ULTIMATE PREPARATION GUIDE TO OSCP 2021

adithyanak.com

WHOAMI

Adithyan Arun Kumar

- Offensive Security Certified Professional (OSCP)
- Certified Ethical Hacker (Master)
- Head of OWASP Coimbatore
- 7+ Years in Information Security
- Expertise in Application Security (Web and Network) and Open Source Intelligence
- Speaker at various conferences and educational institutions (IITM Research Park, NIT, Defcon, OWASP meetup)
- Acknowledged by Microsoft, Apple, Intel, Avira, Oppo, etc

PREPARATION STRATEGY

WHAT

OSCP

EXAM STRATEGY

EXAM SETUP & QA

OSCP

WHAT IS IT ?

PEN-200 PWK

Penetration Testing with Kali Linux

24 HOURS

Rigorous 23 hours 45 minutes practical exam

5 HOSTS

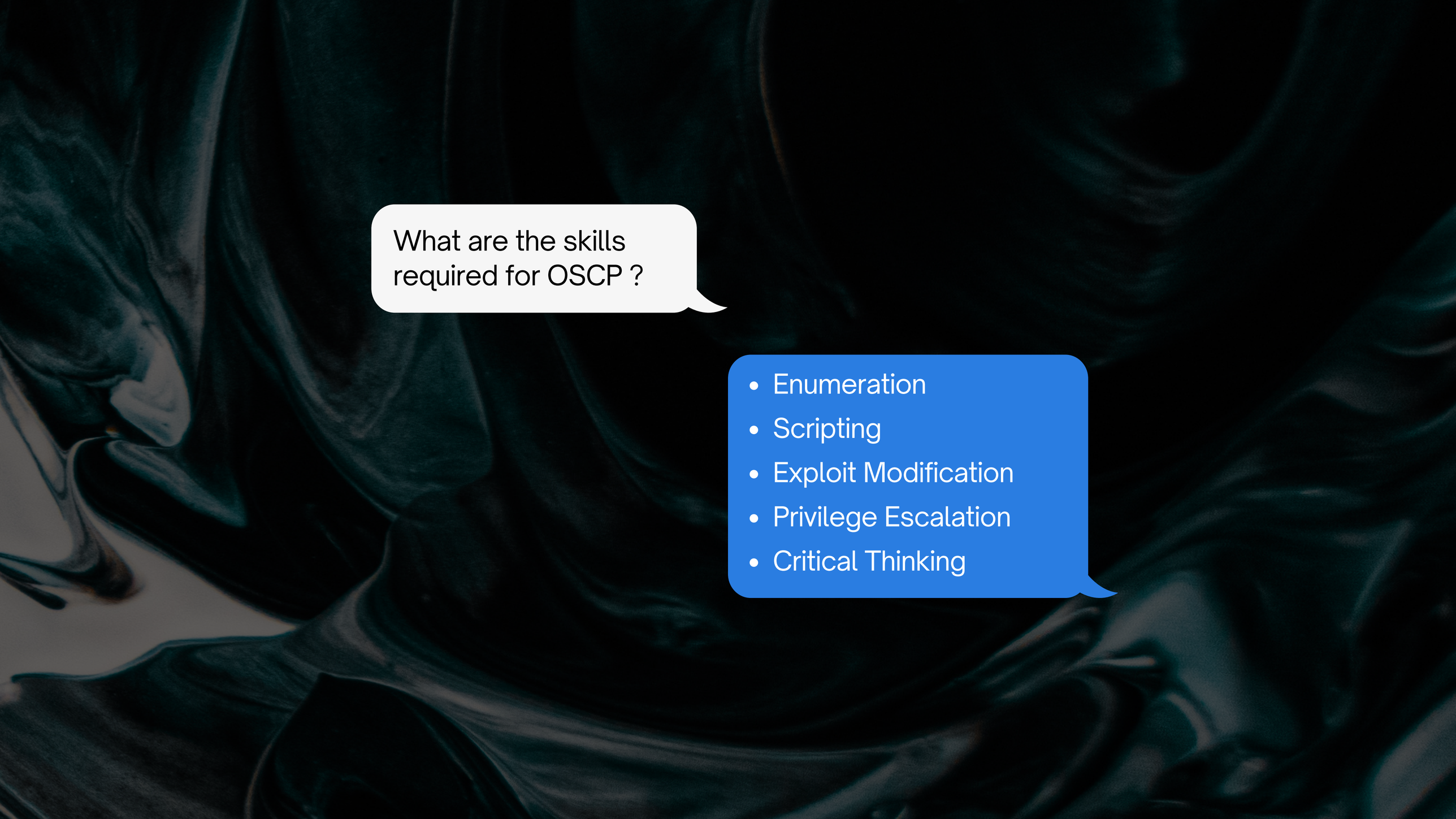
1 Buffer Overflow + 4 Hosts

100 POINTS

70 to pass

PWK Syllabus

- Bash Scripting
- Information Gathering
- Vulnerability Scanning
- Web Application Attacks (SQL, XSS, File inclusion)
- Windows Buffer Overflows
- File transfers
- Password Attacks
- AV Evasion
- Privilege Escalation
- Port Redirection and Tunneling
- Active Directory Attacks
- The Metasploit Framework
- PowerShell Empire


