LEAD2PASS

First Test, First Pass!

Vendor: EC-Council

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QUESTION 1

Sophia is a shopping enthusiast who spends significant time searching for trendy outfits online. Clark, an attacker, noticed her activities several times and sent a fake email containing a deceptive page link to her social media page displaying all-new and trendy outfits. In excitement, Sophia clicked on the malicious link and logged in to that page using her valid credentials. Which of the following tools is employed by Clark to create the spoofed email?

A. Evilginx
B. Slowloris
C. PLCinject
D. PyLoris

Answer: A
Explanation:
Phishing Tools Phishing tools can be used by attackers to generate fake login pages to capture usernames and passwords, send spoofed emails, and obtain the victim’s IP address and session cookies. This information can further be used by the attacker, who will use it to impersonate a legitimate user and launch further attacks on the target organization :=>Tools like BLACKEYE / PhishX / PhishX / Trape / Evilginx

QUESTION 2

John, a disgruntled ex-employee of an organization, contacted a professional hacker to exploit the organization. In the attack process, the professional hacker installed a scanner on a machine belonging to one of the victims and scanned several machines on the same network to identify vulnerabilities to perform further exploitation.
What is the type of vulnerability assessment tool employed by John in the above scenario?

A. Agent-based scanner
B. Network-based scanner
C. Cluster scanner
D. Proxy scanner

Answer: A
Explanation:
* Network-Based Scanner: Network-based scanners are those that interact only with the real machine where they reside and give the report to the same machine after scanning.
* Agent-Based Scanner: Agent-based scanners reside on a single machine but can scan several machines on the same network.
* Proxy Scanner: Proxy scanners are the network-based scanners that can scan networks from any machine on the network.
* Cluster scanner: Cluster scanners are similar to proxy scanners, but they can simultaneously perform two or more scans on different machines in the network.

QUESTION 3

Joel, a professional hacker, targeted a company and identified the types of websites frequently visited by its employees. Using this information, he searched for possible loopholes in these websites and injected a malicious script that can redirect users from the web page and download malware onto a victim's machine. Joel waits for the victim to access the infected web application so as to compromise the victim's machine.
Which of the following techniques is used by Joel in the above scenario?

A. Watering hole attack

B. DNS rebinding attack
C. MarioNet attack
D. Clickjacking attack

Answer: A
Explanation:
It is a type of unvalidated redirect attack whereby the attacker first identifies the most visited website of the target, determines the vulnerabilities in the website, injects malicious code into the vulnerable web application, and then waits for the victim to browse the website. Once the victim tries to access the website, the malicious code executes, infecting the victim.

QUESTION 4
Security administrator John Smith has noticed abnormal amounts of traffic coming from local computers at night. Upon reviewing, he finds that user data have been exfiltrated by an attacker. AV tools are unable to find any malicious software, and the IDS/IPS has not reported on any non-whitelisted programs.
What type of malware did the attacker use to bypass the company's application whitelisting?

A. File-less malware
B. Zero-day malware
C. Phishing malware
D. Logic bomb malware

Answer: A
Explanation:
In this scenario, the attacker used file-less malware to bypass the company's application whitelisting. File-less malware resides entirely in memory, making it difficult for antivirus software and IDS/IPS to detect. It can run in the context of a trusted process or system application, and can be delivered through various attack vectors, including phishing emails, malicious websites, or network exploits.

QUESTION 5
Dorian is sending a digitally signed email to Poly. With which key is Dorian signing this message and how is Poly validating it?

A. Dorian is signing the message with his public key, and Poly will verify that the message came from Dorian by using Dorian's private key.
B. Dorian is signing the message with Poly's private key, and Poly will verify that the message came from Dorian by using Dorian's public key.
C. Dorian is signing the message with his private key, and Poly will verify that the message came from Dorian by using Dorian's public key.
D. Dorian is signing the message with Poly's public key, and Poly will verify that the message came from Dorian by using Dorian's public key.

