Capture the Flag Game on Pentesting in the KYPO Cyber Range

PA197 Secure Network Design

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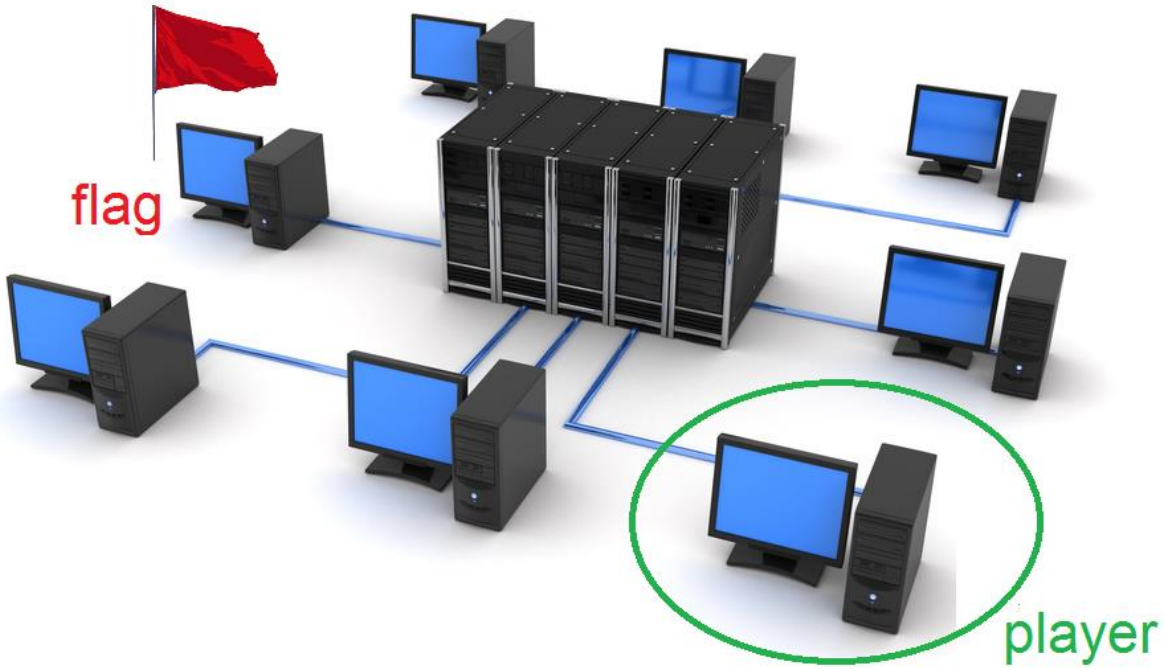
KYPO
BY CSIRT-MU