What are the skills required for OSCP ?
Enumeration
Scripting
Exploit Modification
Privilege Escalation
Critical Thinking

Prerequisites for OSCP

- Network Essentials
- Windows & Linux Administration
- Web Application
- Scripting
- Getting comfortable with tools

Exam Restrictions

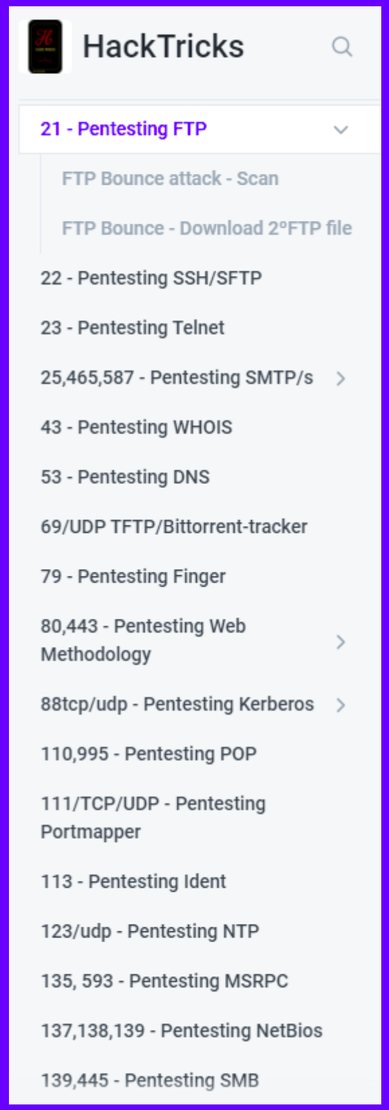
- SPOOFING
- COMMERCIAL TOOLS
- AUTO EXPLOITATION TOOLS
- MASS VULNERABILITY SCANNERS
- YOU'RE RESPONSIBLE

PHASE 1
THE PREPARATION

Courses

- Beginner
  - CompTIA’s Network+
  - Practical Ethical Hacking by Heath Adams
- Intermediate
  - Windows Privilege Escalation for Beginners - TCM
  - Linux Privilege Escalation for Beginners - TCM
  - Linux Privilege Escalation for OSCP & Beyond! - Tib3rius
  - Windows Privilege Escalation for OSCP & Beyond! - Tib3rius
  - TJnull's OSCP Prep playlist by ippsec

Blogs



- Hacktricks.xyz
- oscpnotes.infosecsanyam.in
- sushant747.gitbooks.io
- blog.adithyanak.com
- github.com/wwong99/pentest-notes
- scund00r.com

Youtube Channels

- Ippsec
- Conda
- John Hammond
- JSON Sec
- DC CyberSec
- Elevate Cyber
- Injection
- Michael LaSalvia
- Busra Demir

Why Notes

- Not everyone has great memory
- Reinforcing the learning
- known vs unknown
- Develop your own Offensive Security approach
- note taking choices
  - gitbook
  - cherrytree
  - obsidian

PHASE 2
THE PRACTICE

Practice

VULNHUB

Free, 500+ machines and exercises, great resource
https://www.vulnhub.com/

OFFSEC PROVING GROUNDS

Play & Practice, 19$/Month
https://www.offensive-security.com/labs/

TRYHACKME

freemium - Linux & Windows
Privesc + Bufferoverflow
https://tryhackme.com/

HACKTHEBOX

freemium, 14$/Month VIP pass
retired machines
https://www.hackthebox.eu

VIRTUAL HACKING LABS

45+ hosts + course, 99$/Month,
Certificate of Completion
https://www.virtualhackinglabs.com

PENTESTERLAB PRO

300+ exercises, videos + certificate - 35$/3 Months - Student | 20$/Month
https://pentesterlab.com/

