

Certifications obtained: 1  
Paths completed: 4  
Targets compromised: 427  
Ranking: Top 1%

CERTIFICATIONS OBTAINED

CERTIFIED ON



**HTB Certified Penetration Testing Specialist**  
**28 Modules** **Medium** **Penetration Testing**

HTB Certified Penetration Testing Specialist (HTB CPTS) is a highly hands-on certification that assesses the candidates' penetration testing skills. HTB Certified Penetration Testing Specialist certification holders will possess technical competency in the ethical hacking and penetration testing domains at an intermediate level. They will also be able to assess the risk at which an infrastructure is exposed and compose a commercial-grade as well as actionable report.

August 20 2024

PATHS COMPLETED

PROGRESS



**Bug Bounty Hunter**  
**20 Modules** **Medium**

The Bug Bounty Hunter Job Role Path is for individuals who want to enter the world of Bug Bounty Hunting with little to no prior experience. This path covers core web application security assessment and bug bounty hunting concepts and provides a deep understanding of the attack tactics used during bug bounty hunting. Armed with the necessary theoretical background, multiple practical exercises, and a proven bug bounty hunting methodology, students will go through all bug bounty hunting stages, from reconnaissance and bug identification to exploitation, documentation, and communication to vendors/programs. Upon completing this job role path, you will have become proficient in the most common bug bounty hunting and attack techniques against web applications and be in the position of professionally reporting bugs to a vendor.

100% Completed



**Cracking into Hack the Box**  
**3 Modules** **Easy**

To be successful in any technical information security role, we must have a broad understanding of specialized tools, tactics, and terminology. This path introduces core concepts necessary for anyone interested in a hands-on technical infosec role. The modules also provide the essential prerequisite knowledge for joining the main Hack The Box platform, progressing through Starting Point through easy-rated retired machines, and solving "live" machines with no walkthrough. It also includes helpful information about staying organized, navigating the HTB platforms, common pitfalls, and selecting a penetration testing distribution. Students will complete their first box during this path with a guided walkthrough and be challenged to complete a box on their own by applying the knowledge learned in the Getting Started module.

100% Completed



## 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



## Hacking WordPress

16 Sections Easy Offensive

WordPress is an open-source Content Management System (CMS) that can be used for multiple purposes.

100% Completed

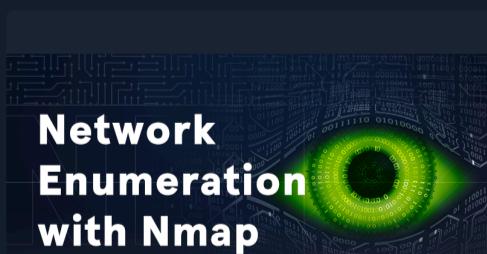
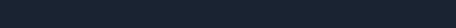


## Linux Fundamentals

30 Sections Fundamental General

This module covers the fundamentals required to work comfortably with the Linux operating system and shell.

26.67% 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



## Stack-Based Buffer Overflows on Linux x86

13 Sections Medium Offensive

Buffer overflows are common vulnerabilities in software applications that can be exploited to achieve remote code execution (RCE) or perform a Denial-of-Service (DoS) attack. These vulnerabilities are caused by insecure coding, resulting in an attacker being able to overrun a program's buffer and overwrite adjacent memory locations, changing the program's execution path and resulting in unintended actions.

100% Completed



## JavaScript Deobfuscation

11 Sections Easy Defensive

This module will take you step-by-step through the fundamentals of JavaScript Deobfuscation until you can deobfuscate basic JavaScript code and understand its purpose.

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

### 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

### 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

### 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 Web Applications

### 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.

100% Completed



## Getting Started

### Getting Started

23 Sections Fundamental Offensive

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

100% Completed



## Broken Authentication

### Broken Authentication

14 Sections Medium Offensive

Authentication is probably the most straightforward and prevalent measure used to secure access to resources, and it's the first line of defense against unauthorized access. Broken authentication is listed as #7 on the 2021 OWASP Top 10 Web Application Security Risks, falling under the broader category of Identification and Authentication failures. A vulnerability or misconfiguration at the authentication stage can impact an application's overall security.

100% Completed



## Intro to Network Traffic Analysis

### Intro to Network Traffic Analysis

15 Sections Medium General

Network traffic analysis is used by security teams to monitor network activity and look for anomalies that could indicate security and operational issues. Offensive security practitioners can use network traffic analysis to search for sensitive data such as credentials, hidden applications, reachable network segments, or other potentially sensitive information "on the wire." Network traffic analysis has many uses for attackers and defenders alike.