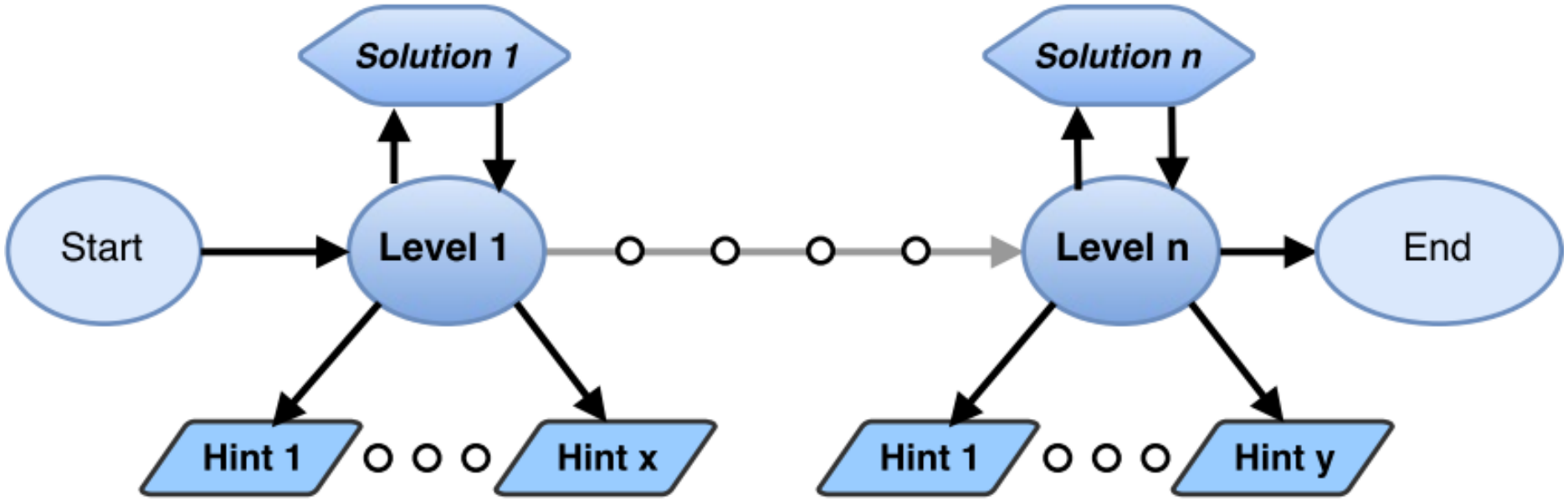
Capture the Flag (CTF) game

- Application for exercising cybersecurity skills
  - We focus on **Attack-only** games
- Original idea: hacker conference DEF CON 1996, modern form in 2003
- Benefits: practicing, learning, competing

