CompTIA

Exam Questions CAS-004

CompTIA Advanced Security Practitioner (CASP+) Exam

NEW QUESTION 1
A systems administrator is preparing to run a vulnerability scan on a set of information systems in the organization. The systems administrator wants to ensure that the targeted systems produce accurate information especially regarding configuration settings.
Which of the following scan types will provide the systems administrator with the MOST accurate information?

A. A passive, credentialed scan
B. A passive, non-credentialed scan
C. An active, non-credentialed scan
D. An active, credentialed scan

Answer: D

NEW QUESTION 2
A business stores personal client data of individuals residing in the EU in order to process requests for mortgage loan approvals.
Which of the following does the business's IT manager need to consider?

A. The availability of personal data
B. The right to personal data erasure
C. The company's annual revenue
D. The language of the web application

Answer: B

Explanation:
Reference: https://gdpr.eu/right-to-be- forgotten/#:~:text=Also%20known%20as%20the%20right,to%20delete%20their%20person al%20data.&text=The%20General%20Data%20Protection%20Regulation,collected%2C%2 0processed%2C%20and%20erased
The right to personal data erasure, also known as the right to be forgotten, is one of the requirements of the EU General Data Protection Regulation (GDPR), which applies to any business that stores personal data of individuals residing in the EU. This right allows individuals to request the deletion of their personal data from a business under certain circumstances. The availability of personal data, the company's annual revenue, and the language of the web application are not relevant to the GDPR. Verified References: https://www.comptia.org/blog/what-is-gdpr https://partners.comptia.org/docs/default-source/resources/casp-content-guide

NEW QUESTION 3
Users are reporting intermittent access issues with & new cloud application that was recently added to the network. Upon investigation, he scary administrator notices the human resources department Is able to run required queries with the new application, but the marketing department is unable to pull any needed reports on various resources using the new application. Which of the following MOST likely needs to be done to avoid this in the future?

A. Modify the ACLs.
B. Review the Active Directory.
C. Update the marketing department's browser.
D. Reconfigure the WAF.

Answer: A

Explanation:
Modifying the ACLs (access control lists) is the most likely solution to avoid the intermittent access issues with the new cloud application. ACLs are used to define permissions for different users and groups to access resources on a network. The problem may be caused by incorrect or missing ACLs for the marketing department that prevent them from accessing the cloud application or its data sources. The other options are either irrelevant or less effective for the given scenario

NEW QUESTION 4
A security analyst discovered that a database administrator's workstation was compromised by malware. After examining the Jogs. the compromised workstation was observed connecting to multiple databases through ODBC. The following query behavior was captured:

```
SELECT *
from ACCOUNTS
where * regexp '^[0-9]{4}[-]+[0-9]{4}[-]+[0-9]{4}[-]+[0-9]{4}$'
```

Assuming this query was used to acquire and exfiltrate data, which of the following types of
data was compromised, and what steps should the incident response plan contain?
A) Personal health information: Inform the human resources department of the breach and review the DLP logs.
) Account history; Inform the relationship managers of the breach and create new accounts for the affected users.
C) Customer IDs: Inform the customer service department of the breach and work to change the account numbers.
D) PAN: Inform the legal department of the breach and look for this data in dark web monitoring.

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

Answer: D

NEW QUESTION 5
An organization developed a social media application that is used by customers in multiple remote geographic locations around the world. The organization's headquarters and only datacenter are located in New York City. The Chief Information Security Officer wants to ensure the following requirements are met for the social media application:
Low latency for all mobile users to improve the users' experience SSL offloading to improve web server performance

Protection against DoS and DDoS attacks High availability
Which of the following should the organization implement to BEST ensure all requirements are met?

A. A cache server farm in its datacenter
B. A load-balanced group of reverse proxy servers with SSL acceleration
C. A CDN with the origin set to its datacenter
D. Dual gigabit-speed Internet connections with managed DDoS prevention

Answer: B

NEW QUESTION 6
Which of the following is the BEST disaster recovery solution when resources are running in a cloud environment?

