-world engagements.

100% Completed