NetSec OSCP

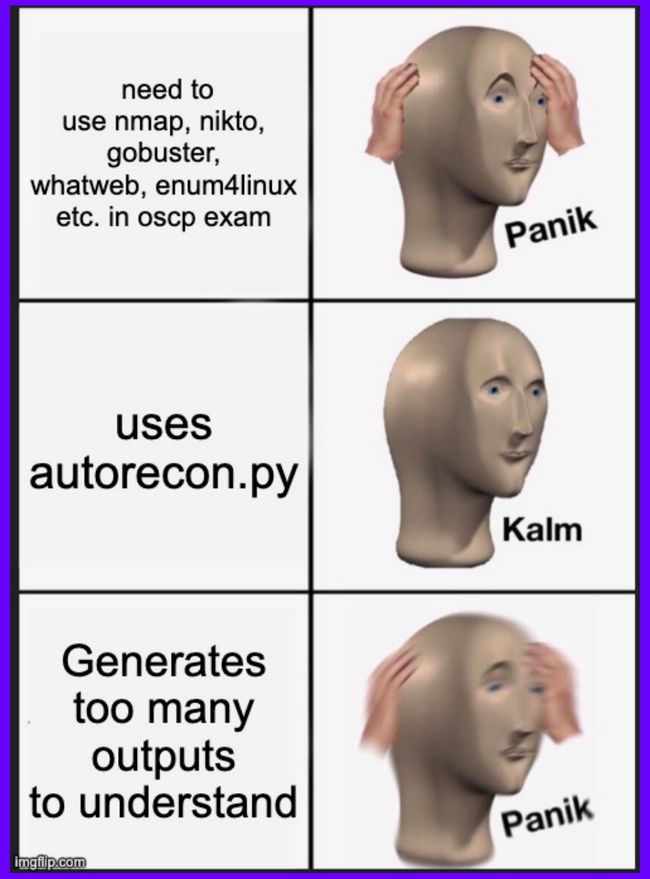
- Frequently updated
- By TJ Null (Community Manager)
- supports range of platforms
  - Vulnhub
  - Offsec proving grounds
  - HackTheBox

JSONSec OSCP

- Created by JSON Sec
- contains boxes from
  - HackTheBox
  - TryHackMe
  - Offsec Proving Grounds
- also has Buffer Overflow exe

Unofficial OSCP Approved Tools

- Note Taking
  - One Note
  - Obsidian
- Enumeration
  - AutoRecon
  - NmapAutomator
- Web
  - Gobuster
  - Feroxbuster
  - Wfuzz
  - Nikto



- Network
  - Impacket (SMB, psexec...)
- File transfer
  - Python (SimpleHTTPserver, updog)
  - Impacket (smbserver)
- Wordlists
  - Seclists
  - Rockyou.txt
- Reverse shell
  - Pentest Monkey
- Bruteforce
  - Hydra, ncrack, john

Privilege Escalation

Linux Privesc

- Linux Exploit Suggester
- SUIDENUM
- LinEnum.sh
- linpeas.sh (v3.1.3 or above)
- Linprivchecker
- pspy

Windows Privesc

- WinPeas
- PowerUp
- Seatbelt
- Windows-Exploit-Suggester
- Sherlock
- Accesschk.exe

Buffer Overflows for OSCP

TCM BufferOverlow

- comprehensive guide
- Compromise in 6 steps!
- Buffer Overflows - Adithyan's Blog

TryHackMe BoF Prep

- Created by Tib3rius
- the room uses a 32-bit Windows 7 VM
- 10+ OSCP like executables
- walkthrough

Misc

- Exploit writing tutorial - Corelan
- SLmail
- FreeFloatFTP Server 1.0
- Minishare 1.4.1
- Savant 3.1

PEN-200 PWK packages

PACKAGES 999-1350

- 30/60/90 days of lab access
- One exam attempt
- Self-guided

PWK 365 - 2148$

- 365 days of lab access
- Two exam attempts
- Self-guided

OFFSEC ACADEMY

- 90 days of lab access
- One exam attempt
- 1:1 mentoring
- Small group instruction

Comprehensive OSCP Journey (5 Months)

Vulnhub	HackTheBox / OSPG	OSCP Labs
• 30 DAYS • FREE	• 30 DAYS • 20 + 35$	• 90 DAYS • 1350$
		Total : 1405$

Modest OSCP Journey (3 Months)

