



RESEARCH AND BUILD TOOLS TO SUPPORT THE NETWORK

SYSTEM PENETRATION TESTING PROCESS

GSP24IA07



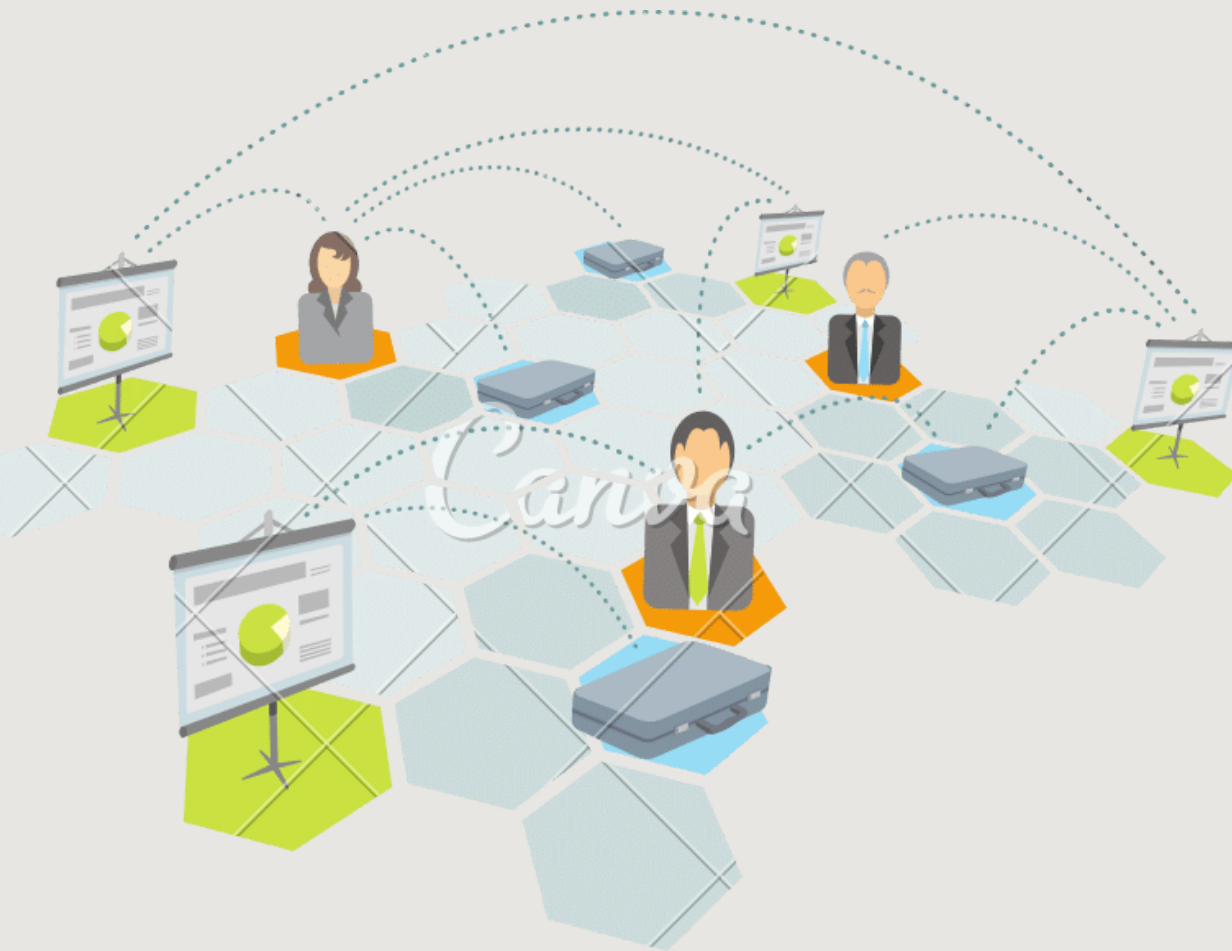
PROJECT INFORMATION

Supervisor :

MR. Hồ Hải



Members :