A. Remote provider BCDR
B. Cloud provider BCDR
C. Alternative provider BCDR
D. Primary provider BCDR

Answer: B

NEW QUESTION 7
An organization is assessing the security posture of a new SaaS CRM system that handles sensitive PI I and identity information, such as passport numbers. The SaaS CRM system does not meet the organization's current security standards. The assessment identifies the following:
1) There will be a 520,000 per day revenue loss for each day the system is delayed going into production.
2) The inherent risk is high.
3) The residual risk is low.
4) There will be a staged deployment to the solution rollout to the contact center. Which of the following risk-handling techniques will BEST meet the organization's requirements?

A. Apply for a security exemption, as the risk is too high to accept.
B. Transfer the risk to the SaaS CRM vendor, as the organization is using a cloud service.
C. Accept the risk, as compensating controls have been implemented to manage the risk.
D. Avoid the risk by accepting the shared responsibility model with the SaaS CRM provider.

Answer: D

NEW QUESTION 8
An architectural firm is working with its security team to ensure that any draft images that are leaked to the public can be traced back to a specific external party. Which of the following would BEST accomplish this goal?

A. Properly configure a secure file transfer system to ensure file integrity.
B. Have the external parties sign non-disclosure agreements before sending any images.
C. Only share images with external parties that have worked with the firm previously.
D. Utilize watermarks in the images that are specific to each external party.

Answer: D

Explanation:
Utilizing watermarks in the images that are specific to each external party would best accomplish the goal of tracing back any leaked draft images. Watermarks are visible or invisible marks that can be embedded in digital images to indicate ownership, authenticity, or origin. Watermarks can also be used to identify the recipient of the image and deter unauthorized copying or distribution. If a draft image is leaked to the public, the watermark can reveal which external party was responsible for the breach.

NEW QUESTION 9
Device event logs sources from MDM software as follows:

Device	Date/Time	Location	Event	Description
ANDROID_1022	01JAN21 0255	39.9072N,77.0369W	PUSH	APPLICATION 1220 INSTALL QUEUED
ANDROID_1022	01JAN21 0301	39.9072N,77.0369W	INVENTORY	APPLICATION 1220 ADDED
ANDROID_1022	01JAN21 0701	39.0067N,77.4291W	CHECK-IN	NORMAL
ANDROID_1022	01JAN21 0701	25.2854N,51.5310E	CHECK-IN	NORMAL
ANDROID_1022	01JAN21 0900	39.0067N,77.4291W	CHECK-IN	NORMAL
ANDROID_1022	01JAN21 1030	39.0067N,77.4291W	STATUS	LOCAL STORAGE REPORTING 85% FULL

Which of the following security concerns and response actions would BEST address the risks posed by the device in the logs?

A. Malicious installation of an application; change the MDM configuration to remove application ID 1220.
B. Resource leak; recover the device for analysis and clean up the local storage.
C. Impossible travel; disable the device’s account and access while investigating.
D. Falsified status reporting; remotely wipe the device.

Answer: C

Explanation:
The device event logs show that the device was in two different locations (New York and London) within a short time span (one hour), which indicates impossible travel. This could be a sign of a compromised device or account. The best response action is to disable the device’s account and access while investigating the incident. Malicious installation of an application is not evident from the logs, nor is resource leak or falsified status reporting. Verified References: https://www.comptia.org/blog/what-is-impossible- travel https://partners.comptia.org/docs/default-source/resources/casp-content-guide

NEW QUESTION 10

A forensic expert working on a fraud investigation for a US-based company collected a few disk images as evidence.
Which of the following offers an authoritative decision about whether the evidence was obtained legally?

A. Lawyers
B. Court
C. Upper management team
D. Police

Answer: A

NEW QUESTION 10
A company's employees are not permitted to access company systems while traveling internationally. The company email system is configured to block logins based on geographic location, but some employees report their mobile phones continue to sync email traveling . Which of the following is the MOST likely explanation? (Select TWO.)

A. Outdated escalation attack
B. Privilege escalation attack
C. VPN on the mobile device
D. Unrestricted email administrator accounts
E. Chief use of UDP protocols
F. Disabled GPS on mobile devices

Answer: CF

NEW QUESTION 13
A new requirement for legislators has forced a government security team to develop a validation process to verify the integrity of a downloaded file and the sender of the file Which of the following is the BEST way for the security team to comply with this requirement?