100% Completed





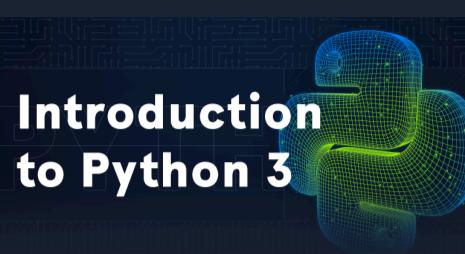
## Intro to Assembly Language

Intro to Assembly Language

24 Sections Medium General

This module builds the core foundation for Binary Exploitation by teaching Computer Architecture and Assembly language basics.

100% Completed



## Introduction to Python 3

Introduction to Python 3

14 Sections Easy General

Automating tedious or otherwise impossible tasks is highly valued during both penetration testing engagements and everyday life. Introduction to Python 3 aims to introduce the student to the world of scripting with Python 3 and covers the essential building blocks needed for a beginner to understand programming. Some advanced topics are also covered for the more experienced student. In a guided fashion and starting soft, the final goal of this module is to equip the reader with enough know-how to be able to implement simple yet useful pieces of software.

100% Completed



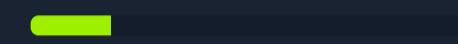
## Stack-Based Buffer Overflows on Windows x86

Stack-Based Buffer Overflows on Windows x86

11 Sections Medium Offensive

This module is your first step into Windows Binary Exploitation, and it will teach you how to exploit local and remote buffer overflow vulnerabilities on Windows machines.

18.18% Completed



## Penetration Testing Process

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)

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

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

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



## Active Directory Enumeration & Attacks



## Server-side Attacks



### Server-side Attacks

19 Sections Medium Offensive

A backend that handles user-supplied input insecurely can lead to devastating security vulnerabilities such as sensitive information disclosure and remote code execution. This module covers how to identify and exploit server-side bugs, including Server-Side Request Forgery (SSRF), Server-Side Template Injection (SSTI), and Server-Side Includes (SSI) injection attacks.

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



## Incident Handling Process



### Incident Handling Process

9 Sections Fundamental General

Security Incident handling has become a vital part of each organization's defensive strategy, as attacks constantly evolve and successful compromises are becoming a daily occurrence. In this module, we will review the process of handling an incident from the very early stage of detecting a suspicious event, to confirming a compromise and responding to it.

100% Completed



## Session Security

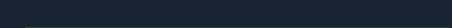


### Session Security

14 Sections Medium Offensive

Maintaining and keeping track of a user's session is an integral part of web applications. It is an area that requires extensive testing to ensure it is set up robustly and securely. This module covers the most common attacks and vulnerabilities that can affect web application sessions, such as Session Hijacking, Session Fixation, Cross-Site Request Forgery, Cross-Site Scripting, and Open Redirects.

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





## Web Service & API Attacks

13 Sections | Medium | Offensive

Web services and APIs are frequently exposed to provide certain functionalities in a programmatic way between heterogeneous devices and software components. Both web services and APIs can assist in integrating different applications or facilitate separation within a given application. This module covers how to identify the functionality a web service or API offers and exploit any security-related inefficiencies.

100% Completed



## 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



## MacOS Fundamentals

11 Sections | Fundamental | General

This module covers the fundamentals required to work comfortably within the macOS operating system and shell.

100% Completed

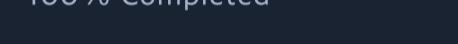


## Documentation & Reporting

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



## Windows Attacks & Defense

16 Sections | Medium | Purple

Microsoft Active Directory (AD) has been, for the past 20+ years, the leading enterprise domain management suite, providing identity and access management, centralized domain administration, authentication, and much more. Throughout those years, the more integrated our applications and data have become with AD, the more exposed to a large-scale compromise we have become. In this module, we will walk through the most commonly abused and fruitful attacks against Active Directory environments that allow threat actors to perform horizontal and vertical privilege escalations in addition to lateral movement. One of the module's core goals is to showcase prevention and detection methods against the covered Active Directory attacks.

100% Completed



## Security Monitoring & SIEM Fundamentals

11 Sections | Easy | Defensive

This module provides a concise yet comprehensive overview of Security Information and Event Management (SIEM) and the Elastic Stack. It demystifies the essential workings of a Security Operation Center (SOC), explores the application of the MITRE ATT&CK framework within SOCs, and introduces SIEM (KQL) query development. With a focus on practical skills, students will learn how to develop SIEM use cases and visualizations using the Elastic Stack.