Nguyen Dinh Quan - SE151007

Tran Minh Nhat - SE150956

Nguyen Minh Tam - SE151041

Nguyen Thanh Nhan - SE151405

Content OutLine

1. Project penetration testing

1.1 Policy

1.2 Network Model

2. CheckList

3. Demo

3.1 Scenario 1

3.2 Scenario 2

4. Conclusion



Policy



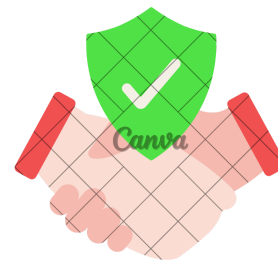
***Learning and
Knowledge Update***

Security Testing

***Reporting and
Evaluation***

***Ethics and
Responsibility***

***Pentest demo
policy***



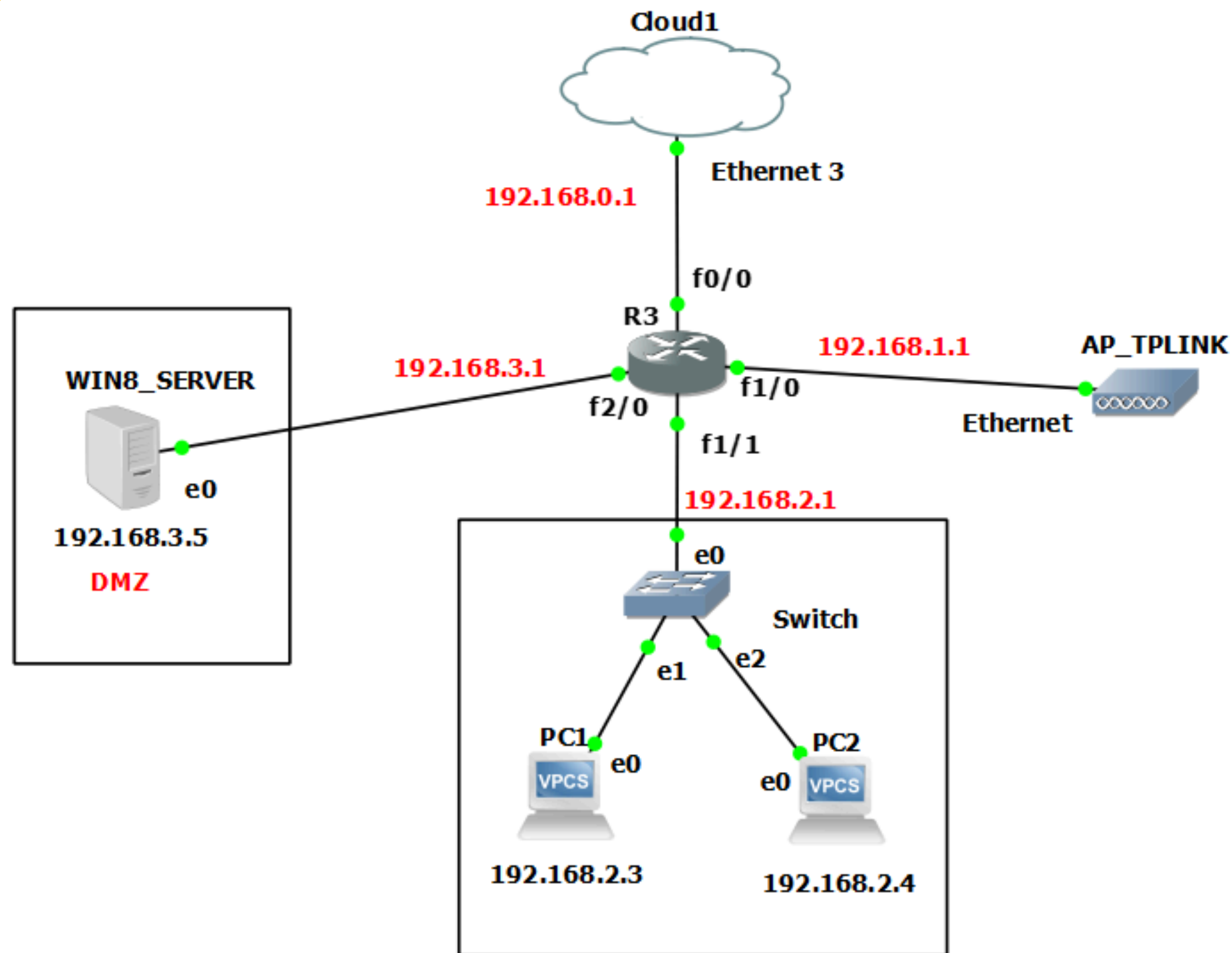
***Agreement and
Legal Compliance***

***Recording and
Information Security***

Scope Definition



1.2 Network Model



Virtual device

- Router
- Switch

VMware

- Windows 8.1(Winserver)
- PC1 PC2 are vpcs are internal machines

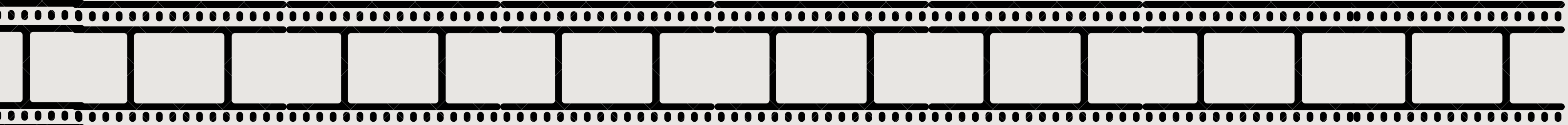
Real equipment

- AccessPoint

2. CheckList

- ***Port Scanning***
- ***List open ports***
- ***List suspicious ports that may be stealth***
- ***Password Service Strength Testing***
- ***Examine the use of standard and nonstandard protocols***
- ***Examine the patches applied to the system***
- ***Create Network Modem***
- ***Check for BruteFroce***
- ***Check for backdock***
- ***Check for default Credential***
- ***Check for weak encryption***
- ***Check Router***
- ***Check Access Point***
- ***Check for DOS***
- ***Test for port (23)***
- ***Check for FTP vulnerabilities***