Vulnhub

- 30 DAYS
- 500+ HOSTS
- FREE

HackTheBox / OSPG

- 30 DAYS
- 150+ HOSTS
- 20 + 35$

OSCP Lab + Exam attempt

- 30 DAYS
- 70+ HOSTS
- 1000$

Total : 1055$

+ 2 attempt=300$

Total : 1355$

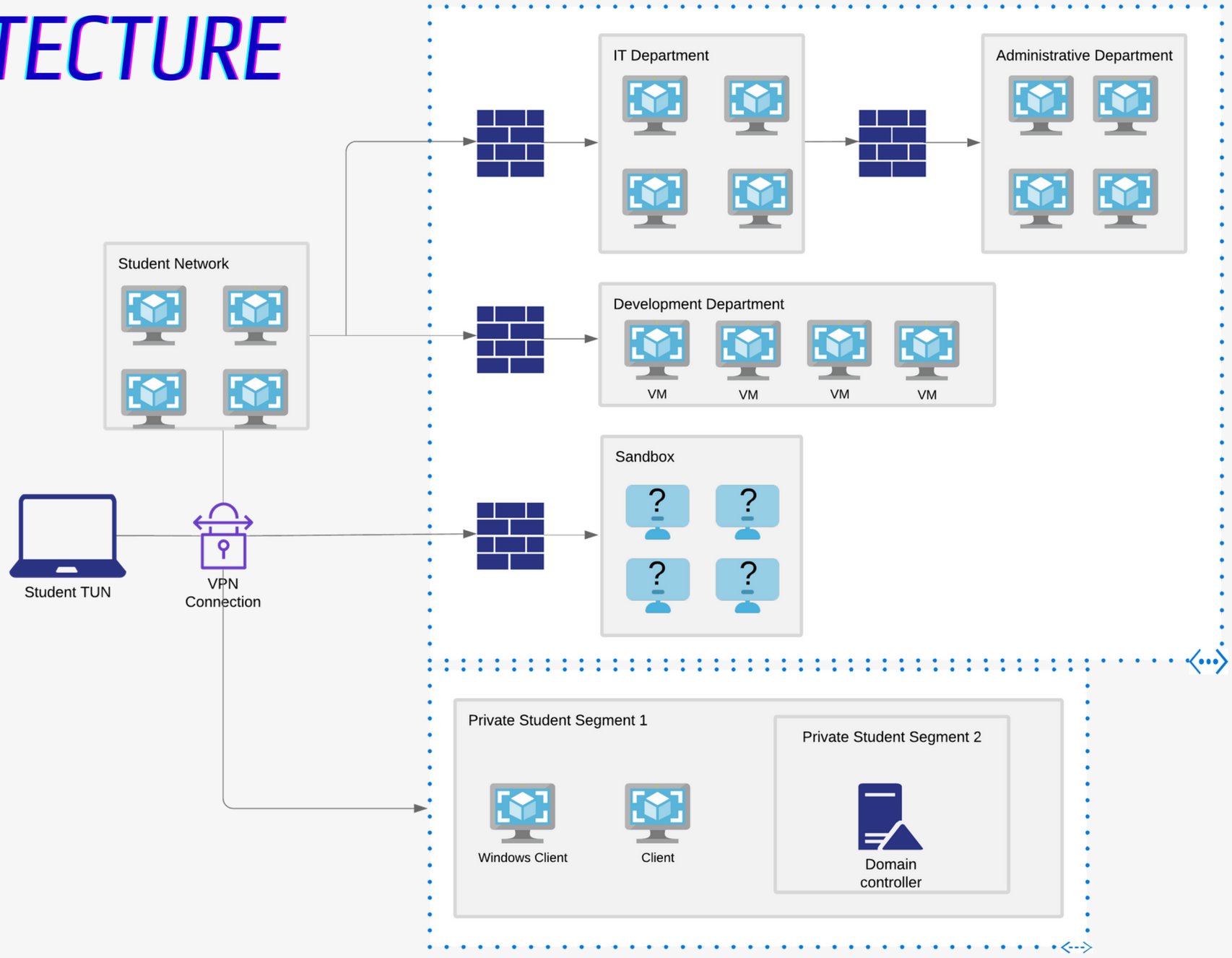
PHASE 3
THE LAB


Every Battle is won before it's fought
Sun Tzu

The 5 Points struggle

- ALL LAB EXERCISE + SCREENSHOTS
- REPORT FOR MIMINUM 10 LAB HOSTS
- 40 (ISC)2 CPE CREDITS
- ONLY APPLICABLE IF YOU SCORE 65 POINTS
- 25 + 20 + 20

LAB ARCHITECTURE



OFFENSIVE SECURITY - LAB CONTROL PANEL: PUBLIC SERVERS

MY CLIENTS | PUBLIC SERVERS | SANDBOX | SUBNET KEYS | PROOF KEYS

LOGGED IN AS:

OS-[redacted]

