

CompTIA

Exam Questions CS0-003

CompTIA CySA+ Certification Beta Exam



NEW QUESTION 1

A security analyst recently joined the team and is trying to determine which scripting language is being used in a production script to determine if it is malicious. Given the following script:

```
foreach ($user in Get-Content .\this.txt)
{
    Get-ADUser $user -Properties primaryGroupID |select-object primaryGroupID
    Add-ADGroupMember "Domain Users" -Members $user
    Set-ADUser $user -Replace @{primaryGroupID=513}
}
```

Which of the following scripting languages was used in the script?

- A. PowerShell
- B. Ruby
- C. Python
- D. Shell script

Answer: A

Explanation:

The script uses PowerShell syntax, such as cmdlets, parameters, variables, and comments. PowerShell is a scripting language that can be used to automate tasks and manage systems.

NEW QUESTION 2

Which of the following would help to minimize human engagement and aid in process improvement in security operations?

- A. OSSTMM
- B. SIEM
- C. SOAR
- D. QVVASP

Answer: C

Explanation:

SOAR stands for security orchestration, automation, and response, which is a term that describes a set of tools, technologies, or platforms that can help streamline, standardize, and automate security operations and incident response processes and tasks. SOAR can help minimize human engagement and aid in process improvement in security operations by reducing manual work, human errors, response time, or complexity. SOAR can also help enhance collaboration, coordination, efficiency, or effectiveness of security operations and incident response teams.

NEW QUESTION 3

Which of the following is described as a method of enforcing a security policy between cloud customers and cloud services?

- A. CASB
- B. DMARC
- C. SIEM
- D. PAM

Answer: A

Explanation:

A CASB (Cloud Access Security Broker) is a security solution that acts as an intermediary between cloud users and cloud providers, and monitors and enforces security policies for cloud access and usage. A CASB can help organizations protect their data and applications in the cloud from unauthorized or malicious access, as well as comply with regulatory standards and best practices. A CASB can also provide visibility, control, and analytics for cloud activity, and identify and mitigate potential threats¹²

The other options are not correct. DMARC (Domain-based Message Authentication, Reporting and Conformance) is an email authentication protocol that helps email domain owners prevent spoofing and phishing attacks by verifying the sender's identity and instructing the receiver how to handle unauthenticated messages³⁴ SIEM (Security Information and Event Management) is a security solution that collects, aggregates, and analyzes log data from various sources across an organization's network, such as applications, devices, servers, and users, and provides real-time alerts, dashboards, reports, and incident response capabilities to help security teams identify and mitigate cyberattacks⁵⁶ PAM (Privileged Access Management) is a security solution that helps organizations manage and protect the access and permissions of users, accounts, processes, and systems that have elevated or administrative privileges. PAM can help prevent credential theft, data breaches, insider threats, and compliance violations by monitoring, detecting, and preventing unauthorized privileged access to critical resources⁷⁸

NEW QUESTION 4

The security team reviews a web server for XSS and runs the following Nmap scan:

```
#nmap -p80 --script http-unsafe-output-escaping 172.31.15.2

PORT      STATE      SERVICE    REASON
80/tcp    open      http       syn-ack
| http-unsafe-output-escaping:
|_ Characters [> " '] reflected in parameter id at
http://172.31.15.2/1.php?id=2
```

Which of the following most accurately describes the result of the scan?

- A. An output of characters > and " as the parameters used in the attempt
- B. The vulnerable parameter ID `http://172.31.15.2/1.php?id=2` and unfiltered characters returned

- C. The vulnerable parameter and unfiltered or encoded characters passed > and " as unsafe
D. The vulnerable parameter and characters > and " with a reflected XSS attempt

Answer: D

Explanation:

A cross-site scripting (XSS) attack is a type of web application attack that injects malicious code into a web page that is then executed by the browser of a victim user. A reflected XSS attack is a type of XSS attack where the malicious code is embedded in a URL or a form parameter that is sent to the web server and then reflected back to the user's browser. In this case, the Nmap scan shows that the web server is vulnerable to a reflected XSS attack, as it returns the characters > and " without any filtering or encoding. The vulnerable parameter is id in the URL `http://172.31.15.2/1.php?id=2`.

NEW QUESTION 5

Which of the following phases of the Cyber Kill Chain involves the adversary attempting to establish communication with a successfully exploited target?