100% Completed



## Introduction to Threat Hunting & Hunting With Elastic

6 Sections Medium Defensive

This module initially lays the groundwork for understanding Threat Hunting, ranging from its basic definition, to the structure of a threat hunting team. The module also dives into the threat hunting process, highlighting the interrelationships between threat hunting, risk assessment, and incident handling. Furthermore, the module elucidates the fundamentals of Cyber Threat Intelligence (CTI). It expands on the different types of threat intelligence and offers guidance on effectively interpreting a threat intelligence report. Finally, the module puts theory into practice, showcasing how to conduct threat hunting using the Elastic stack. This practical segment uses real-world logs to provide learners with hands-on experience.

100% Completed



## Windows Event Logs & Finding Evil



## Windows Event Logs & Finding Evil

6 Sections Medium Defensive

This module covers the exploration of Windows Event Logs and their significance in uncovering suspicious activities. Throughout the course, we delve into the anatomy of Windows Event Logs and highlight the logs that hold the most valuable information for investigations. The module also focuses on utilizing Sysmon and Event Logs for detecting and analyzing malicious behavior. Additionally, we delve into Event Tracing for Windows (ETW), explaining its architecture and components, and provide ETW-based detection examples. To streamline the analysis process, we introduce the powerful Get-WinEvent cmdlet.

100% Completed



## Understanding Log Sources & Investigating with Splunk



## Understanding Log Sources & Investigating with Splunk

6 Sections Medium Defensive

This module provides a comprehensive introduction to Splunk, focusing on its architecture and the creation of effective detection-related SPL (Search Processing Language) searches. We will learn to investigate with Splunk as a SIEM tool and develop TTP-driven and analytics-driven SPL searches for enhanced threat detection and response. Through hands-on exercises, we will learn to identify and understand the ingested data and available fields within Splunk. We will also gain practical experience in leveraging Splunk's powerful features for security monitoring and incident investigation.

100% Completed



## Working with IDS/IPS



## Working with IDS/IPS

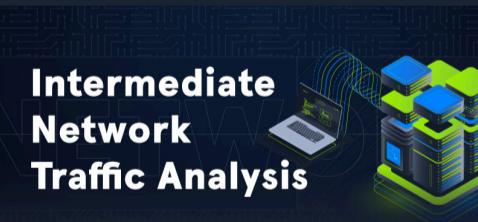
11 Sections Medium Defensive

This module offers an in-depth exploration of Suricata, Snort, and Zeek, covering both rule development and intrusion detection. We'll guide you through signature-based and analytics-based rule development, and you'll learn to tackle encrypted traffic. The module features numerous hands-on examples, focusing on the detection of prevalent malware such as PowerShell Empire, Covenant, Sliver, Cerber, Dridex, Ursnif, and Patchwork. We also dive into detecting attacking techniques like DNS exfiltration, TLS/HTTP Exfiltration, PsExec lateral movement, and beaconing through IDS/IPS.

45.45% Completed



## Intermediate Network Traffic Analysis



## Intermediate Network Traffic Analysis

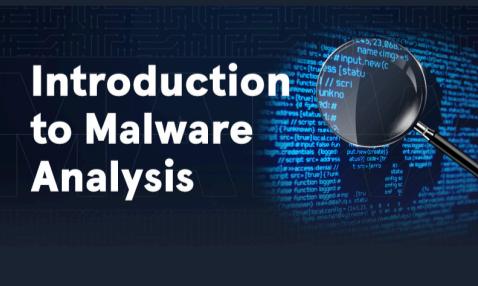
18 Sections Easy Defensive

Through network traffic analysis, this module sharpens skills in detecting link layer attacks such as ARP anomalies and rogue access points, identifying network abnormalities like IP spoofing and TCP handshake irregularities, and uncovering application layer threats from web-based vulnerabilities to peculiar DNS activities.

100% Completed



## Introduction to Malware Analysis



## Introduction to Malware Analysis

9 Sections Hard Defensive

This module offers an exploration of malware analysis, specifically targeting Windows-based threats. The module covers Static Analysis utilizing Linux and Windows tools, Malware Unpacking, Dynamic Analysis (including malware traffic analysis), Reverse Engineering for Code Analysis, and Debugging using x64dbg. Real-world malware examples such as WannaCry, DoomJuice, Brbbot, Dharma, and Meterpreter are analyzed to provide practical experience.

100% Completed





## YARA & Sigma for SOC Analysts

11 Sections Easy Defensive

This Hack The Box Academy module covers how to create YARA rules both manually and automatically and apply them to hunt threats on disk, live processes, memory, and online databases. Then, the module switches gears to Sigma rules covering how to build Sigma rules, translate them into SIEM queries using "sigmac", and hunt threats in both event logs and SIEM solutions. It's all hands-on, using real-world malware and techniques.

9.09% Completed

