

Practical Session: Social Engineering - Phishing and Baiting

1. STUDENT WORKSHEET

Activity 1: Video Reflection Watch the two video clips provided and fill in the table below:

| Attack Type | Technique Used | How Victim Reacted | Red Flags Noticed |
|-------------|----------------|--------------------|-------------------|
| | | | |
| | | | |

Activity 2: Mock Phishing Email Creation Create a basic phishing email targeting a student or staff member. Use persuasive language.

Scenario Given: You want the recipient to believe they need to reset their university portal password.

Write your mock phishing email below:

Subject:

Body:

Link (optional):

Lab Exercise – Part A: Phishing Email Analysis Analyze the provided phishing email samples and answer:

1. What is the **goal** of the email?
2. What **psychological trick** is being used? 3. ## List 2 signs that indicate this is a phishing attempt: -
3. What type of phishing attack is this (e.g., spear phishing, whaling, etc.)?

2. FLOWCHART TEMPLATE: "Planning a Phishing Attack"

Students should sketch a flowchart showing the stages of a phishing attack:

Start:

- Research target (LinkedIn, company website)
- Create phishing email/webpage
- Send to target
- Target opens email/clicks link
- Credentials/data entered
- Data harvested
- Attacker access/use/exfiltrate data

End

(Students can draw this or use sticky notes to represent each step.)

3. QUIZ: End-of-Class Assessment

Name: _____ Date: _____

Instructions: Answer the following questions. Circle the correct answer where applicable.

1. What is phishing? \ a) Sending gifts via email \ b) Tricking someone into giving sensitive info via fake messages \ c) Fishing for bugs in code

2. Which of the following is a red flag in an email? \ a) Personalized greeting \ b) Grammar errors and urgent tone \ c) Domain-matched email address

3. What is baiting? \ a) Offering fake rewards or media (e.g. USBs) to trick victims \ b) Waiting patiently for a victim to click \ c) Sending a mass email to many people

4. List two techniques hackers use in phishing attacks:

5. What tool can simulate a phishing attack in a controlled lab?

[BONUS] What is the best way to avoid phishing?

4. INSTRUCTOR CHEAT SHEET (SET DEMO)

Social-Engineer Toolkit (SET) Basic Phishing Demo on Kali Linux

Step-by-Step:

1. Open terminal, type:

```
sudo setoolkit
```

1. Select:

From the main menu:

- 1. Social-Engineering Attacks - 1. Spear-Phishing Attack Vectors - 2. FileFormat Attack - 13. Adobe PDF Embedded EXE Social Engineering

1. When prompted:

2. Choose a safe payload (or cancel before completion)
3. SET will generate a malicious-looking PDF
4. Save location: `/root/.set/reports/`
5. Do not send or open the PDF — only demonstrate that such a file can be crafted.

Alternate Safe Demo: Use:

- 5. Mass Mailer Attack
- Send a mock email (no attachment or malicious link) to demonstrate phishing email content only

Understanding LHOST and LPORT

- **LHOST:** Local Host – the attacker's IP address (your Kali machine)
- To find it, run: `ip a`
- Look for the IP under your active interface (e.g., `192.168.56.x`)
- **LPORT:** Local Port – the port your listener will use (e.g., `4444`)
- Default is usually `4444`, but you can use any free port above 1024
- To check availability: `netstat -tuln | grep 4444`

Example: If Kali IP is `192.168.56.101`, and you use port `4444`:

```
LHOST = 192.168.56.101
LPORT = 4444
```

The payload will connect back to that IP and port, opening a shell.

Ensure your **Kali VM and target VM are on the same network** (e.g., Host-Only Adapter).

Warnings:

- Ensure this is in a **closed lab network**
- **NEVER** send malicious files or emails to real users
- Use only for **educational demonstration**

Let students reflect on what they learned using these tools and what ethical guidelines must always be followed.