- A. Command and control
B. Actions on objectives
C. Exploitation
D. Delivery

Answer: A

Explanation:

Command and control (C2) is a phase of the Cyber Kill Chain that involves the adversary attempting to establish communication with a successfully exploited target. C2 enables the adversary to remotely control or manipulate the target system or network using various methods, such as malware callbacks, backdoors, botnets, or covert channels. C2 allows the adversary to maintain persistence, exfiltrate data, execute commands, deliver payloads, or spread to other systems or networks.

NEW QUESTION 6

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 7

The analyst reviews the following endpoint log entry:

```
invoke-command -ComputerName clientcomputer1 -Credential xyzcompany\administrator -ScriptBlock {HOSTNAME}
clientcomputer1

invoke-command -ComputerName clientcomputer1 -Credential xyzcompany\administrator -ScriptBlock {net user /add invoke_ul}
The command completed successfully.
```

Which of the following has occurred?

- A. Registry change
B. Rename computer
C. New account introduced
D. Privilege escalation

Answer: C

Explanation:

The endpoint log entry shows that a new account named "admin" has been created on a Windows system with a local group membership of "Administrators". This indicates that a new account has been introduced on the system with administrative privileges. This could be a sign of malicious activity, such as privilege escalation or backdoor creation, by an attacker who has compromised the system.

NEW QUESTION 8

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 9

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 10

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 10

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.

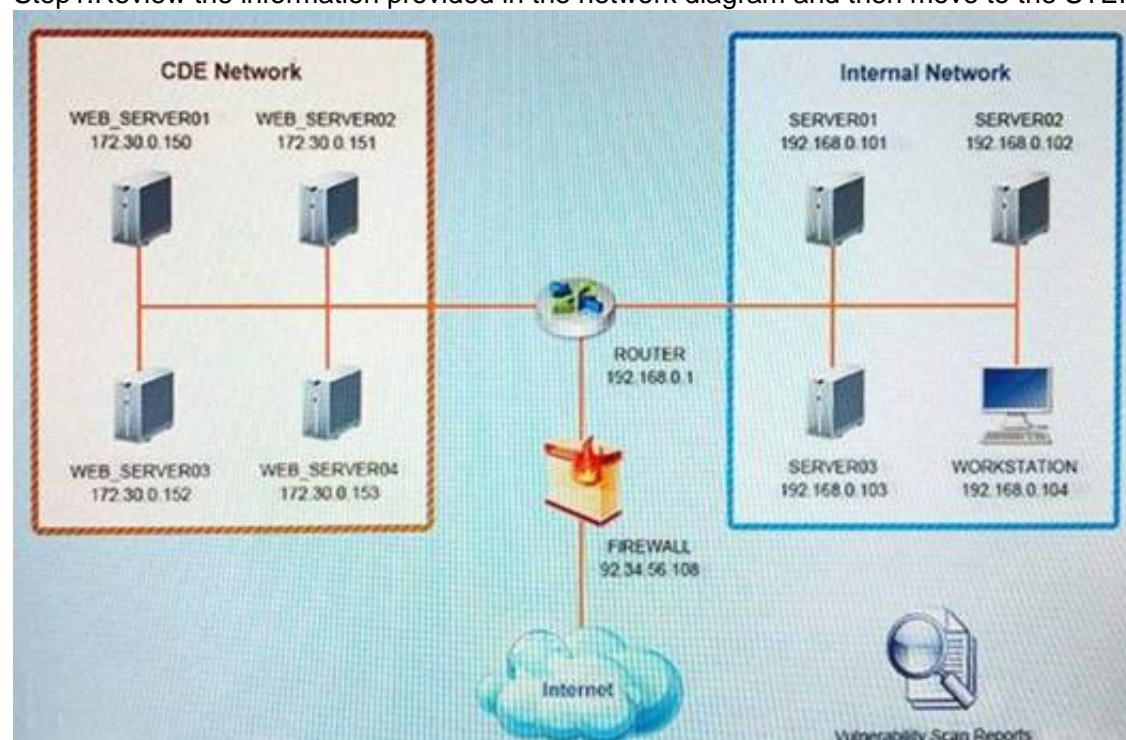
If the vulnerability is valid, the analyst must remediate the finding.

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	True Positive	Encrypt Entire Session
WEB_SERVER02	True Positive	Encrypt All Session Cookies
WEB_SERVER03	True Positive	Request Certificate from a Public CA

NEW QUESTION 13

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: (TransAtl) 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 16

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 21

Joe, a leading sales person at an organization, has announced on social media that he is leaving his current role to start a new company that will compete with his current employer. Joe is soliciting his current employer's customers. However, Joe has not resigned or discussed this with his current supervisor yet. Which of the following would be the best action for the incident response team to recommend?

