

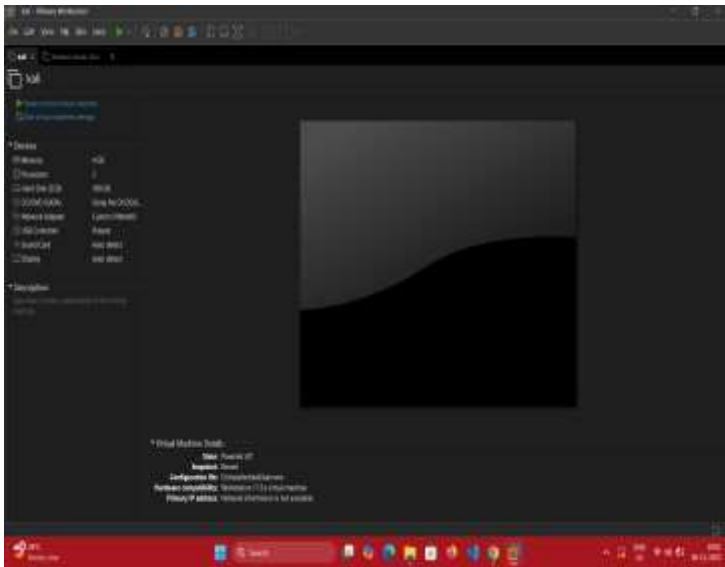
LearnBay

Secure Lab Lite
Report

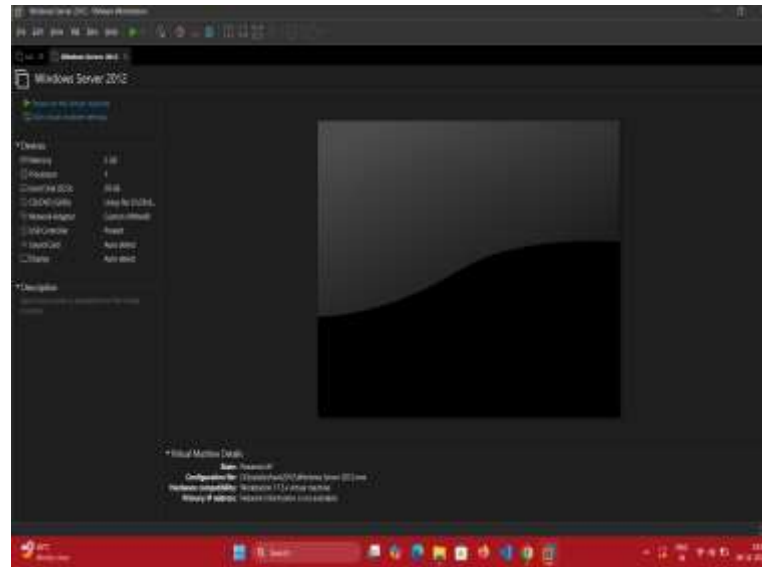
Souvik Mondal

Objective

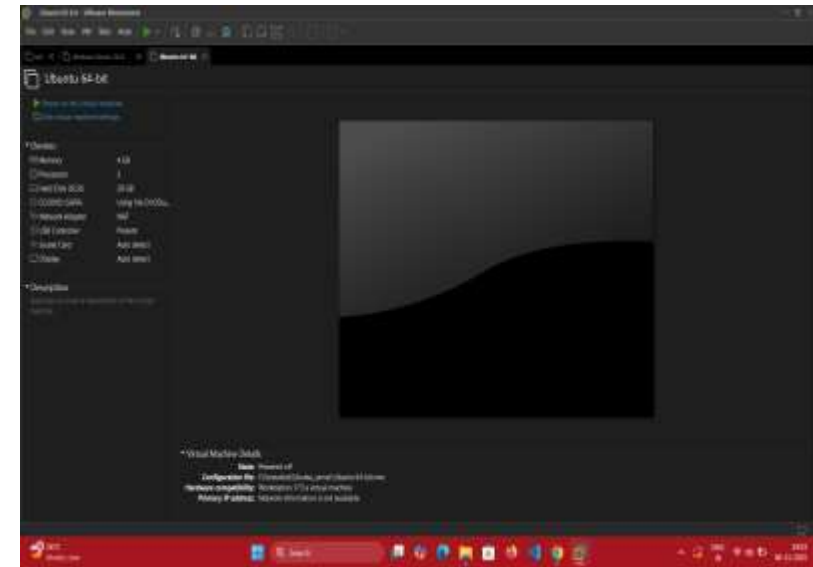
- Build a tiny lab (Ubuntu + Windows + Kali), run network discovery, find one vulnerability, fix it, and demonstrate results.