EXAM DATE: NOT SCHEDULED

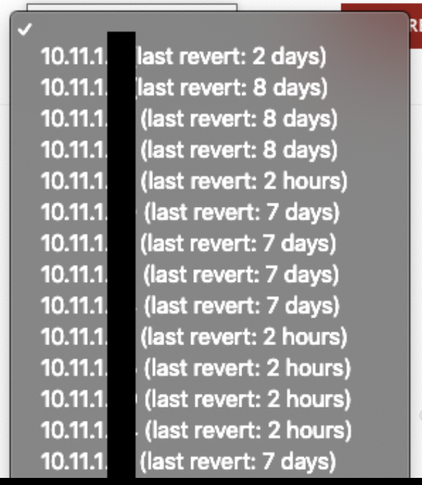
Set or change date

Your last exam date: Tue, 09 Jun 2020, 04:20

You have 3 days of lab access, until Mon, 10 Feb 2020, 10:16

Revert Machines

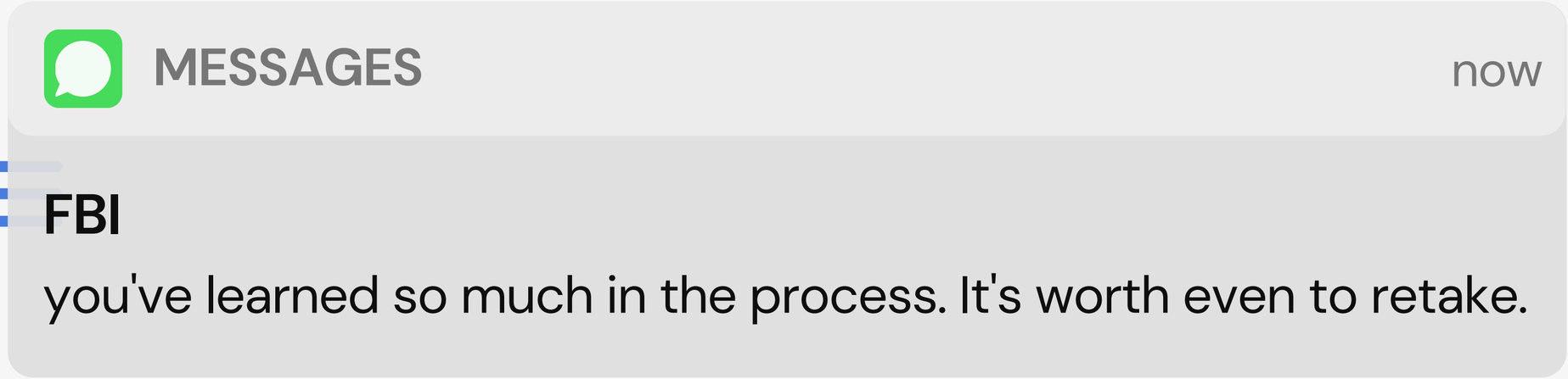
Select IP:

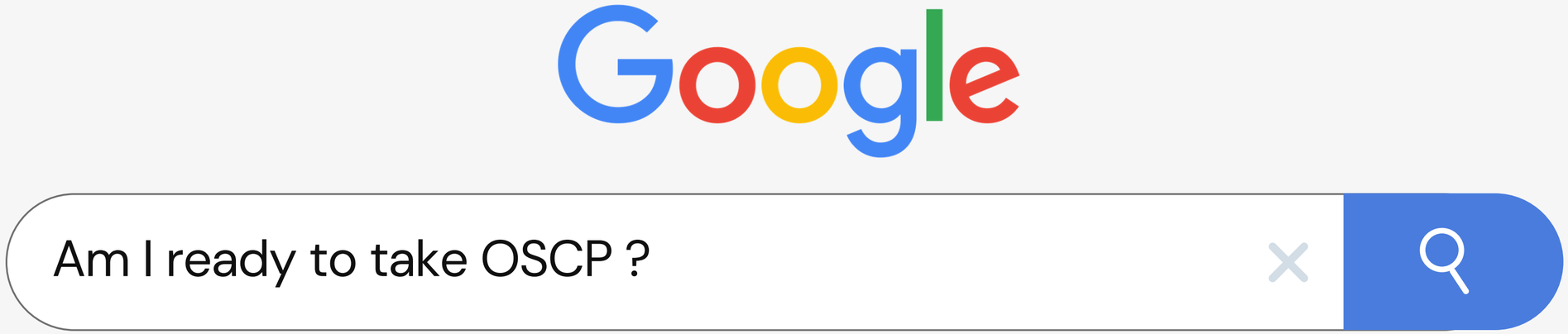


Job Status:

READY

8 reverts left today. Counter resets at 0h00 GMT
If you require more reverts, please email help@offensive-security.com


MESSAGES
now
FBI
you've learned so much in the process. It's worth even to retake.