- A. Isolate Joe's PC from the network
- B. Reimage the PC based on standard operating procedures
- C. Initiate a remote wipe of Joe's PC using mobile device management
- D. Perform no action until HR or legal counsel advises on next steps

Answer: D

Explanation:

The best action for the incident response team to recommend in this scenario is to perform no action until HR or legal counsel advises on next steps. This action can help avoid any potential legal or ethical issues, such as violating employee privacy rights, contractual obligations, or organizational policies. This action can also help ensure that any evidence or information collected from the employee's system or network is admissible and valid in case of any legal action or dispute. The incident response team should consult with HR or legal counsel before taking any action that may affect the employee's system or network.

NEW QUESTION 22

A security analyst is trying to identify possible network addresses from different source networks belonging to the same company and region. Which of the following shell script functions could help achieve the goal?

- A. `function w() { a=$(ping -c 1 $1 | awk -F "/" 'END{print $1}') && echo "$1 | $a" }`
- B. `function x() { b=tracert -m 40 $1 | awk 'END{print $1}' && echo "$1 | $b" }`
- C. `function y() { dig $(dig -x $1 | grep PTR | tail -n 1 | awk -F ".in-addr" '{print $1}').origin.asn.cymru.com TXT +short }`
- D. `function z() { c=$(geoiplookup $1) && echo "$1 | $c" }`

Answer: C

Explanation:

The shell script function that could help identify possible network addresses from different source networks belonging to the same company and region is:

```
function y() { dig $(dig -x $1 | grep PTR | tail -n 1 | awk -F ".in-addr" '{print $1}').origin.asn.cymru.com TXT +short }
```

This function takes an IP address as an argument and performs two DNS lookups using the dig command. The first lookup uses the -x option to perform a reverse DNS lookup and get the hostname associated with the IP address. The second lookup uses the origin.asn.cymru.com domain to get the autonomous system number (ASN) and other information related to the IP address, such as the country code, registry, or allocation date. The function then prints the IP address and the ASN information, which can help identify any network addresses that belong to the same ASN or region.

NEW QUESTION 23

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 canary⁴ 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 25

During an extended holiday break, a company suffered a security incident. This information was properly relayed to appropriate personnel in a timely manner and the server was up to date and configured with appropriate auditing and logging. The Chief Information Security Officer wants to find out precisely what happened. Which of the following actions should the analyst take first?

- A. Clone the virtual server for forensic analysis
- B. Log in to the affected server and begin analysis of the logs
- C. Restore from the last known-good backup to confirm there was no loss of connectivity
- D. Shut down the affected server immediately

Answer: A

Explanation:

The first action that the analyst should take in this case is to clone the virtual server for forensic analysis. Cloning the virtual server involves creating an exact copy or image of the server's data and state at a specific point in time. Cloning the virtual server can help preserve and protect any evidence or information related to the security incident, as well as prevent any tampering, contamination, or destruction of evidence. Cloning the virtual server can also allow the analyst to safely analyze and investigate the incident without affecting the original server or its operations.

NEW QUESTION 28

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 30

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 34

A user downloads software that contains malware onto a computer that eventually infects numerous other systems. Which of the following has the user become?

- A. Hacklivist
- B. Advanced persistent threat
- C. Insider threat
- D. Script kiddie

Answer: C

Explanation:

The user has become an insider threat by downloading software that contains malware onto a computer that eventually infects numerous other systems. An insider

threat is a person or entity that has legitimate access to an organization's systems, networks, or resources and uses that access to cause harm or damage to the organization. An insider threat can be intentional or unintentional, malicious or negligent, and can result from various actions or behaviors, such as downloading unauthorized software, violating security policies, stealing data, sabotaging systems, or collaborating with external attackers.

NEW QUESTION 38

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 41

A recent zero-day vulnerability is being actively exploited, requires no user interaction or privilege escalation, and has a significant impact to confidentiality and integrity but not to availability. Which of the following CVE metrics would be most accurate for this zero-day threat?

- A. CVSS: 31/AV: N/AC: L/PR: N/UI: N/S: U/C: H/1: K/A: L
- B. CVSS:31/AV:K/AC:L/PR:H/UI:R/S:C/C:H/I:H/A:L
- C. CVSS:31/AV:N/AC:L/PR:N/UI:H/S:U/C:L/I:N/A:H
- D. CVSS:31/AV:L/AC:L/PR:R/UI:R/S:U/C:H/I:L/A:H

Answer: A

Explanation:

This answer matches the description of the zero-day threat. The attack vector is network (AV:N), the attack complexity is low (AC:L), no privileges are required (PR:N), no user interaction is required (UI:N), the scope is unchanged (S:U), the confidentiality and integrity impacts are high (C:H/I:H), and the availability impact is low (A:L). Official References: <https://nvd.nist.gov/vuln-metrics/cvss>

NEW QUESTION 43

Which of the following is the best way to begin preparation for a report titled "What We Learned" regarding a recent incident involving a cybersecurity breach?