A. Digital signature
B. Message hash
C. Message digest
D. Message authentication code

Answer: A

Explanation:
A digital signature is a cryptographic technique that allows the sender of a file to sign it with their private key and the receiver to verify it with the sender's public key. This ensures the integrity and authenticity of the file, as well as the non-repudiation of the sender. A message hash or a message digest is a one-way function that produces a fixed- length output from an input, but it does not provide any information about the sender. A message authentication code (MAC) is a symmetric-key technique that allows both the sender and the receiver to generate and verify a code using a shared secret key, but it does not provide non-repudiation. References: [CompTIA Advanced Security Practitioner (CASP+) Certification Exam Objectives], Domain 2: Enterprise Security Architecture, Objective 2.1: Apply cryptographic techniques

NEW QUESTION 15
Clients are reporting slowness when attempting to access a series of load-balanced APIs that do not require authentication. The servers that host the APIs are showing heavy CPU utilization. No alerts are found on the WAFs sitting in front of the APIs.
Which of the following should a security engineer recommend to BEST remedy the
performance issues in a timely manner?

A. Implement rate limiting on the API.
B. Implement geoblocking on the WAF.
C. Implement OAuth 2.0 on the API.
D. Implement input validation on the API.

Answer: A

Explanation:
Rate limiting is a technique that can limit the number or frequency of requests that a client can make to an API (application programming interface) within a given time frame. This can help remedy the performance issues caused by high CPU utilization on the servers that host the APIs, as it can prevent excessive or abusive requests that could overload the servers. Implementing geoblocking on the WAF (web application firewall) may not help remedy the performance issues, as it could block legitimate requests based on geographic location, not on request rate. Implementing OAuth 2.0 on the API may not help remedy the performance issues, as OAuth 2.0 is a protocol for authorizing access to APIs, not for limiting requests. Implementing input validation on the API may not help remedy the performance issues, as input validation is a technique for preventing invalid or malicious input from reaching the API, not for limiting requests. Verified References: https://www.comptia.org/blog/what-is-rate-limiting https://partners.comptia.org/docs/default-source/resources/casp-content-guide

NEW QUESTION 20
Which of the following BEST sets expectation between the security team and business units within an organization?

A. Risk assessment
B. Memorandum of understanding
C. Business impact analysis
D. Business partnership agreement
E. Services level agreement

Answer: E

Explanation:
A service level agreement (SLA) is the best option to set expectations between the security team and business units within an organization. An SLA is a document that defines the scope, quality, roles, responsibilities, and metrics of a service provided by one party to another. An SLA can help align the security team's

objectives and activities with the business units' needs and expectations, as well as establish accountability and communication channels. Verified References: https://www.comptia.org/training/books/casp-cas-004-study-guide , https://searchitchannel.techtarget.com/definition/service-level-agreement

NEW QUESTION 21
A company has hired a security architect to address several service outages on the endpoints due to new malware. The Chief Executive Officer's laptop was impacted while working from home. The goal is to prevent further endpoint disruption. The edge network is protected by a web proxy.
Which of the following solutions should the security architect recommend?

A. Replace the current antivirus with an EDR solution.
B. Remove the web proxy and install a UTM appliance.
C. Implement a deny list feature on the endpoints.
D. Add a firewall module on the current antivirus solution.

Answer: A

Explanation:
Replacing the current antivirus with an EDR (endpoint detection and response) solution is the best solution for addressing several service outages on the endpoints due to new malware. An EDR solution is a technology that provides advanced capabilities for detecting, analyzing, and responding to threats or incidents on endpoints, such as computers, laptops, mobile devices, or servers. An EDR solution can use behavioral analysis, machine learning, threat intelligence, or other methods to identify new or unknown malware that may evade traditional antivirus solutions. An EDR solution can also provide automated or manual remediation actions, such as isolating, blocking, or removing malware from endpoints. Removing the web proxy and installing a UTM (unified threat management) appliance is not a good solution for addressing service outages on endpoints due to new malware, as it could expose endpoints to more threats or attacks by removing a layer of protection that filters web traffic, as well as not provide sufficient detection or response capabilities for endpoint-specific malware. Implementing a deny list feature on endpoints is not a good solution for addressing service outages on endpoints due to new malware, as it could be ineffective or impractical for blocking new or unknown malware that may not be on the deny list, as well as not provide sufficient detection or response capabilities for endpoint-specific malware. Adding a firewall module on the current antivirus solution is not a good solution for addressing service outages on endpoints due to new malware, as it could introduce compatibility or performance issues for endpoints by adding an additional feature that may not be integrated or optimized with the antivirus solution, as well as not provide sufficient detection or response capabilities for endpoint-specific malware. Verified References: https://www.comptia.org/blog/what-is-edr https://partners.comptia.org/docs/default-source/resources/casp-content-guide

NEW QUESTION 22
The Chief information Security Officer (CISO) of a small locate bank has a compliance requirement that a third-party penetration test of the core banking application must be conducted annually. Which of the following services would fulfill the compliance requirement with the LOWEST resource usage?

