

# **HYDRA**

# BOOT2ROOT NETWORKING CHALLENGES



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# 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 CTF will begin on Tuesday 21st May 2024, 10:00AM GMT+1.

In the meantime, create your TryHackMe account and work on the bootstrap.

**The Hydra project** is composed of 15 different challenges that get gradually harder. You can use any tools / techniques you want to solve the challenges, although none of them require Metasploit.#br

Since you're on the second year course, the challenges are designed to be of medium difficulty, not too easy, but not too hard either. All of them are loosely based on privilege escalation, custom vulnerabilities exposures, reversing and bruteforcing with tools such as Gobuster, John the Ripper or Hydra.#br



Some keywords are: Exploit, Bruteforce, Pentesting, etc...

Google Them, or better yet, use TryHackMe to learn how to do it!



The challenge are sorted by difficulty, be sure to do the easier ones first before moving onto the harder ones



# Some rules



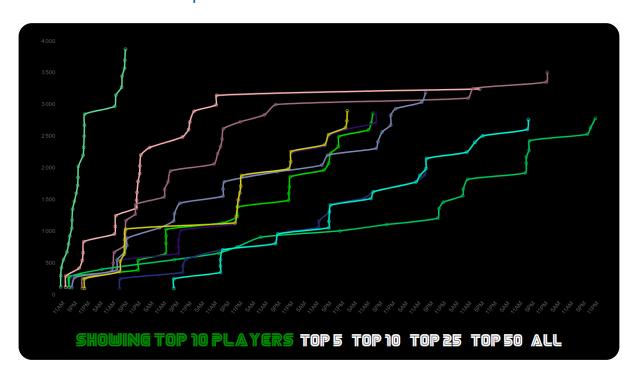
- ✓ You MUST register on https://intra.epitech.eu your group BEFORE the deadline.
- ✓ You MUST NOT submit write-ups, solutions, or flags anywhere online
- ✓ You MUST be able to explain every challenge that you succeed
- ✓ You MUST NOT share flags between teams, it will be considered cheating and will 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 90 bonus points per flag depending on your speed

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 Chisel project. The format will be that of a proper Review/Keynote, where you will have to explain the ins and outs of your project.

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.

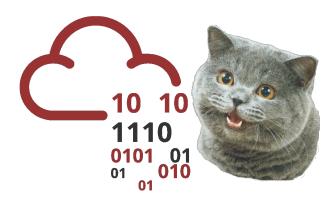
The choice of the challenge you'll be questionned on will be at your reviewer's discretion.

Some theoretical questions will be asked to be sure that you fully understand the core concepts of SSH tunneling and port forwarding.

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



# 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.

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 one of the links on the next pages and get hacking!



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



The challenges need to be completed by at least one member of the team



# Challenges

### **Basic**

#### Toss a coin

Sing with me this amazing song! Click Here

#### **Secrets of the Maw**

Uncover the secrets of the maw, and don't get caught! Click Here

#### Yer a Wizard

Find the secret website and hack the most complex puzzles! Click Here

### Medium

#### **Grand Line**

I am going to be the pirate king! Click Here

#### E-Corp

Hack E-Corp, their pretty insecure password policy and old configurations Click Here



#### Jörmungandr

Beware of the mischievous snake!

Click Here

### Hard

#### **Tatakae**

This time around mankind will feast upon the Titans! Click Here

#### **Undercooked**

We need you to save the Onion kingdom with your amazing hacking skills! Click Here

### Dalgona

Click Here

### Harder

### **Oh The Misery**

Everybody wants to be my enemy! Click Here



#### **Around The World**

Discover the secret track of the famous duo! Click Here

#### **Diabolical Box**

Every puzzle has an answer! Click Here

#### Insane

#### **Dead Inside**

We're not too far gone! Click Here

### **Family Friendly**

A fourth wall break inside a fourth wall break, that's like sixteen walls! Click Here

#### **Chosen Undead**

Only in truth, the Lords will abandon their thrones, and the Unkindled will rise. Click Here