- A. Determine the sophistication of the audience that the report is meant for
- B. Include references and sources of information on the first page
- C. Include a table of contents outlining the entire report
- D. Decide on the color scheme that will effectively communicate the metrics

Answer: A

Explanation:

The best way to begin preparation for a report titled "What We Learned" regarding a recent incident involving a cybersecurity breach is to determine the sophistication of the audience that the report is meant for. The sophistication of the audience refers to their level of technical knowledge, understanding, or interest in cybersecurity topics. Determining the sophistication of the audience can help tailor the report content, language, tone, and format to suit their needs and expectations. For example, a report for executive management may be more concise, high-level, and business-oriented than a report for technical staff or peers.

NEW QUESTION 48

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 53

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:

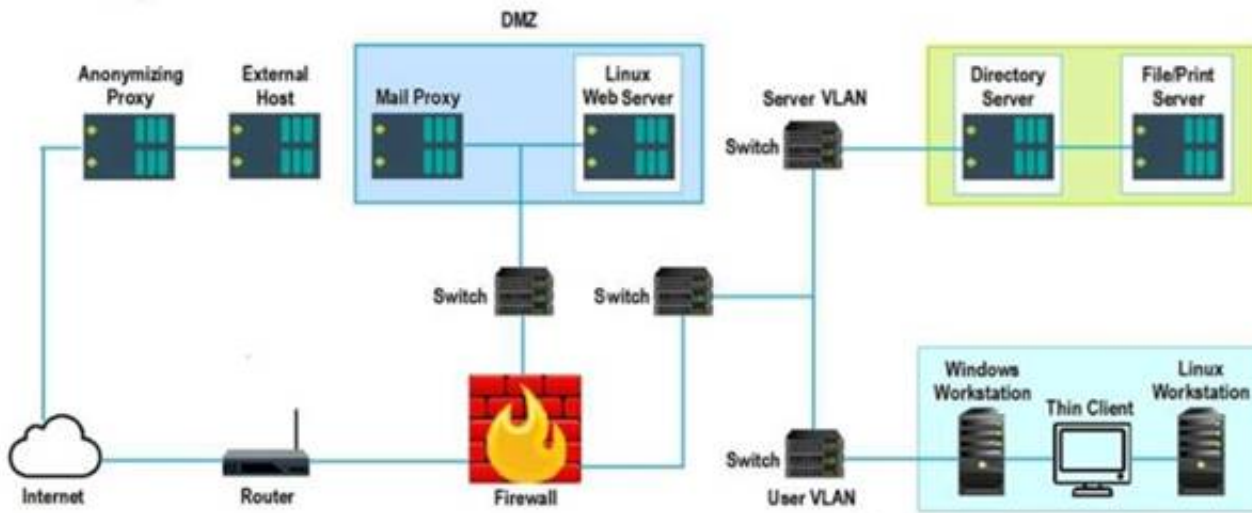
Select the Results Generated drop-down option to determine if the results were generated from a credentialed scan, non-credentialed scan, or a compliance scan. For ONLY the credentialed and non-credentialed scans, evaluate the results for false positives and check the findings that display false positives. 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:

<p>False Positive Findings Listing 1</p> <ul style="list-style-type: none"> Critical (10.0) 12209 Security Update for Microsoft Windows (835732) Critical (10.0) 13852 Microsoft Windows Task Scheduler Remote Overflow (841873) Critical (10.0) 18502 Vulnerability in SMB Could Allow Remote Code Execution (896422) Critical (10.0) 58662 Samba 3.x:3.6.4/3.5.14/3.4.16 RPC Multiple Buffer Overflows (20161146) Critical (10.0) 19407 Vulnerability in Printer Spooler Service Could Allow Remote Code Execution (896423) 	<p>Results Generated</p> <p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>
<p>False Positive Findings Listing 2</p> <ul style="list-style-type: none"> Critical (10.0) 19407 Vulnerability in Printer Spooler Service Could Allow Remote Code Execution (896423) Critical (10.0) 11890 Ubuntu 5.04/5.10/6.06 LTS : Buffer Overrun in Messenger Service (CVE-2016-8035) Critical (10.0) 27942 Ubuntu 5.04/5.10/6.06 LTS : php5 vulnerabilities (CVE-2016-362-1) Critical (10.0) 27978 Ubuntu 5.10/6.06 LTS / 6.10 : gnupg vulnerability (CVE-2016-3931) Critical (10.0) 28017 Ubuntu 5.10/6.06 LTS / 6.10 : php5 regression (CVE-2016-4242) 	<p>Results Generated</p> <p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>
<p>False Positive Findings Listing 3</p> <ul style="list-style-type: none"> 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 INFORM (1.2.4) Network access: Do not allow anonymous enumeration of SAM accounts: Enabled INFORM (1.3.4) Network access: Do not allow anonymous enumeration of SAM accounts and shares: Enabled INFORM (1.5.0) Network access: Let everyone permissions apply to anonymous users: Disabled INFORM (1.6.5) Network access: Sharing and security model for local accounts Classic - local users authenticate as themselves 	<p>Results Generated</p> <p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>

- A. Mastered
 B. Not Mastered

Answer: A

Explanation:

Hot Area:

<p>False Positive Findings Listing 1</p> <ul style="list-style-type: none"> Critical (10.0) 12209 Security Update for Microsoft Windows (835732) Critical (10.0) 13852 Microsoft Windows Task Scheduler Remote Overflow (841873) Critical (10.0) 18502 Vulnerability in SMB Could Allow Remote Code Execution (896422) Critical (10.0) 58662 Samba 3.x:3.6.4/3.5.14/3.4.16 RPC Multiple Buffer Overflows (20161146) Critical (10.0) 19407 Vulnerability in Printer Spooler Service Could Allow Remote Code Execution (896423) 	<p>Results Generated</p> <p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>
<p>False Positive Findings Listing 2</p> <ul style="list-style-type: none"> Critical (10.0) 19407 Vulnerability in Printer Spooler Service Could Allow Remote Code Execution (896423) Critical (10.0) 11890 Ubuntu 5.04/5.10/6.06 LTS : Buffer Overrun in Messenger Service (CVE-2016-8035) Critical (10.0) 27942 Ubuntu 5.04/5.10/6.06 LTS : php5 vulnerabilities (CVE-2016-362-1) Critical (10.0) 27978 Ubuntu 5.10/6.06 LTS / 6.10 : gnupg vulnerability (CVE-2016-3931) Critical (10.0) 28017 Ubuntu 5.10/6.06 LTS / 6.10 : php5 regression (CVE-2016-4242) 	<p>Results Generated</p> <p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>
<p>False Positive Findings Listing 3</p> <ul style="list-style-type: none"> 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 INFORM (1.2.4) Network access: Do not allow anonymous enumeration of SAM accounts: Enabled INFORM (1.3.4) Network access: Do not allow anonymous enumeration of SAM accounts and shares: Enabled INFORM (1.5.0) Network access: Let everyone permissions apply to anonymous users: Disabled INFORM (1.6.5) Network access: Sharing and security model for local accounts Classic - local users authenticate as themselves 	<p>Results Generated</p> <p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>

NEW QUESTION 57

A zero-day command injection vulnerability was published. A security administrator is analyzing the following logs for evidence of adversaries attempting to exploit the vulnerability:

Log entry #	Message
Log entry 1	comptia.org/S{@java.lang.Runtime@getRuntime().exec("nslookup example.com"))/
Log entry 2	<script type="text/javascript">var test='../index.php?cookie_data='+escape(document.cookie);</script>
Log entry 3	example.com/butler.php?id=1 and nullif (1337,1337)
Log entry 4	requestObj = ... {scopes: ["Mail.ReadWrite", "Mail.send", "Files.ReadWrite.All"] }

Which of the following log entries provides evidence of the attempted exploit?

- A. Log entry 1
- B. Log entry 2
- C. Log entry 3
- D. Log entry 4

Answer: D

Explanation:

Log entry 4 shows an attempt to exploit the zero-day command injection vulnerability by appending a malicious command (;cat /etc/passwd) to the end of a legitimate request (/cgi-bin/index.cgi?name=John). This command would try to read the contents of the /etc/passwd file, which contains user account information, and could lead to further compromise of the system. The other log entries do not show any signs of command injection, as they do not contain any special characters or commands that could alter the intended behavior of the application. Official References:

- > <https://www.imperva.com/learn/application-security/command-injection/>
- > <https://www.zerodayinitiative.com/advisories/published/>

NEW QUESTION 61

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 64

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 66

Which of the following threat-modeling procedures is in the OWASP Web Security Testing Guide?