Kali



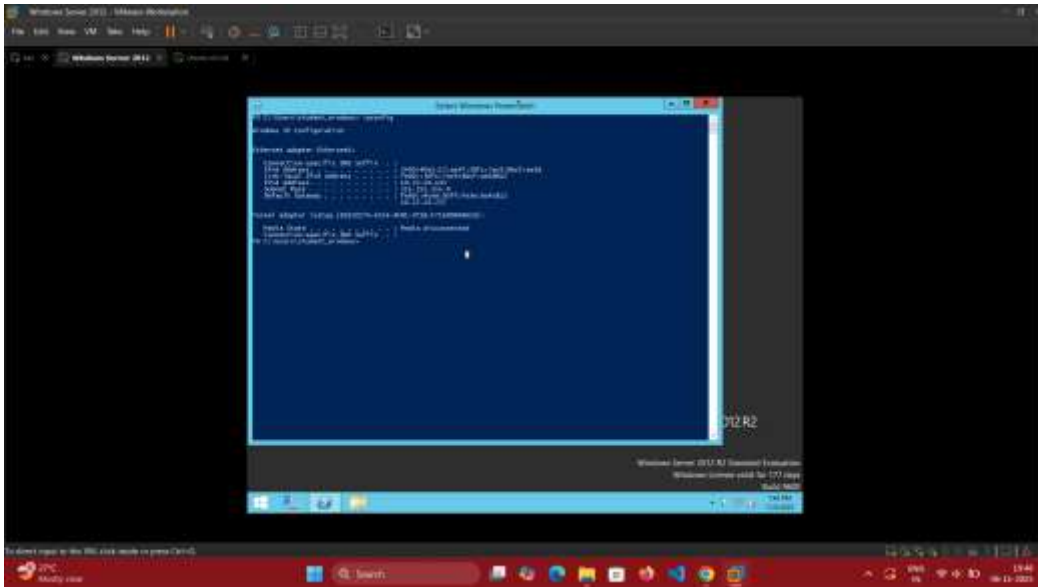
Windows Server



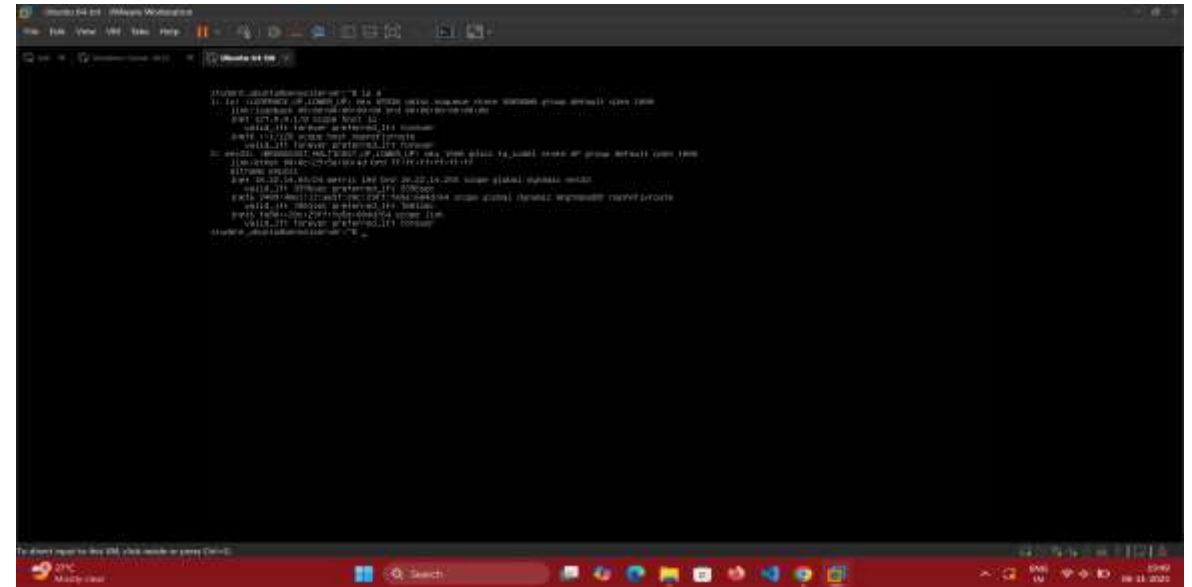
Ubuntu

Setup

- Ubuntu Server 22.04 - 10.22.14.64 (before restart) | 10.116.247.64 (after restart)
- Windows Server - 10.22.14.143 (before restart) | 1.116.247.143 (after restart)
- Kali – 10.116.247.159
- Network: Custom: Specific Virtual Network (VMnet0)