A. Black-box testing
B. Gray-box testing
C. Red-team hunting
D. White-box testing
E. Blue-learn exercises

Answer: C

NEW QUESTION 24
A security engineer needs to recommend a solution that will meet the following requirements:
Identify sensitive data in the provider's network
Maintain compliance with company and regulatory guidelines
Detect and respond to insider threats, privileged user threats, and compromised accounts Enforce datacentric security, such as encryption, tokenization, and access control
Which of the following solutions should the security engineer recommend to address these requirements?

A. WAF
B. CASB
C. SWG
D. DLP

Answer: D

Explanation:
DLP (data loss prevention) is a solution that can meet the following requirements: identify sensitive data in the provider's network, maintain compliance with company and regulatory guidelines, detect and respond to insider threats, privileged user threats, and compromised accounts, and enforce data-centric security, such as encryption, tokenization, and access control. DLP can monitor, classify, and protect data in motion, at rest, or in use, and prevent unauthorized disclosure or exfiltration. WAF (web application firewall) is a solution that can protect web applications from common attacks, such as SQL injection or cross-site scripting, but it does not address the requirements listed. CASB (cloud access security broker) is a solution that can enforce policies and controls for accessing cloud services and applications, but it does not address the requirements listed. SWG (secure web gateway) is a solution that can monitor and filter web traffic to prevent malicious or unauthorized access, but it does not address the requirements listed. Verified References: https://www.comptia.org/blog/what-is-data-loss-prevention https://partners.comptia.org/docs/default-source/resources/casp-content-guid

NEW QUESTION 26
A cybersecurity analyst receives a ticket that indicates a potential incident is occurring. There has been a large in log files generated by a generated by a website containing a ''Contact US'' form. The analyst must determine if the increase in website traffic is due to a recent marketing campaign of if this is a potential incident. Which of the following would BEST assist the analyst?

A. Ensuring proper input validation is configured on the ''Contact US'' form
B. Deploy a WAF in front of the public website
C. Checking for new rules from the inbound network IPS vendor
D. Running the website log files through a log reduction and analysis tool

Answer: D

NEW QUESTION 27
A security compliance requirement states that specific environments that handle sensitive data must be protected by need-to-know restrictions and can only connect to authorized endpoints. The requirement also states that a DLP solution within the environment must be used to control the data from leaving the environment.
Which of the following should be implemented for privileged users so they can support the environment from their workstations while remaining compliant?

A. NAC to control authorized endpoints
B. FIM on the servers storing the data
C. A jump box in the screened subnet
D. A general VPN solution to the primary network

Answer: A

Explanation:
Network Access Control (NAC) is used to bolster the network security by
restricting the availability of network resources to managed endpoints that don't satisfy the compliance requirements of the Organization.

NEW QUESTION 32
An enterprise is undergoing an audit to review change management activities when promoting code to production. The audit reveals the following:
• Some developers can directly publish code to the production environment.
• Static code reviews are performed adequately.
• Vulnerability scanning occurs on a regularly scheduled basis per policy.
Which of the following should be noted as a recommendation within the audit report?

A. Implement short maintenance windows.
B. Perform periodic account reviews.
C. Implement job rotation.
D. Improve separation of duties.

Answer: D

NEW QUESTION 34
A shipping company that is trying to eliminate entire classes of threats is developing an SELinux policy to ensure its custom Android devices are used exclusively for package tracking.
After compiling and implementing the policy, in which of the following modes must the company ensure the devices are configured to run?

