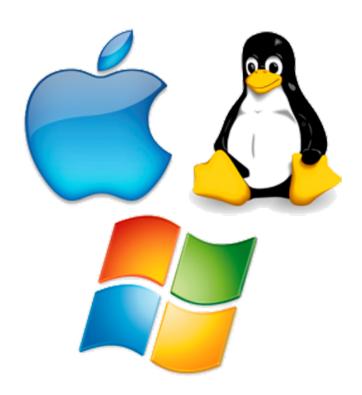


$\begin{array}{c} {\rm Technical\ report} \\ {\bf Operating\ Systems\ ST0257} \end{array}$



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1 Disclaimer

A penetration test is considered a snapshot in time. The findings and recommendations reflects the information gathered during the assessment and not any changes or modifications made outside of that period.

Time-limited engagements do not allow for a full evaluation of all security controls. **EAFIT** prioritized the assessment to identify the weakest security controls an attacker would exploit. **EAFIT** recommends conducting similar assessments on an annual basis by internal or third-party assessors to ensure the continued success of the controls.

1.1 Confidentiality Statement

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1.2 Contact info

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1.3 Assesment overview

From Date 1 to Date 2, **EAFIT** engaged Penetration tests to evaluate the security posture of its infrastructure compared to current industry best practices. All testing performed is based on the NIST SP 800-115 Technical Guide to Information Security Testing and Assessment, OWASP Testing Guide (v4), and customized testing frameworks.

Phases conducted for penetration testing are the following:

- Planning and preparation.
- Reconnaissance / Discovery.
- Vulnerability Enumeration / Analysis.
- Initial Exploitation.
- Expanding Foothold / Deeper Penetration.
- Cleanup.
- Report Generation.





2 Antecedents

The following document takes all the processes and results given by the audit made to the machine **Operating** Systems ST0257 from the platform HackTheBox.



Figure 1: Details of the machine

 \mathbf{URL}

https://app.hackthebox.com/machines/98

2.1 considerations

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2.2 examples

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3 Objectives

The idea is to check the machine state of the machine Operating Systems ST0257.

3.1 considerations

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3.2 results

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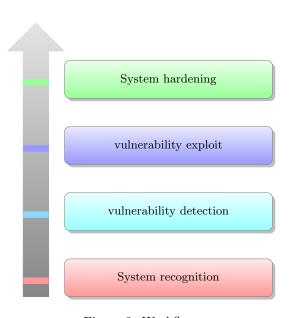


Figure 2: Workflow





4 Vulnerability analysis

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4.1 Initial Recognition

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```
) sudo nmap -sn 192.168.0.0/24
[sudo] password for youngermaster:
Starting Nmap 7.92 ( https://nmap.org ) at 2022-01-23 23:28 -05
Nmap scan report for 192.168.0.1
Host is up (0.0042s latency).
MAC Address: 00:00:CA:11:22:33 (Arris Group)
Nmap scan report for 192.168.0.6
Host is up.
Nmap done: 256 IP addresses (2 hosts up) scanned in 2.29 seconds

A > ~/GitHub/Youngermaster/Pentesting-Report-Template > on  P main !3
```

4.2 Improvement

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```
# This function is taken from S4vitar's blog.
# https://s4vitar.github.io/bspwm-configuration-files/

ports="$(cat $1 | grep -oP '\d{1,5}/open' | awk '{print $1}' FS='/' | xargs | tr ' ' ',')"

ip_address="$(cat $1 | grep -oP '\d{1,3}\.\d{1,3}\.\d{1,3}\.\d{1,3}\.\d{1,3}\' | sort -u | head -n 1)"

echo -e "\n[*] Extracting information...\n" > extractPorts.tmp

echo -e "\t[*] IP Address: $ip_address" >> extractPorts.tmp

echo -e "\t[*] Open ports: $ports\n" >> extractPorts.tmp

echo *ports | tr -d '\n' | xclip -sel clip

echo -e "[*] Ports copied to clipboard\n" >> extractPorts.tmp

cat extractPorts.tmp; rm extractPorts.tmp
```

Code 1: This script allow us to extract nmap generated info





Donec ut tincidunt dolor. Curabitur sit amet porttitor magna, nec consectetur mi. Praesent quis congue tellus, a tincidunt mauris. Aenean sed luctus enim. Donec ut maximus nisi, sed malesuada erat. Aliquam sollicitudin ullamcorper sem vitae ultrices. Sed iaculis enim egestas, suscipit arcu ac, lacinia risus. Proin scelerisque mi eu feugiat euismod:

```
TCP Ports
593, 1337
```

Vivamus vitae elit porta, tempor justo tincidunt, accumsan ligula. Proin nec magna sit amet leo dignissim sollicitudin sit amet ut quam:

Figure 3: These are the results of lorem ipsum

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