3. Demo



Penetration Tester

Made by: Nhat, Nhan, Quan, Tam

Penetration Tester

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MAIN MENU

1. Wireless Network

2. Scan Information

3. Exploit

4. Report

5. Exit

Input number:

Penetration Tester

Made by: Nhat, Nhan, Quan, Tam

MAIN MENU

1. Wireless Network

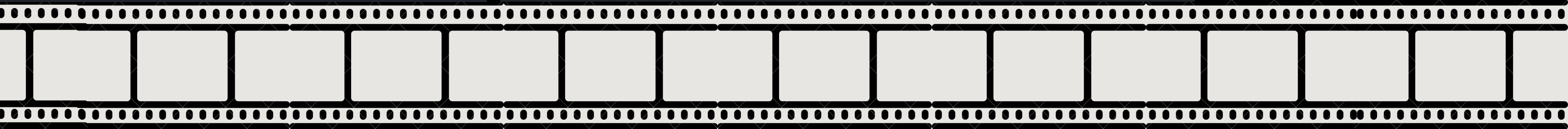
2. Scan Information

3. Exploit

4. Report

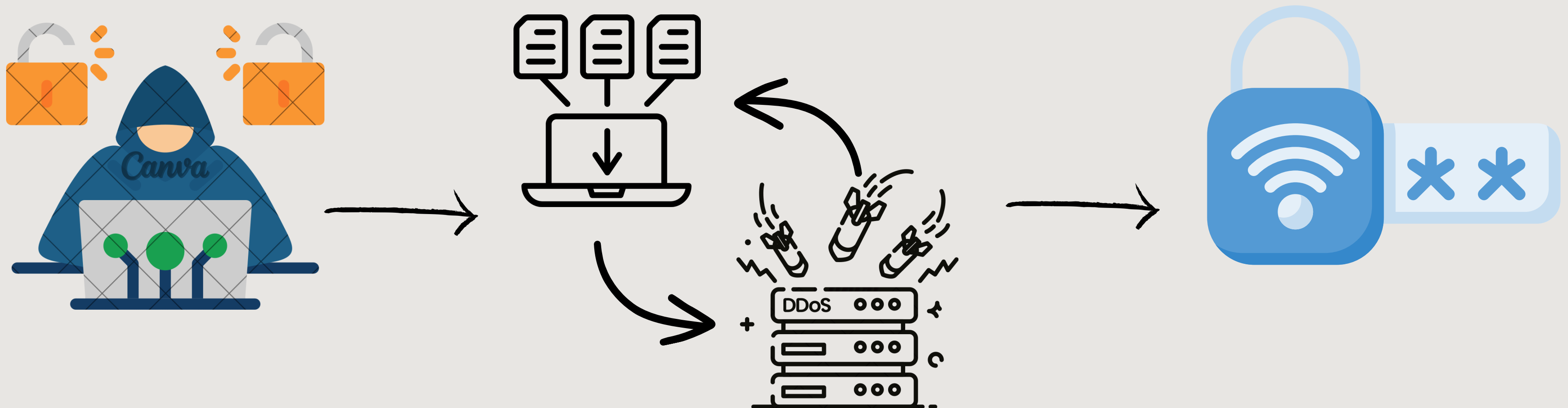
5. Exit

Input number:



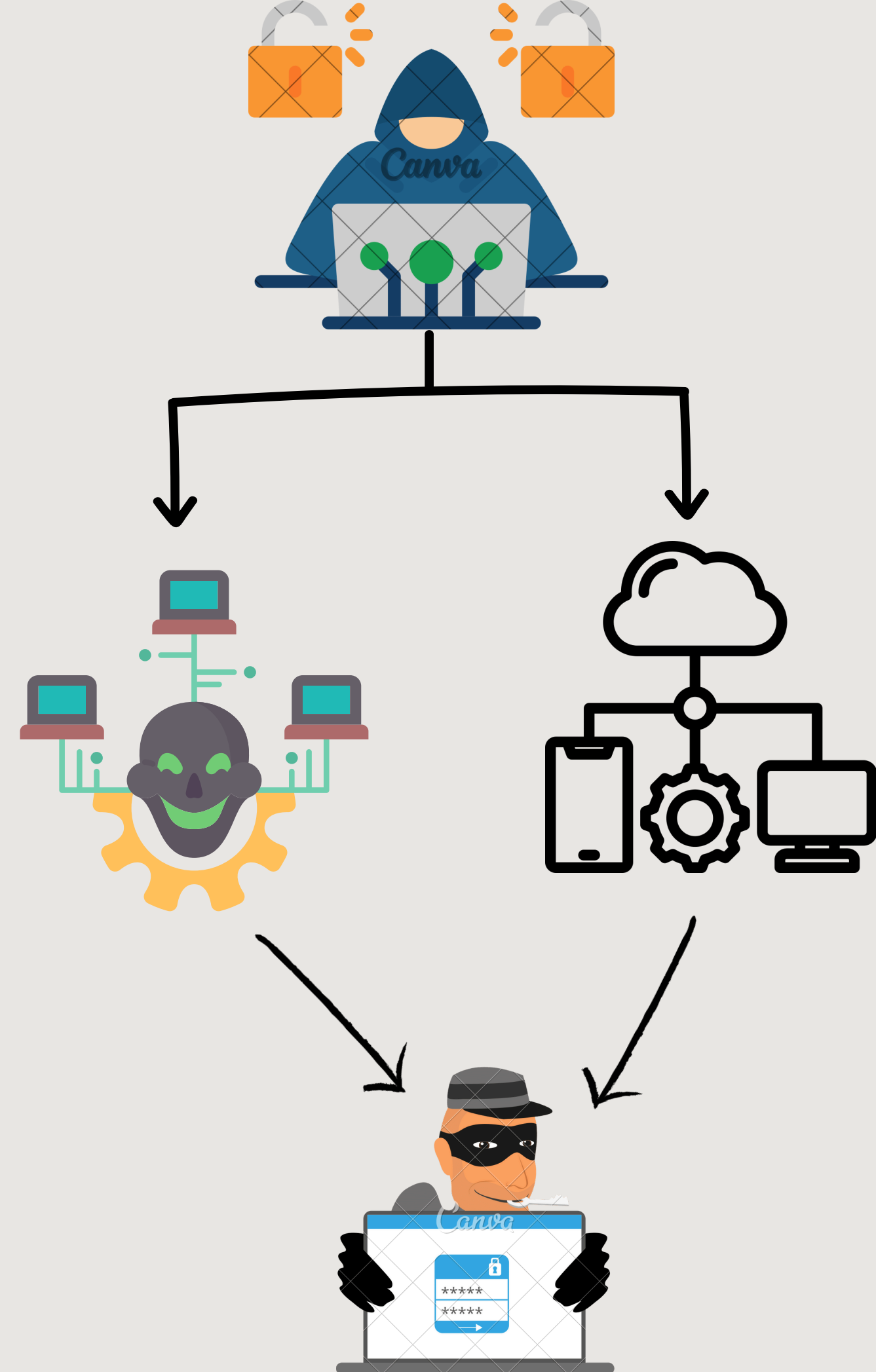
3.1 Sceniro 1

In the first scenario, we will use GNS3 to operate a virtual network model using virtualized routers to perform IP allocation for Access Points and the implementation environment is based on no firewall. This method is often implemented and tested to attack and test the safety and security of network devices. Specifically about passwords and traffic.



3.2 Sceniro 2

After Scenario 1, we already have the access point's wifi password because of the laxity in setting security policies for network devices, so we can scan the devices that are connected to the network infrastructure. From there, we can identify important locations such as routers or dmz servers and internal devices. Because this is a plan to follow a process that has been simulated, we have a diagram of the The network device then recognizes the router and performs testing to obtain the username and password in the device's web config to change the device's settings.





4. *Report*



PN Report

1. Scan Multiple Subnets: 192.168.1.0/24

- Active hosts: 192.168.1.1

2. Scan Services: 3

- Active ports:

21/tcp - state:filtered - service:ftp

22/tcp - state:filtered - service:ssh

23/tcp - state:open - service:telnet Cisco IOS telnetd

25/tcp - state:filtered - service:smtp

80/tcp - state:open - service:http Cisco IOS http config

443/tcp - state:filtered - service:https

Wifi: Tenda_465F30

- BSSID: C8:3A:35:46:5F:30

- Channel: 6

- Encrypt: WPA2 WPA

- Password: *12345678* => Weak

Router: 7200 Software (C7200-ADVENTERPRISEK9-M)

- IP: 192.168.1.1

- Version: 12.4(24)TS

- Vulnerability: Default Credentials Attack

+ Username : admin

+ Password : admin

Thank for listening!

PENNET TEAM