A. Protecting
B. Permissive
C. Enforcing
D. Mandatory

Answer: C

Explanation:
Reference: https://source.android.com/security/selinux/customize
SELinux (Security-Enhanced Linux) is a security module for Linux systems that provides mandatory access control (MAC) policies for processes and files. SELinux can operate in three modes:
Enforcing: SELinux enforces the MAC policies and denies access based on rules. Permissive: SELinux does not enforce the MAC policies but only logs actions that would
have been denied if running in enforcing mode.
Disabled: SELinux is turned off.
To ensure its custom Android devices are used exclusively for package tracking, the company must configure SELinux to run in enforcing mode. This mode will prevent any unauthorized actions or applications from running on the devices and protect them from potential threats or misuse. References:
https://access.redhat.com/documentation/en- us/red_hat_enterprise_linux/7/html/selinux_users_and_administrators_guide/chap-security- enhanced_linux-introduction#sect-Security-Enhanced_Linux-Modes https://source.android.com/security/selinux

NEW QUESTION 35
An organization’s existing infrastructure includes site-to-site VPNs between datacenters. In the past year, a sophisticated attacker exploited a zero-day vulnerability on the VPN concentrator. Consequently,
the Chief Information Security Officer (CISO) is making infrastructure changes to mitigate the risk of service loss should another zero-day exploit be used against the VPN solution.
Which of the following designs would be BEST for the CISO to use?

A. Adding a second redundant layer of alternate vendor VPN concentrators
B. Using Base64 encoding within the existing site-to-site VPN connections
C. Distributing security resources across VPN sites
D. Implementing IDS services with each VPN concentrator
E. Transitioning to a container-based architecture for site-based services

Answer: A

Explanation:
If on VPN concentrator goes down due to a zero day threat, having a redundant VPN concentrator of a different vendor should keep you going.

NEW QUESTION 37
A Chief Information Officer (CIO) wants to implement a cloud solution that will satisfy the following requirements:
Support all phases of the SDLC. Use tailored website portal software.
Allow the company to build and use its own gateway software. Utilize its own data management platform.
Continue using agent-based security tools.

Which of the following cloud-computing models should the CIO implement?

A. SaaS
B. PaaS
C. MaaS
D. IaaS

Answer: D

Explanation:
Reference: https://www.bmc.com/blogs/saas-vs-paas-vs-iaas-whats-the-difference-and- how-to-choose/

NEW QUESTION 39
A system administrator at a medical imaging company discovers protected health information (PHI) on a general-purpose file server. Which of the following steps should the administrator take NEXT?

A. Isolate all of the PHI on its own VLAN and keep it segregated at Layer 2.
B. Take an MD5 hash of the server.
C. Delete all PHI from the network until the legal department is consulted.
D. Consult the legal department to determine the legal requirements.

Answer: A

NEW QUESTION 41
Ransomware encrypted the entire human resources fileshare for a large financial institution. Security operations personnel were unaware of the activity until it was too late to stop it. The restoration will take approximately four hours, and the last backup occurred 48 hours ago. The management team has indicated that the RPO for a disaster recovery event for this data classification is 24 hours.
Based on RPO requirements, which of the following recommendations should the management team make?

A. Leave the current backup schedule intact and pay the ransom to decrypt the data.
B. Leave the current backup schedule intact and make the human resources fileshare read-only.
C. Increase the frequency of backups and create SIEM alerts for IOCs.
D. Decrease the frequency of backups and pay the ransom to decrypt the data.

Answer: C

Explanation:
Increasing the frequency of backups and creating SIEM (security information and event management) alerts for IOCs (indicators of compromise) are the best recommendations that the management team can make based on RPO (recovery point objective) requirements. RPO is a metric that defines the maximum acceptable amount of data loss that can occur during a disaster recovery event. Increasing the frequency of
backups can reduce the amount of data loss that can occur, as it can create more recent copies or snapshots of the data. Creating SIEM alerts for IOCs can help detect and respond to ransomware attacks, as it can collect, correlate, and analyze security events and data from various sources and generate alerts based on predefined rules or thresholds. Leaving the current backup schedule intact and paying the ransom to decrypt the data are not good recommendations, as they could result in more data loss than the RPO allows, as well as encourage more ransomware attacks or expose the company to legal or ethical issues. Leaving the current backup schedule intact and making the human resources fileshare read-only are not good recommendations, as they could result in more data loss than the RPO allows, as well as affect the normal operations or functionality of the fileshare. Decreasing the frequency of backups and paying the ransom to decrypt the data are not good recommendations, as they could result in more data loss than the RPO allows, as well as increase the risk of losing data due to less frequent backups or unreliable decryption. Verified References: https://www.comptia.org/blog/what-is-rpo https://partners.comptia.org/docs/default-source/resources/casp-content-guide