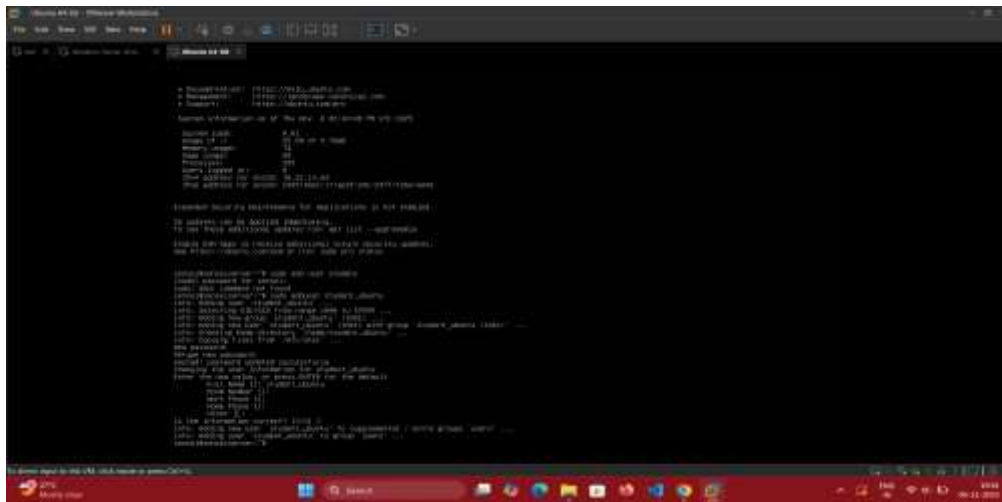
Windows Server



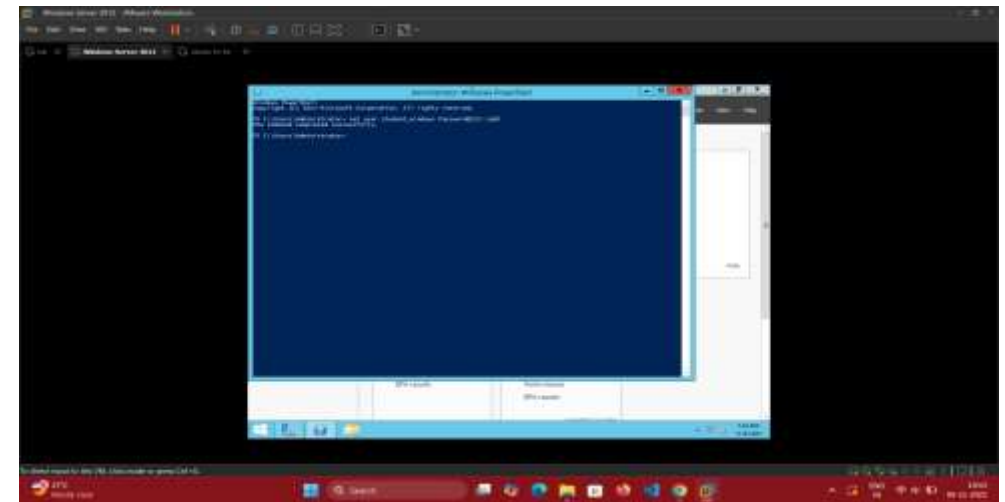
Ubuntu

Actions performed

- Basic OS setup:
- Ubuntu: created non-admin user `student_windows`
- Windows: created non-admin user `student_ubuntu`