Google
Am I ready to take OSCP ?
ALL
NEWS
VIDEOS
IMAGES
MAPS

PHASE 4
THE EXAM

PROCTORING

NO SCREEN RECORDING

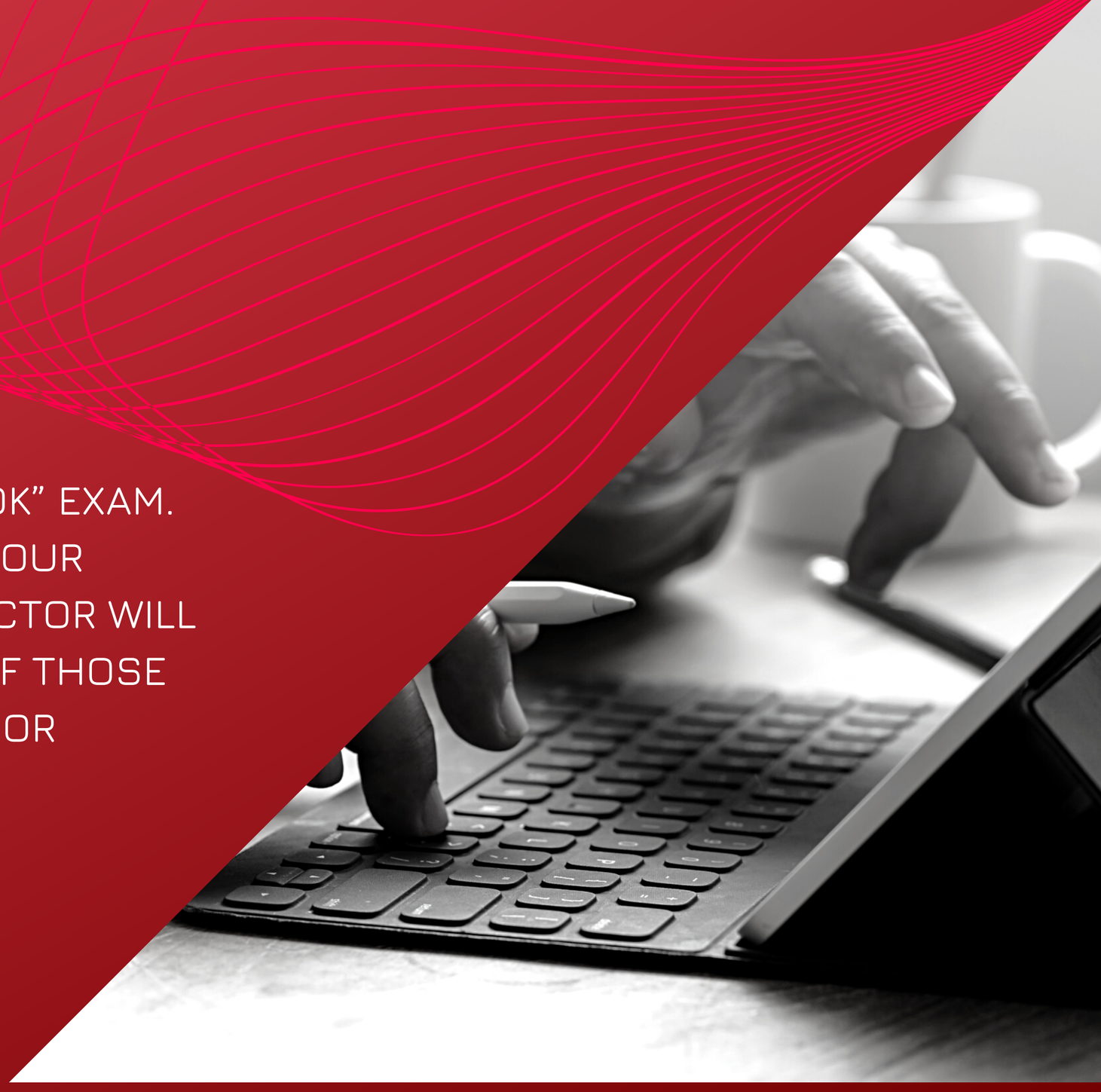
SCREENSHOTS FTW

JANUS WEBRTC SCREENSHARING

DUAL SCREEN / CONNECTIVITY

OSCP HAS ALWAYS BEEN AN “OPEN BOOK” EXAM. WE ENCOURAGE YOU TO USE GOOGLE, YOUR NOTES, OR OTHER TOOLS AND THE PROCTOR WILL NOT DISQUALIFY YOUR EXAM FOR ANY OF THOSE REASONS OR FOR HAVING YOUR PHONE OR ANOTHER PERSON ENTER THE ROOM.

