B2 - Binary Security

B-SEC-200

Burp

Boot2Root networking challenges

Introduction

This project is designed to teach you network exploits in the form of **Boot2Root** challenges. As the name suggests, **Boot2Root** just means "boot it to root it", which is a kind of challenge involving launching VMs to connect to a specific service, find weaknesses to access the system, then escalate your privileges to become root.

As a variant of the **Capture-The-Flag**, you will find in the VM token in the form of `EPI{Th1s_iS_4_T0k3N}`.
You must find those to validate the challenges.

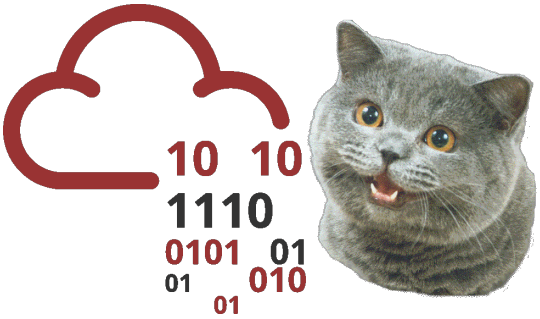
The Burp project is composed of 9 different challenges that get gradually harder.
You can use any tools / techniques you want to solve the challenges, although none of them require Metasploit.

Since you're on tek, the challenges are designed to be of easy to medium difficulty, covering a vast array of topics to prepare you for the next years. All of them are loosely based on learning basic exploit techniques, privilege escalation, and using basic pentesting tools such as Nmap, Gobuster, Ffuf, John the Ripper…

Some keywords are: Injection, Exploit, Bruteforce, Pentesting, etc.
Google Them, or better yet, use TryHackMe to learn how to do it !

The challenges are sorted by difficulty, but do NOT hesitate to do them in any order you see fit !

I CAN HAZ CHALLENGES ?



The challenges are on a specific plateform for our partner : TryHackMe !
It is a website specifically designed to learn and practice hacking in all kind of shapes and forms, and is the perfect place to improve your skills.

You can join our custom learning path on the Burp interface

If you don't have a TryHackMe account, you will need to register on the platform **using your epitech email**.
If you already have an account and you want to keep it, just make sure that you your email address on TryHackMe is your epitech email.

Once done, just click the link above and get hacking!

Each time you start a machine, it takes around 1-3 minutes to boot, be patient!

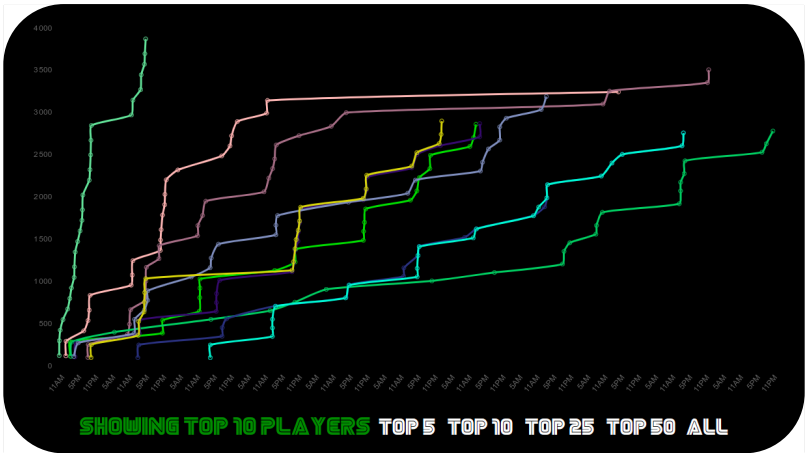
It is still mandatory to register your group on the intranet.
The challenges need to be completed by at least one member of the team

Some rules

- You MUST register on https://intra.epitech.eu your group BEFORE the deadline.
- You MUST NOT submit write-ups, solutions, or flags anywhere online
- You MUST be able to explain every challenge that you succeed
- You MUST NOT share flags between teams, it will be considered cheating and will result in -42
- You MUST abide by the site rules (no attacking the main platform, no ddos, etc.)

Failure to follow those rules may result in -42, be careful !
Be sure to read it ALL !

Now the fun part



During this project, you will be graded according to the number of `challenges` you finish, and number of `flags` you find.
To add more spice to it, you will have a dashboard on This website

You will find a graph showing your score earned by collecting flags, finishing rooms and being the fastest

possible for each flag. You will have both a local ranking and (inter)national ranking.

Points are calculated this way:
- 1000 points per flag
- 500 points per room fully completed
- up to 80 bonus points per flag depending on your speed

Prizes will be delivered to the best hackers of each city, the best hackers of all students, and their name will forever be in the Hall of fame!

Do your best to shine in this competition!

Final Defense

The **Final Defense** will be a mandatory review that occurs right after the end of the Burp project.
The format will be that of a proper Review/Keynote, where you will have to explain the ins and outs of your project with **a presentation**.

The pedagogical team will ask **each member** of the group to explain **one challenge each** that you manage to solve. You will have to go into detail on how you did it, which technique / tool you used, etc.
The choice of the challenge you'll be questionned on will be at your reviewer's discretion.

Some theoretical questions will be asked to be sure that you fully understand the core concepts of the challenges.

Be careful, this defense is MANDATORY and will be crucial for the validation of your module!