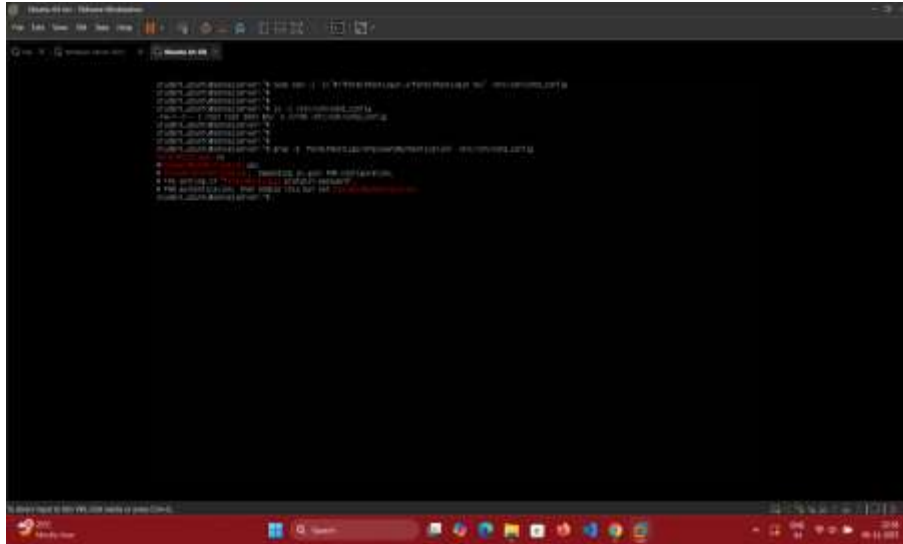
Ubuntu



Windows Server

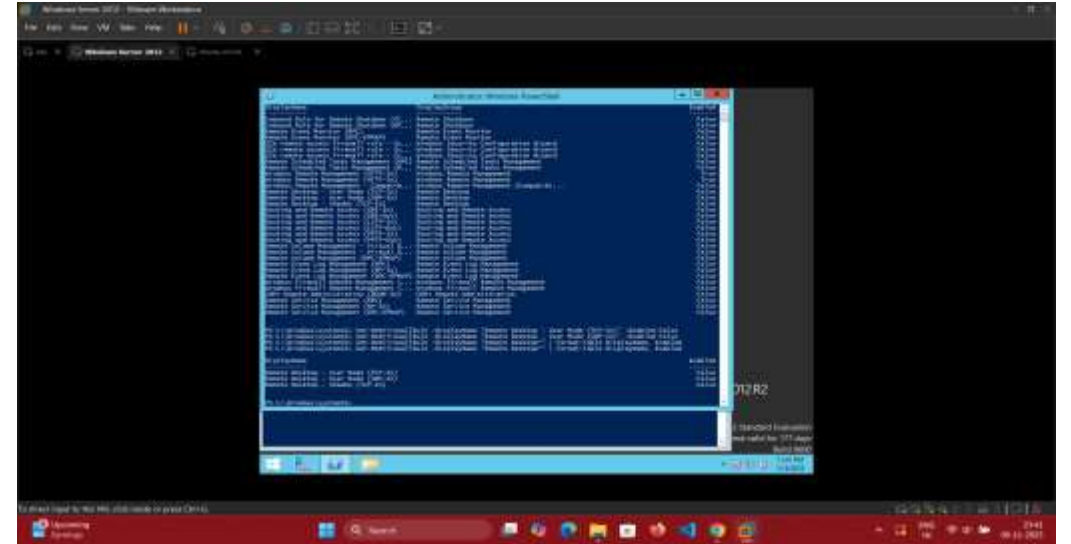
Hardening

- Disabled SSH root login on Ubuntu (`PermitRootLogin no`)
- Disabled Remote Desktop on Windows via registry and firewall

A terminal window on a Ubuntu system showing the configuration of the /etc/ssh/sshd_config file. The configuration includes several lines for Match blocks and a global section. The Match blocks are for 'Match Host' and 'Match User'. The global section includes 'PermitRootLogin no', 'PermitTTY no', and 'X11Forwarding no'. The terminal output shows the configuration being applied and the SSH service being restarted.

```
if user is ubuntu sshd@ubuntu:~$ cat /etc/ssh/sshd_config | grep -E 'PermitRootLogin|PermitTTY|X11Forwarding'
```

Ubuntu



Windows Server

Discovery

- Nmap quick scan: ``nmap -Pn -O -p- -sV --min-rate=100 10.116.247.64 10.116.247.143``
- - Output confirmed SSH open on Ubuntu and RDP open on Windows (before fixes)

Fix applied

- Ubuntu: `PermitRootLogin no` then `systemctl restart sshd`.
- Windows: Disabled RDP and disabled Remote Desktop firewall rules.

Result

Re-scanned with Nmap:

1. RDP port no longer reachable
2. SSH root login disabled.