– OFFSEC



LOGIN

OSID

MD5

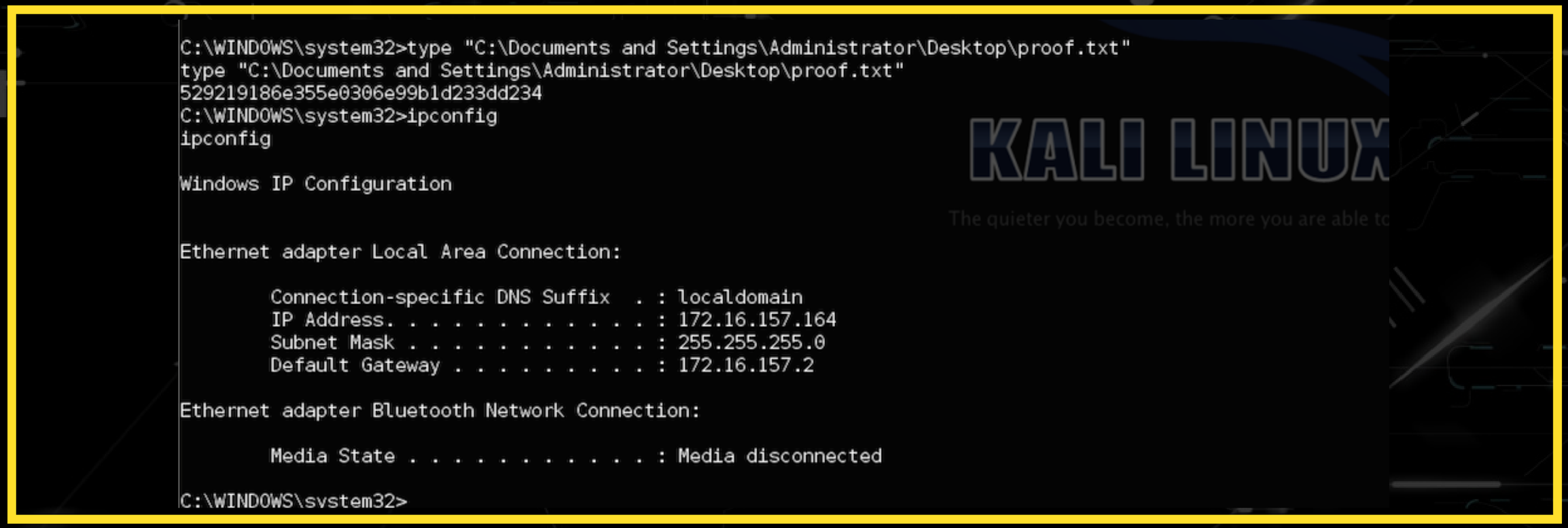
LOGIN

Please enter only the numeric portion of your OSID. If you are unable to login and it is 15 minutes or less before your exam start time, please contact proctoring@offensive-security.com

OFFENSIVE® security

OFFENSIVE SECURITY OFFERS THE ONLY HANDS ON TRAINING AND TRUE PERFORMANCE BASED CERTIFICATIONS IN THE INDUSTRY.

PROOF SCREENSHOT



Windows : `type proof.txt && whoami && hostname && ipconfig`

Linux : `cat proof.txt && whoami && hostname && ip addr`

EXAM CONTROL PANEL

Points Distribution

25 POINTS BOF

Straight forward, maximum 45 minutes with enough practice

25 POINTS HARD

rabbitholes, local.txt and proof.txt
12.5 + 12.5 / 10 + 15

20 POINTS MEDIUM

rabbitholes, local.txt and proof.txt

20 POINTS MEDIUM-HARD

rabbitholes,local.txt and proof.txt

10 POINT EASY

figure out the rabbit hole and you'll get the shell in minutes. No privesc.