- A. Review Of security requirements
- B. Compliance checks
- C. Decomposing the application
- D. Security by design

Answer: C

Explanation:

The OWASP Web Security Testing Guide (WSTG) includes a section on threat modeling, which is a structured approach to identify, quantify, and address the security risks associated with an application. The first step in the threat modeling process is decomposing the application, which involves creating use cases, identifying entry points, assets, trust levels, and data flow diagrams for the application. This helps to understand the application and how it interacts with external entities, as well as to identify potential threats and vulnerabilities¹. The other options are not part of the OWASP WSTG threat modeling process.

NEW QUESTION 69

An analyst is reviewing a vulnerability report for a server environment with the following entries:

Vulnerability	Severity	CVSS v3	Host IP	Crown jewel	Exploit available
EOL/Obsolete Log4j v1 x	5	-	54 73 224 15	No	No
EOL/Obsolete Log4j v1 x	5	-	54 73 225 17	Yes	No
EOL/Obsolete Log4j v1 x	5	-	10 101 27 98	Yes	No
Microsoft Windows Security Update	4	8.2	10 100 10 52	No	Yes
Microsoft Windows Security Update	4	8.2	54 74 110 26	No	Yes
Microsoft Windows Security Update	4	8.2	54 74 110 228	Yes	Yes
Oracle Java Critical Patch	3	6.9	10 101 25 65	Yes	No
Oracle Java Critical Patch	3	6.9	54 73 225 17	Yes	No
Oracle Java Critical Patch	3	6.9	10 101 27 98	Yes	No

Which of the following systems should be prioritized for patching first?

- A. 10.101.27.98
- B. 54.73.225.17
- C. 54.74.110.26
- D. 54.74.110.228

Answer: D

Explanation:

The system that should be prioritized for patching first is 54.74.110.228, as it has the highest number and severity of vulnerabilities among the four systems listed in the vulnerability report. According to the report, this system has 12 vulnerabilities, with 8 critical, 3 high, and 1 medium severity ratings. The critical vulnerabilities include CVE-2019-0708 (BlueKeep), CVE-2019-1182 (DejaBlue), CVE-2017-0144 (EternalBlue), and CVE-2017-0145 (EternalRomance), which are all remote code execution vulnerabilities that can allow an attacker to compromise the system without any user interaction or authentication. These vulnerabilities pose a high risk to the system and should be patched as soon as possible.

NEW QUESTION 70

There are several reports of sensitive information being disclosed via file sharing services. The company would like to improve its security posture against this threat. Which of the following security controls would best support the company in this scenario?

- A. Implement step-up authentication for administrators
- B. Improve employee training and awareness

- C. Increase password complexity standards
- D. Deploy mobile device management

Answer: B

Explanation:

The best security control to implement against sensitive information being disclosed via file sharing services is to improve employee training and awareness. Employee training and awareness can help educate employees on the risks and consequences of using file sharing services for sensitive information, as well as the policies and procedures for handling such information securely and appropriately. Employee training and awareness can also help foster a security culture and encourage employees to report any incidents or violations of information security.

NEW QUESTION 73

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 75

A virtual web server in a server pool was infected with malware after an analyst used the internet to research a system issue. After the server was rebuilt and added back into the server pool, users reported issues with the website, indicating the site could not be trusted. Which of the following is the most likely cause of the server issue?

- A. The server was configured to use SSL- to securely transmit data
- B. The server was supporting weak TLS protocols for client connections.
- C. The malware infected all the web servers in the pool.
- D. The digital certificate on the web server was self-signed

Answer: D

Explanation:

A digital certificate is a document that contains the public key and identity information of a web server, and is signed by a trusted third-party authority called a certificate authority (CA). A digital certificate allows the web server to establish a secure connection with the clients using the HTTPS protocol, and also verifies the authenticity of the web server. A self-signed certificate is a digital certificate that is not signed by a CA, but by the web server itself. A self-signed certificate can cause issues with the website, as it may not be trusted by the clients or their browsers. Clients may receive warnings or errors when trying to access the website, indicating that the site could not be trusted or that the connection is not secure. Official References:

- > <https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your-questions-answered>
- > <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>

NEW QUESTION 79

A cybersecurity analyst is reviewing SIEM logs and observes consistent requests originating from an internal host to a blocklisted external server. Which of the following best describes the activity that is taking place?

