

## Recon and Enumeration



## WHAT IS RECONNAISSANCE (RECON)?

- Gathering information about the target(s)
- Get a good understanding of the technologies being used
- Can be passive (openly available information in the web) or active (interacting with the target)





## WHAT IS ENUMERATION?

- Process of extracting useful information from a system
- The attacker interacts with the system and performs scans
- Attempt to identify pre-existing vulnerabilities





## **RECON vs ENUMERATION**

Recon	Enumeration
A very broad process	A subset of recon
Both active and passive	Active
General and Specific	Specific



## WHY ARE THEY IMPORTANT?

- A proper recon would provide detailed information – open ports, running services
- Often the scope of our target can be massive – Large corporations with hundreds of subdomains
- Allows us to find the most vulnerable target





## THINGS TO LOOK FOR DURING RECON

- Subdomains
- Target's infrastructure
- Credential dumps and API keys
- Cloud servers and services
- Other assets





## MY RECON FRAMEWORK

- 1. Target Validation
- 2. Finding Subdomains
- 3. Fingerprinting
- 4. Known data breaches





## TARGET VALIDATION

- Determine the scope of target
- Identify whether target is online
- Validate if information are correct
- Tools: WHOIS, nslookup, dnsrecon





## FINDING SUBDOMAINS & VALIDATION

- And extension to domain to organise and navigate different section of website
- Particular subdomains can expose relatively vulnerable information
- Not all subdomains we found will be active
- Tools: dig, sublist3r, crt.sh, , httprobe





## **FINGERPRINTING**

- Collecting sensitive information about the target
- Access security posture firewalls and protections
- Reduce attack area
- Identify vulnerabilities
- Tools: nmap, Wappalyzer, WhatWeb, BuildWith, Netcat





## DATA BREACHES AND EXPLOITS

- No need to reinvent the wheel
- Older systems and technologies often have known vulnerabilities
- If the company has faced a data breach before then chances are there are creds still floating in the web



 Tools: ExploitDB, HavelBeenPwned, Breach Parse, Metasploit



## **TOOLS**

#### **Domains**

- Hunter.io
- Theharvester
- Breach parse

#### Subdomains

- Sublist3r
- Crt.sh
- Owasp Amass
- Httprobe

#### Web Technologies

- Wappalyzer
- Whatweb
- Buildwith

#### HTTP/HTTPs

- Nmap
- Nikto

#### **Directory Bustring**

- Dirb
- Dirbuster

#### **Active Scanners**

- Nmap
- Nessus
- Netcat



### Resources

YouTube Videos

https://www.youtube.com/watch?v=ZBi8Qa9m5c0&t=21 95s

https://www.youtube.com/watch?v=Wpm2C1LD9ns

**Useful Recon Tips** 

https://www.youtube.com/watch?v=amihlWTtkMA

**Automating Recon** 

<u> https://www.youtube.com/watch?v=YT5Zl2jW3wg</u>



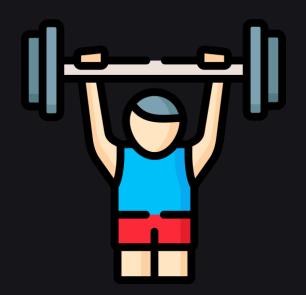
## **Practice Recon**

#### Live Machines

- HackTheBox
- Vulnhub
- Bug Bounty Programs

#### YouTubers – Live Recon Sessions

- Nahamsec
- Jason Haddix
- The Cyber Mentor





# WANT TO KNOW ABOUT CUTTING EDGE RECON AND INTELLIGENCE?



## **THANK YOU!**

Please ask any questions you have in the chat!