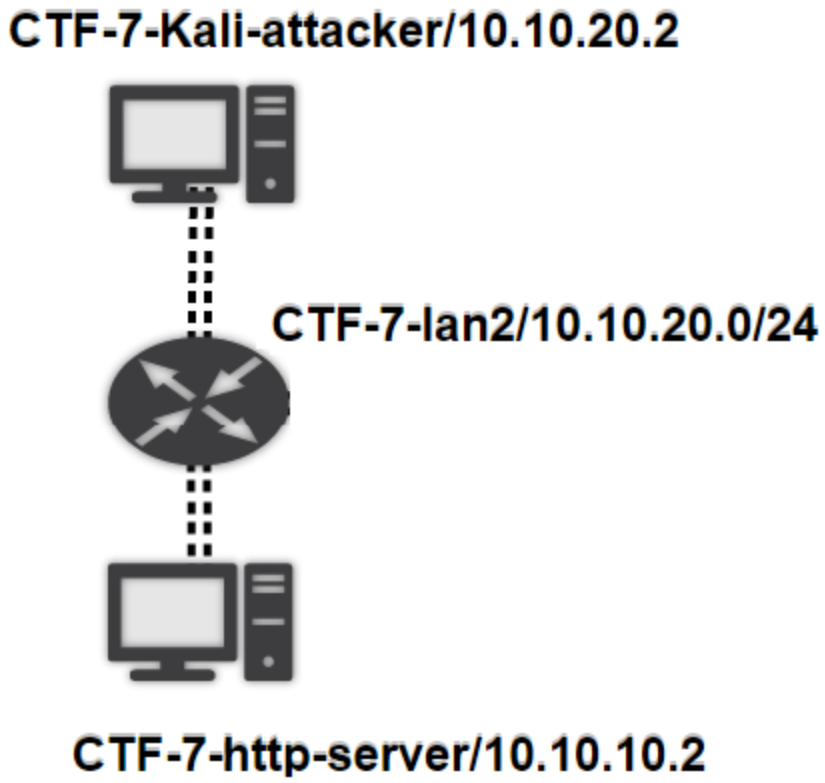


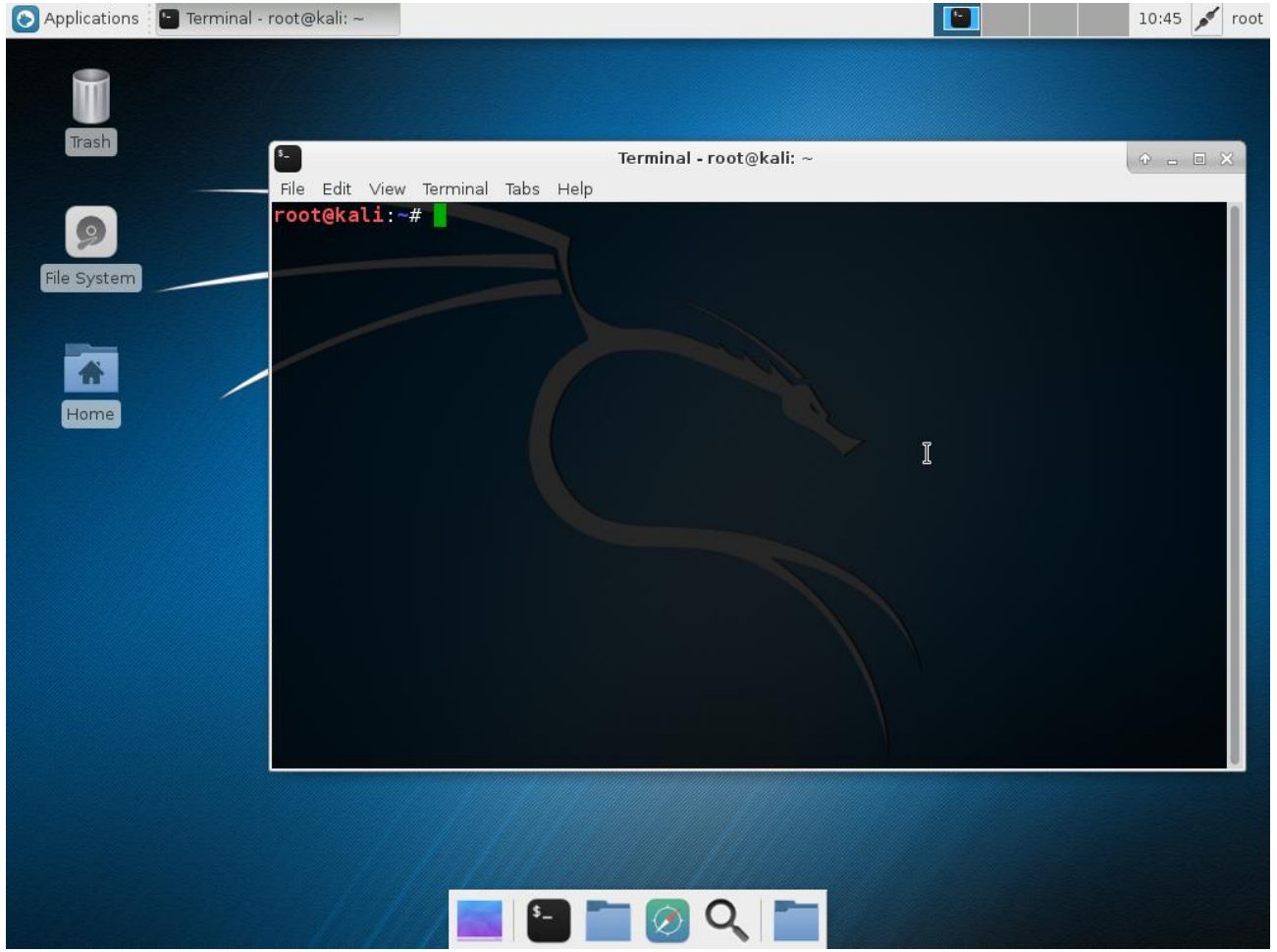
CTF games in KYPO: structure

- Completing security-related tasks in linearly connected levels
  - Penetration testing skills



CTF games in KYPO: topology and machine view





CTF games in KYPO: game view

- Task description
- Game control panel:

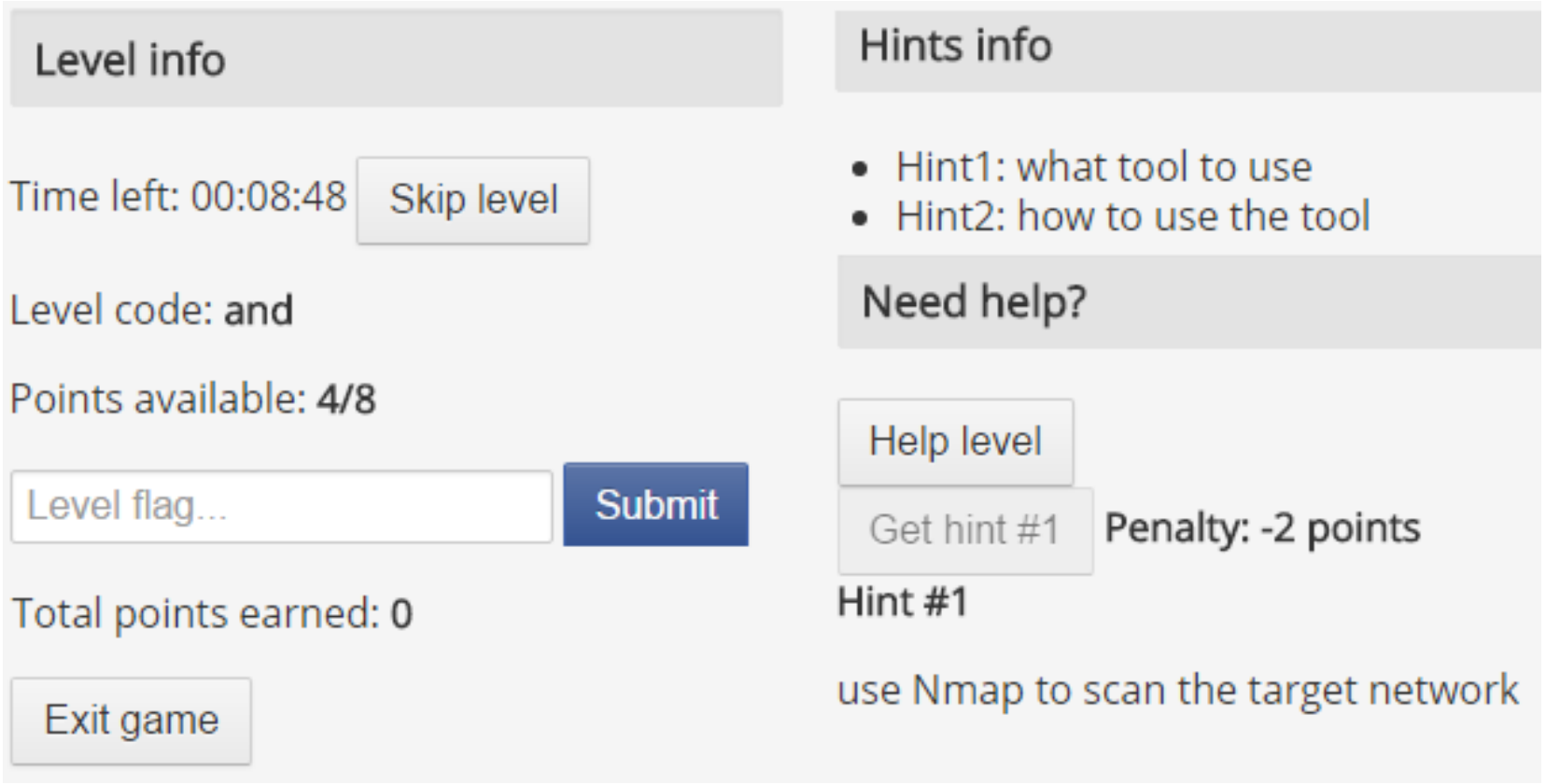
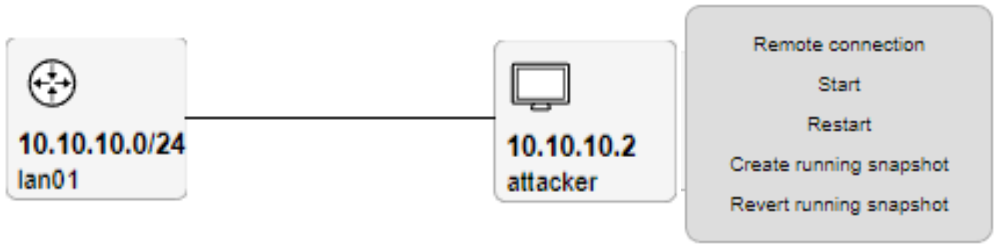


Photo Hunter Game

- Background story: a paparazzi blackmails a celebrity, who asks for your help
- You start by receiving an e-mail from her
- Goal: find the photos on the paparazzi's server
- 4 levels to practice 4 stages of a cyber attack:
  1. **Reconnaissance** (network exploration)
  2. **Scanning** the target host
  3. **Gaining access** (SQL injection)
  4. **Exploiting a vulnerability** (password cracking)

Your tasks

1. **Log in** at https://kypo2.ics.muni.cz/ via Shibboleth using your UČO
2. **Access** the **attacker machine** (login/password: `root/toor`)



3. **Have fun** and try everything! :) (restart the machine in case of trouble)
4. After you finish, we'd love to hear your feedback on the game! Please, **fill out the questionnaire** at https://goo.gl/forms/rfcqZjCPKJsGxQu13

Extra resources: check them out for homework

- https://www.kali.org/
- https://ctftime.org/
- https://defcon.org/
- https://www.hackthebox.eu/
- http://overthewire.org/wargames/
- https://avatao.com/
- https://www.hackthissite.org/
- https://hack.me/
- http://www.dvwa.co.uk/

QUESTIONS?

THANKS FOR YOUR ATTENTION!

www.kypo.cz

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