Answer: C
Explanation:
In digital signature, the sender signs the message using their private key, which only the sender knows. The recipient can verify that the message came from the sender by using the sender's public key. Therefore, in this scenario, Dorian is signing the email with his private key, and Poly will validate it using Dorian's public key.

QUESTION 6
Scenario: Joe turns on his home computer to access personal online banking. When he enters the URL www.bank.com, the website is displayed, but it prompts him to re-enter his credentials as if he has never visited the site before. When he examines the website URL closer, he finds that the site is not secure and the web address appears different.
What type of attack he is experiencing?

A. DHCP spoofing
B. DoS attack
C. ARP cache poisoning
D. DNS hijacking

Answer: D
Explanation:
DNS hijacking: Attacker modifies DNS queries/responses, redirects users to incorrect/malicious websites, steals sensitive information.

QUESTION 7
Boney, a professional hacker, targets an organization for financial benefits. He performs an attack by sending his session ID using an MITM attack technique. Boney first obtains a valid session ID by logging into a service and later feeds the same session ID to the target employee. The session ID links the target employee to Boney's account page without disclosing any information to the victim. When the target employee clicks on the link, all the sensitive payment details entered in a form are linked to Boney's account.
What is the attack performed by Boney in the above scenario?

A. Forbidden attack
B. CRIME attack
C. Session donation attack
D. Session fixation attack

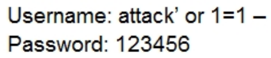
Answer: C
Explanation:
In a session donation attack, the attacker donates their own session ID to the target user. In this attack, the attacker first obtains a valid session ID by logging into a service and later feeds the same session ID to the target user. This session ID links a target user to the attacker's account page without disclosing any information to the victim. When the target user clicks on the link and enters the details (username, password, payment details, etc.) in a form, the entered details are linked to the attacker's account. To initiate this attack, the attacker can send their session ID using techniques such as cross-site cooking, an MITM attack, and session fixation. A session donation attack involves the following steps.

QUESTION 8
Kevin, a professional hacker, wants to penetrate CyberTech Inc's network. He employed a technique, using which he encoded packets with Unicode characters. The company's IDS cannot recognize the packets, but the target web server can decode them.
What is the technique used by Kevin to evade the IDS system?

A. Session splicing
B. Urgency flag
C. Obfuscating
D. Desynchronization

Answer: C
Explanation:
Obfuscating is an IDS evasion technique used by attackers to encode the attack packet payload in such a way that the destination host can only decode the packet but not the IDS. Using Unicode characters, an attacker can encode attack packets that the IDS would not recognize but which an IIS web server can decode.

QUESTION 9
Suppose that you test an application for the SQL injection vulnerability. You know that the backend database is based on Microsoft SQL Server. In the login/password form, you enter the following credentials:


Username: attack' or 1=1 –
Password: 123456

Based on the above credentials, which of the following SQL commands are you expecting to be executed by the server, if there is indeed an SQL injection vulnerability?

A. select * from Users where UserName = 'attack' ' or 1=1 -- and UserPassword = '123456'
B. select * from Users where UserName = 'attack' or 1=1 -- and UserPassword = '123456'
C. select * from Users where UserName = 'attack or 1=1 -- and UserPassword = '123456'
D. select * from Users where UserName = 'attack' or 1=1 --' and UserPassword = '123456'

Answer: D
Explanation:
SELECT Count(*) FROM Users WHERE UserName='Blah' or 1=1 --' AND Password='Springfield'
SQL Query Executed : SELECT Count(*) FROM Users WHERE UserName='Blah' or 1=1
Code after -- are now comments : --' AND Password='Springfield'

QUESTION 10
Which of the following commands checks for valid users on an SMTP server?

A. RCPT
B. CHK
C. VRFY
D. EXPN

Answer: C
Explanation:
The VRFY commands enables SMTP clients to send an invitation to an SMTP server to verify that mail for a selected user name resides on the server. The VRFY command is defined in RFC 821.The server sends a response indicating whether the user is local or not, whether mail are going to be forwarded, and so on. A response of 250 indicates that the user name is local; a response of 251 indicates that the user name isn't local, but the server can forward the message. The server response includes the mailbox name.