- A. Data exfiltration
- B. Rogue device
- C. Scanning
- D. Beaconsing

Answer: D

Explanation:

Beaconsing is the best term to describe the activity that is taking place, as it refers to the periodic communication between an infected host and a blocklisted external server. Beaconsing is a common technique used by malware to establish a connection with a command-and-control (C2) server, which can provide instructions, updates, or exfiltration capabilities to the malware. Beaconsing can vary in frequency, duration, and payload, depending on the type and sophistication

of the malware. The other terms are not as accurate as beaconing, as they describe different aspects of malicious activity. Data exfiltration is the unauthorized transfer of data from a compromised system to an external destination, such as a C2 server or a cloud storage service. Data exfiltration can be a goal or a consequence of malware infection, but it does not necessarily involve blocklisted servers or consistent requests. Rogue device is a device that is connected to a network without authorization or proper security controls. Rogue devices can pose a security risk, as they can introduce malware, bypass firewalls, or access sensitive data. However, rogue devices are not necessarily infected with malware or communicating with blocklisted servers. Scanning is the process of probing a network or a system for vulnerabilities, open ports, services, or other information. Scanning can be performed by legitimate administrators or malicious actors, depending on the intent and authorization. Scanning does not imply consistent requests or blocklisted servers, as it can target any network or system.

NEW QUESTION 83

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 88

A security analyst is validating a particular finding that was reported in a web application vulnerability scan to make sure it is not a false positive. The security analyst uses the snippet below:

```
<!--?xml version="1.0" ?-->
<!DOCTYPE replace [<!ENTITY ent SYSTEM "file:///etc/shadow">]>
<userInfo>
<firstName>John</firstName>
<lastName>Sent;</lastName>
</userInfo>
```

Which of the following vulnerability types is the security analyst validating?

- A. Directory traversal
- B. XSS
- C. XXE
- D. SSRF

Answer: B

Explanation:

XSS (cross-site scripting) is the vulnerability type that the security analyst is validating, as the snippet shows an attempt to inject a script tag into the web application. XSS is a web security vulnerability that allows an attacker to execute arbitrary JavaScript code in the browser of another user who visits the vulnerable website. XSS can be used to perform various malicious actions, such as stealing cookies, session hijacking, phishing, or defacing websites. The other vulnerability types are not relevant to the snippet, as they involve different kinds of attacks. Directory traversal is an attack that allows an attacker to access files and directories that are outside of the web root folder. XXE (XML external entity) injection is an attack that allows an attacker to interfere with an application's processing of XML data, and potentially access files or systems. SSRF (server-side request forgery) is an attack that allows an attacker to induce the server-side application to make requests to an unintended location. Official References:

- > <https://portswigger.net/web-security/xxe>
- > <https://portswigger.net/web-security/ssrf>
- > https://cheatsheetseries.owasp.org/cheatsheets/Server_Side_Request_Forgery_Prevention_Cheat_Sheet.ht

NEW QUESTION 90

After a security assessment was done by a third-party consulting firm, the cybersecurity program recommended integrating DLP and CASB to reduce analyst alert fatigue. Which of the following is the best possible outcome that this effort hopes to achieve?

- A. SIEM ingestion logs are reduced by 20%.
- B. Phishing alerts drop by 20%.
- C. False positive rates drop to 20%.
- D. The MTTR decreases by 20%.

Answer: D

Explanation:

The MTTR (Mean Time to Resolution) decreases by 20% is the best possible outcome that this effort hopes to achieve, as it reflects the improvement in the efficiency and effectiveness of the incident response process by reducing analyst alert fatigue. Analyst alert fatigue is a term that refers to the phenomenon of security analysts becoming overwhelmed, desensitized, or exhausted by the large number of alerts they receive from various security tools or systems, such as