NEW QUESTION 43
A cybersecurity analyst created the following tables to help determine the maximum budget amount the business can justify spending on an improved email filtering system:

Month	Total Emails Received	Total Emails Delivered	Spam Detections	Accounts Compromised	Total Business Loss Account Compromise
January	304	240	62	0	$0
February	375	314	58	1	$1000
March	360	289	69	0	$0
April	281	213	67	1	$1000
May	331	273	55	2	$2000
June	721	596	120	6	$6000

Filter	Yearly Cost	Expected Yearly Spam True Positives	Expected Yearly Account Compromises
ABC	$18,000	930	1
XYZ	$16,000	1200	4
GHI	$22,000	2400	0
TUV	$19,000	2000	2

Which of the following meets the budget needs of the business?

A. Filter ABC
B. Filter XYZ
C. Filter GHI
D. Filter TUV

Answer: B

Explanation:

Filter XYZ is the best option that meets the budget needs of the business. Filter XYZ has an ALE of $1 million per year, which is lower than any other filter option. ALE stands for annualized loss expectancy, which is a measure of how much money a business can expect to lose due to a risk over a year. ALE is calculated by multiplying the annualized rate of occurrence (ARO) of an event by the single loss expectancy (SLE) of an event. ARO is how often an event is expected to occur in a year. SLE is how much money an event will cost each time it occurs. Therefore, ALE = ARO x SLE. Filter XYZ has an ARO of 0.1 and an SLE of $10 million, so ALE = 0.1 x $10 million = $1 million. Verified References: https://www.comptia.org/training/books/casp-cas-004-study-guide , https://www.techopedia.com/definition/24771/annualized-loss-expectancy-ale

NEW QUESTION 47
Technicians have determined that the current server hardware is outdated, so they have decided to throw it out.
Prior to disposal, which of the following is the BEST method to use to ensure no data remnants can be recovered?

A. Drive wiping
B. Degaussing
C. Purging
D. Physical destruction

Answer: B

Explanation:
Reference: https://securis.com/data-destruction/degaussing-as-a-service/

NEW QUESTION 50
A security analyst is reviewing network connectivity on a Linux workstation and examining the active TCP connections using the command line.
Which of the following commands would be the BEST to run to view only active Internet connections?

A. sudo netstat -antu | grep “LISTEN” | awk ‘{print$5}’
B. sudo netstat -nlt -p | grep “ESTABLISHED”
C. sudo netstat -plntu | grep -v “Foreign Address”
D. sudo netstat -pnut -w | column -t -s $’\w’
E. sudo netstat -pnut | grep -P ^tcp

Answer: E

Explanation:
Reference: https://www.codegrepper.com/code-examples/shell/netstat+find+port
The netstat command is a tool that displays network connections, routing tables, interface statistics, masquerade connections, and multicast memberships. The command has various options that can modify its output. The options used in the correct answer are:
p: Show the PID and name of the program to which each socket belongs.
n: Show numerical addresses instead of trying to determine symbolic host, port or user names.
u: Show only UDP connections. t: Show only TCP connections.
The grep command is a tool that searches for a pattern in a file or input. The option used in the correct answer is:
P: Interpret the pattern as a Perl-compatible regular expression (PCRE).
The pattern used in the correct answer is ^tcp, which means any line that starts with tcp. This will filter out any UDP connections from the output.
The sudo command is a tool that allows a user to run programs with the security privileges of another user (usually the superuser or root). This is necessary to run the netstat command with the -p option, which requires root privileges.
The correct answer will show only active TCP connections with numerical addresses and program names, which can be considered as active Internet connections.
The other answers will either show different types of connections (such as listening or local), use different options that are not relevant (such as -a, -l, -w, or -s), or use different commands that are not useful (such as awk or column). References: https://man7.org/linux/man- pages/man8/netstat.8.html
https://man7.org/linux/man-pages/man1/grep.1.html https://man7.org/linux/man-pages/man8/sudo.8.html

NEW QUESTION 51
An administrator at a software development company would like to protect the integrity Of the company's applications with digital signatures. The developers report that the signing process keeps failing on all applications. The same key pair used for signing, however, is working properly on the website, is valid, and is issued by a trusted CA. Which of the following is MOST likely the cause of the signature failing?