5 POINT LAB

complete all lab exercises + 10 lab hosts

EXAM TIMELINE

0 HOURS 30 MINUTES

Buffer Overflow = 25 points

04 HOURS 01 MINUTES

BOF + 25 = 50 points

05 HOURS 53 MINUTES

BOF + 25 + 20 = 70 points

07 HOURS 23 MINUTES

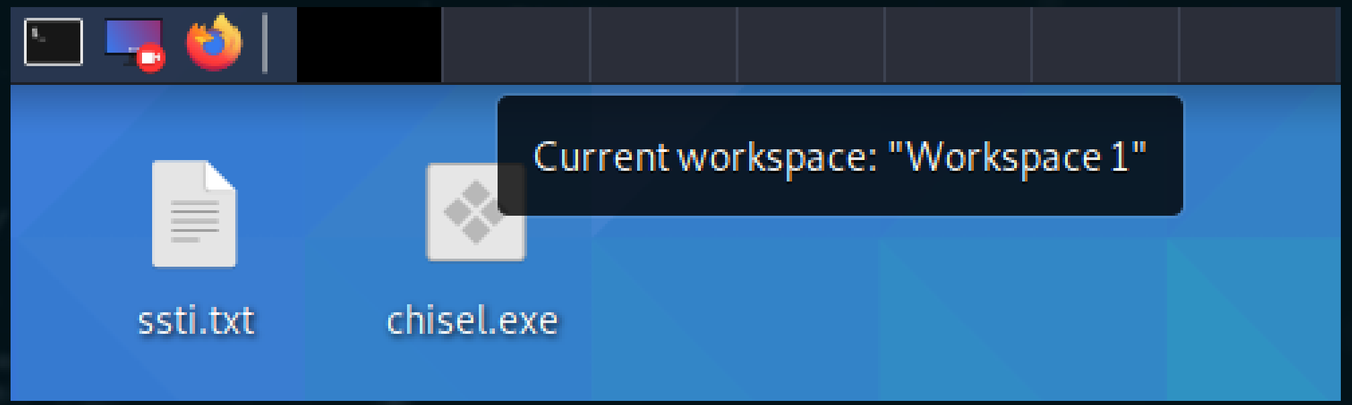
BOF + 25 + 20 + 10 = 80 points

12 HOURS 35 MINUTES

BOF + 25 + 20 + 10 + 20 = 100 points

Exam Setup

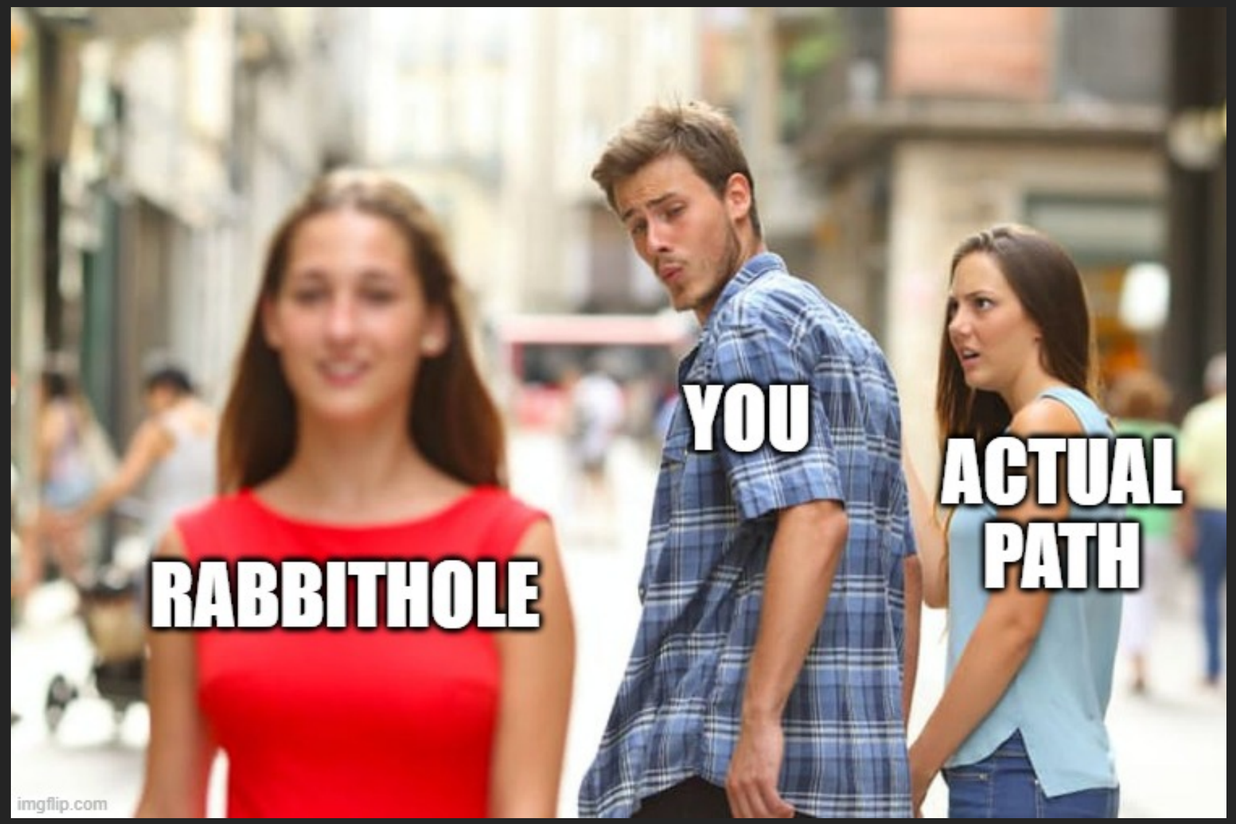
- Workspace
  - 5 machines + report + vpn
- tools and locations
- zshrc



DEMYSTIFYING METASPLOIT RESTRICTIONS

- allowed to use on one target
  - Auxiliary, Exploit, and Post
  - Meterpreter payload
- unlimited to use
  - multi handler (aka exploit/multi/handler)
  - msfvenom
  - pattern_create and pattern_offset

Wholesome Advice



- unlimited breaks
- skip after 2 hours
- 24 reverts
- All are intentionally vulnerable machines
- ippsec.rocks

PHASE 5
THE REPORT

Reporting

24 HOURS

More than enough to write your report

SAMPLE REPORT & VIDEOS

- OSCP Official sample report
- How to Write OSCP Report - Conda
- OSCP Report made easy - Michael LaSalvia
- Writing a Pentest Report - TheCyberMentor

SCREENSHOTS!

include as much screenshots as possible

COMPREHENSIVE

include all steps, commands and output

Exploit Code

- THE MODIFIED EXPLOIT CODE
- THE URL TO THE ORIGINAL EXPLOIT CODE
- THE COMMAND USED TO GENERATE ANY SHELLCODE (IF APPLICABLE)
- HIGHLIGHTED CHANGES YOU HAVE MADE
- AN EXPLANATION OF WHY THOSE CHANGES WERE MADE

Takeaway

OSCP is not an exam. It's a journey. Cherish your way into it.

FAQ

IS PROGRAMMING SKILLS MANDATORY?

Recommended, but not mandatory.

WHAT SCRIPTING KNOWLEDGE IS NEEDED, TO WHAT EXTENT

Python and Bash

HOW MANY HOURS PER DAY DID YOU SPEND?

4-6 hours/day for 2 months
16 Hours/day for a month

Shoot your Queries

 akoffsec

 root@adithyanak.com

 akoffsec

 akoffsec

 akoffsec

 Adithyan AK

 adithyanak.com

 adithyan_ak