DLP (Data Loss Prevention) or CASB (Cloud Access Security Broker). DLP is a security solution that helps to prevent unauthorized access, use, or transfer of sensitive data, such as personal information, intellectual property, or financial records. CASB is a security solution that helps to monitor and control the use of cloud-based applications and services, such as SaaS (Software as a Service), PaaS (Platform as a Service), or IaaS (Infrastructure as a Service). Both DLP and CASB can generate alerts when they detect potential data breaches, policy violations, or malicious activities, but they can also produce false positives, irrelevant information, or duplicate notifications that can overwhelm or distract the security analysts. Analyst alert fatigue can have negative consequences for the security posture and performance of an organization, such as missing or ignoring critical alerts, delaying or skipping investigations or remediations, making errors or mistakes, or losing motivation or morale. Therefore, it is important to reduce analyst alert fatigue and optimize the alert management process by using various strategies, such as tuning the alert thresholds and rules, prioritizing and triaging the alerts based on severity and context, enriching and correlating the alerts with additional data sources, automating or orchestrating repetitive or low-level tasks or actions, or integrating and consolidating different security tools or systems into a unified platform. By reducing analyst alert fatigue and optimizing the alert management process, the effort hopes to achieve a decrease in the MTTR, which is a metric that measures the average time it takes to resolve an incident from the moment it is reported to the moment it is closed. A lower MTTR indicates a faster and more effective incident response process, which can help to minimize the impact and damage of security incidents, improve customer satisfaction and trust, and enhance security operations and outcomes. The other options are not as relevant or realistic as the MTTR decreases by 20%, as they do not reflect the best possible outcome that this effort hopes to achieve. SIEM ingestion logs are reduced by 20% is not a relevant outcome, as it does not indicate any improvement in the incident response process or any reduction in analyst alert fatigue. SIEM (Security Information and Event Management) is a security 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 ingestion logs are records of the data that is ingested by the SIEM system from different sources. Reducing SIEM ingestion logs may imply less data volume or less data sources for the SIEM system, which may not necessarily improve its performance or accuracy. Phishing alerts drop by 20% is not a realistic outcome, as it does not depend on the integration of DLP and CASB or any reduction in analyst alert fatigue. Phishing alerts are notifications that indicate potential phishing attempts or attacks, such as fraudulent emails, websites, or messages that try to trick users into revealing sensitive information or installing malware. Phishing alerts can be generated by various security tools or systems, such as email security solutions, web security solutions, endpoint security solutions, or user awareness training programs. Reducing phishing alerts may imply less phishing attempts or attacks on the organization, which may not necessarily be influenced by the integration of DLP and CASB or any reduction in analyst alert fatigue. False positive rates drop to 20% is not a realistic outcome

NEW QUESTION 94

An incident response team found IoCs in a critical server. The team needs to isolate and collect technical evidence for further investigation. Which of the following pieces of data should be collected first in order to preserve sensitive information before isolating the server?

- A. Hard disk
- B. Primary boot partition
- C. Malicious files
- D. Routing table
- E. Static IP address

Answer: A

Explanation:

The hard disk is the piece of data that should be collected first in order to preserve sensitive information before isolating the server. The hard disk contains all the files and data stored on the server, which may include evidence of malicious activity, such as malware installation, data exfiltration, or configuration changes. The hard disk should be collected using proper forensic techniques, such as creating an image or a copy of the disk and maintaining its integrity using hashing algorithms.

NEW QUESTION 98

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 analysis.

NEW QUESTION 100

A technician identifies a vulnerability on a server and applies a software patch. Which of the following should be the next step in the remediation process?

- A. Testing
- B. Implementation
- C. Validation
- D. Rollback

Answer: C

Explanation:

The next step in the remediation process after applying a software patch is validation. Validation is a process that involves verifying that the patch has been successfully applied, that it has fixed the vulnerability, and that it has not caused any adverse effects on the system or application functionality or performance. Validation can be done using various methods, such as scanning, testing, monitoring, or auditing.

NEW QUESTION 105

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 109

An analyst is remediating items associated with a recent incident. The analyst has isolated the vulnerability and is actively removing it from the system. Which of the following steps of the process does this describe?

- A. Eradication
- B. Recovery
- C. Containment
- D. Preparation

Answer: A

Explanation:

Eradication is a step in the incident response process that involves removing any traces or remnants of the incident from the affected systems or networks, such as malware, backdoors, compromised accounts, or malicious files. Eradication also involves restoring the systems or networks to their normal or secure state, as well as verifying that the incident is completely eliminated and cannot recur. In this case, the analyst is remediating items associated with a recent incident by isolating the vulnerability and actively removing it from the system. This describes the eradication step of the incident response process.

NEW QUESTION 111

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 116

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 119

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 122

.....

Thank You for Trying Our Product

We offer two products:

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

2nd - Questions and Answers in PDF Format

CS0-003 Practice Exam Features:

- * CS0-003 Questions and Answers Updated Frequently
- * CS0-003 Practice Questions Verified by Expert Senior Certified Staff
- * CS0-003 Most Realistic Questions that Guarantee you a Pass on Your First Try
- * CS0-003 Practice Test Questions in Multiple Choice Formats and Updates for 1 Year

100% Actual & Verified — Instant Download, Please Click
[Order The CS0-003 Practice Test Here](#)