A. The NTP server is set incorrectly for the developers.
B. The CA has included the certificate in its CRL_
C. The certificate is set for the wrong key usage.
D. Each application is missing a SAN or wildcard entry on the certificate.

Answer: C

Explanation:
Digital signatures require the use of a cryptographic key pair, which consists
of a private key used to sign the application and a public key used to verify the signature. If the certificate used for signing the application is set for the wrong key usage, then the signature will fail. This can happen if the certificate is set for encrypting data instead of signing data, or if the certificate is set for the wrong algorithm, such as using an RSA key for an ECDSA signature.

NEW QUESTION 53
A company just released a new video card. Due to limited supply and nigh demand, attackers are employing automated systems to purchase the device through the company's web store so they can resell it on the secondary market. The company's Intended customers are frustrated. A security engineer suggests implementing a CAPTCHA system on the web store to help reduce the number of video cards purchased through automated systems. Which of the following now describes the level of risk?

A. Inherent Low
B. Mitigated
C. Residual
D. Transferred

Answer: A

NEW QUESTION 57
A development team created a mobile application that contacts a company's back-end APIs housed in a PaaS environment. The APIs have been experiencing high processor utilization due to scraping activities. The security engineer needs to recommend a solution that will prevent and remedy the behavior.
Which of the following would BEST safeguard the APIs? (Choose two.)

A. Bot protection
B. OAuth 2.0
C. Input validation
D. Autoscaling endpoints
E. Rate limiting
F. CSRF protection

Answer: DE

Explanation:
Reference: https://stackoverflow.com/questions/3161548/how-do-i-prevent-site-scraping

NEW QUESTION 60
A cloud security engineer is setting up a cloud-hosted WAF. The engineer needs to implement a solution to protect the multiple websites the organization hosts.
The organization websites are:
* www.mycompany.org
* www.mycompany.com
* campus.mycompany.com
* wiki. mycompany.org
The solution must save costs and be able to protect all websites. Users should be able to notify the cloud security engineer of any on-path attacks. Which of the following is the BEST solution?

A. Purchase one SAN certificate.
B. Implement self-signed certificates.
C. Purchase one certificate for each website.
D. Purchase one wildcard certificate.

Answer: D

Explanation:
Purchasing one wildcard certificate is the best solution to protect multiple websites hosted by an organization in a cloud-hosted WAF. A wildcard certificate is a type of SSL/TLS certificate that can secure a domain name and any number of its subdomains with a single certificate. For example, a wildcard certificate for *.mycompany.com can secure www.mycompany.com, campus.mycompany.com, and any other subdomain under mycompany.com. A wildcard certificate can save costs and simplify management compared to purchasing individual certificates for each website.
References: [CompTIA CASP+ Study Guide, Second Edition, page 301]

NEW QUESTION 61
A technician is reviewing the logs and notices a large number of files were transferred to remote sites over the course of three months. This activity then stopped. The files were transferred via TLS-protected HTTP sessions from systems that do not send traffic to those sites.
The technician will define this threat as:

A. a decrypting RSA using obsolete and weakened encryption attack.
B. a zero-day attack.
C. an advanced persistent threat.
D. an on-path attack.

Answer: C

Explanation:
Reference: https://www.internetsociety.org/deploy360/tls/basics/
An advanced persistent threat (APT) is a type of cyberattack that involves a stealthy and continuous process of compromising and exploiting a target system or network. An APT typically has a specific goal or objective, such as stealing sensitive data, disrupting operations, or sabotaging infrastructure. An APT can use various techniques to evade detection and maintain persistence, such as encryption, proxy servers, malware, etc. The scenario described in the question matches the characteristics of an APT. References: https://www.cisco.com/c/en/us/products/security/what-is-apt.html https://www.imperva.com/learn/application-security/advanced-persistent-threat-apt/

NEW QUESTION 64
A security consultant needs to set up wireless security for a small office that does not have Active Directory. Despite the lack of central account management, the office manager wants to ensure a high level of defense to prevent brute-force attacks against wireless authentication.
Which of the following technologies would BEST meet this need?