QUESTION 11
Bella, a security professional working at an IT firm, finds that a security breach has occurred while transferring important files. Sensitive data, employee usernames, and passwords are shared in plaintext, paving the way for hackers to perform successful session hijacking. To address this situation, Bella implemented a protocol that sends data using encryption and digital certificates.

Which of the following protocols is used by Bella?

A. FTPS
B. FTP
C. HTTPS
D. IP

Answer: A
Explanation:
FTPS includes full support for the TLS and SSL cryptographic protocols, including the use of server-side public key authentication certificates and client-side authorization certificates. It also supports compatible ciphers, including AES, RC4, RC2, Triple DES, and DES. It further supports hash functions SHA, MD5, MD4, and MD2.

QUESTION 12
John wants to send Marie an email that includes sensitive information, and he does not trust the network that he is connected to. Marie gives him the idea of using PGP. What should John do to communicate correctly using this type of encryption?

A. Use his own private key to encrypt the message.
B. Use his own public key to encrypt the message.
C. Use Marie's private key to encrypt the message.
D. Use Marie's public key to encrypt the message.

Answer: D
Explanation:
PGP (Pretty Good Privacy) is an encryption software that can be used to encrypt and decrypt electronic communications, such as emails. PGP uses a combination of symmetric-key and public-key encryption to provide confidentiality and authenticity to the communications.

QUESTION 13
In the Common Vulnerability Scoring System (CVSS) v3.1 severity ratings, what range does medium vulnerability fall in?

A. 4.0-6.0
B. 3.9-6.9
C. 3.0-6.9
D. 4.0-6.9

Answer: D
Explanation:
CVSS v3.0 Ratings
Low 0.1-3.9
Medium 4.0-6.9
High 7.0-8.9
Critical 9.0-10.0
https://nvd.nist.gov/vuln-metrics/cvss

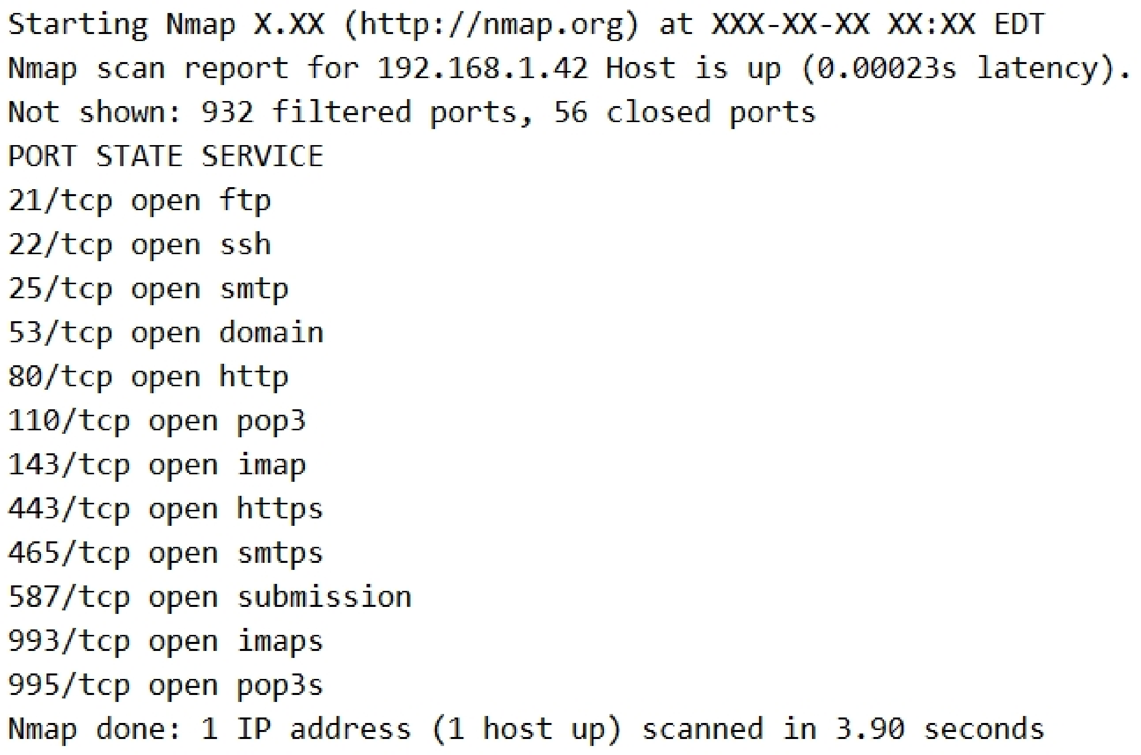
QUESTION 14
Bill is a network administrator. He wants to eliminate unencrypted traffic inside his company's network. He decides to setup a SPAN port and capture all traffic to the datacenter. He

immediately discovers unencrypted traffic in port UDP 161.
What protocol is this port using and how can he secure that traffic?

A. RPC and the best practice is to disable RPC completely.
B. SNMP and he should change it to SNMP V3.
C. SNMP and he should change it to SNMP V2, which is encrypted.
D. It is not necessary to perform any actions, as SNMP is not carrying important information.

Answer: B
Explanation:
SNMP (Simple Network Management Protocol) is a protocol used for managing and monitoring network devices, such as routers, switches, and servers. SNMP uses UDP port 161 for communication. However, SNMP V1 and V2 use clear text community strings for authentication, making them vulnerable to eavesdropping and other attacks.
To secure SNMP traffic, Bill should change the SNMP version to SNMP V3, which provides enhanced security features, such as authentication, encryption, and message integrity. SNMP V3 requires a username and password for authentication, and it supports encryption of the data being transmitted.

QUESTION 15
Consider the following Nmap output:



```
Starting Nmap X.XX (http://nmap.org) at XXX-XX-XX XX:XX EDT
Nmap scan report for 192.168.1.42 Host is up (0.00023s latency).
Not shown: 932 filtered ports, 56 closed ports
PORT STATE SERVICE
21/tcp open ftp
22/tcp open ssh
25/tcp open smtp
53/tcp open domain
80/tcp open http
110/tcp open pop3
143/tcp open imap
443/tcp open https
465/tcp open smtps
587/tcp open submission
993/tcp open imaps
995/tcp open pop3s
Nmap done: 1 IP address (1 host up) scanned in 3.90 seconds
```

What command-line parameter could you use to determine the type and version number of the web server?

A. -sV
B. -sS
C. -Pn

D. -V

Answer: A
Explanation:
https://nmap.org/book/man-briefoptions.html
-sV: Probe open ports to determine service/version info

QUESTION 16
Bob was recently hired by a medical company after it experienced a major cyber security breach. Many patients are complaining that their personal medical records are fully exposed on the Internet and someone can find them with a simple Google search. Bob's boss is very worried because of regulations that protect those data.
Which of the following regulations is mostly violated?

A. PCI DSS
B. PII
C. ISO 2002
D. HIPPA/PHI

Answer: D
Explanation:
HIPAA/PHI: The Health Insurance Portability and Accountability Act (HIPAA) establishes rules and regulations to safeguard protected health information (PHI). It applies to healthcare providers, health plans, and other entities handling patient data to ensure its confidentiality, integrity, and availability.

QUESTION 17
Infecting a system with malware and using phishing to gain credentials to a system or web application are examples of which phase of the ethical hacking methodology?

A. Scanning
B. Gaining access
C. Maintaining access
D. Reconnaissance

Answer: B
Explanation:
The ethical hacking methodology consists of five phases, which are: reconnaissance, scanning, gaining access, maintaining access, and covering tracks.
The phase that involves infecting a system with malware and using phishing to gain credentials to a system or web application is the gaining access phase. In this phase, the attacker attempts to gain unauthorized access to the target system or network by exploiting vulnerabilities, misconfigurations, or weaknesses in the security controls.