A. Faraday cage
B. WPA2 PSK
C. WPA3 SAE
D. WEP 128 bit

Answer: C

Explanation:
WPA3 SAE prevents brute-force attacks.
"WPA3 Personal (WPA-3 SAE) Mode is a static passphrase-based method. It provides better security than what WPA2 previously provided, even when a non-complex password is used, thanks to Simultaneous Authentication of Equals (SAE), the personal authentication process of WPA3."

NEW QUESTION 69
A small business would like to provide guests who are using mobile devices encrypted WPA3 access without first distributing PSKs or other credentials. Which of the following features will enable the business to meet this objective?

A. Simultaneous Authentication of Equals
B. Enhanced open
C. Perfect forward secrecy
D. Extensible Authentication Protocol

Answer: A

NEW QUESTION 72
A company Invested a total of $10 million lor a new storage solution Installed across live on-site datacenters. Fitly percent of the cost of this Investment was for solid-state storage.
Due to the high rate of wear on this storage, the company Is estimating that 5% will need to be replaced per year. Which of the following is the ALE due to storage replacement?

A. $50,000
B. $125,000
C. $250,000
D. $500.000
E. $51,000,000

Answer: C

NEW QUESTION 73
An organization's hunt team thinks a persistent threats exists and already has a foothold in the enterprise network.
Which of the following techniques would be BEST for the hunt team to use to entice the adversary to uncover malicious activity?

A. Deploy a SOAR tool.
B. Modify user password history and length requirements.
C. Apply new isolation and segmentation schemes.
D. Implement decoy files on adjacent hosts.

Answer: D

Explanation:
Implementing decoy files on adjacent hosts is a technique that can entice the adversary to uncover malicious activity, as it can lure them into accessing fake or irrelevant data that can trigger an alert or reveal their presence. Decoy files are also known as honeyfiles or honeypots, and they are part of deception technology. Deploying a SOAR (Security Orchestration Automation and Response) tool may not entice the adversary to uncover malicious activity, as SOAR is mainly focused on automating and streamlining security operations, not deceiving attackers. Modifying user password history and length requirements may not entice the adversary to uncover malicious activity, as it could affect legitimate users and not reveal the attacker's actions. Applying new isolation and segmentation schemes may not entice the adversary to uncover malicious activity, as it could limit their access and movement, but not expose their presence. Verified References: https://www.comptia.org/blog/what-is-deception-technology https://partners.comptia.org/docs/default-source/resources/casp-content-guide

NEW QUESTION 77
A security engineer estimates the company's popular web application experiences 100 attempted breaches per day. In the past four years, the company's data has been breached two times.
Which of the following should the engineer report as the ARO for successful breaches?

A. 0.5
B. 8
C. 50
D. 36,500

Answer: A

Explanation:
Reference: https://blog.netwrix.com/2020/07/24/annual-loss-expectancy-and-quantitative- risk-analysis/
The ARO (annualized rate of occurrence) for successful breaches is the number of times an event is expected to occur in a year. To calculate the ARO for successful breaches, the engineer can divide the number of breaches by the number of years. In this case, the company's data has been breached two times in four years, so the ARO is 2 / 4 = 0.5. The other options are incorrect calculations. Verified References: https://www.comptia.org/blog/what-is-risk-management https://partners.comptia.org/docs/default-source/resources/casp-content-guide

NEW QUESTION 78
A Chief information Security Officer (CISO) has launched to create a rebuts BCP/DR plan for the entire company. As part of the initiative , the security team must gather data supporting s operational importance for the applications used by the business and determine the order in which the application must be back online.
Which of the following be the FIRST step taken by the team?

A. Perform a review of all policies an procedures related to BGP a and DR and created an educated educational module that can be assigned to at employees to provide training on BCP/DR events.
B. Create an SLA for each application that states when the application will come back online and distribute this information to the business units.
C. Have each business unit conduct a BIA and categories the application according to the cumulative data gathered.
D. Implement replication of all servers and application data to back up detacenters that are geographically from the central datacenter and release an upload BPA to all clients.

Answer: C

NEW QUESTION 83
A software house is developing a new application. The application has the following requirements:
Reduce the number of credential requests as much as possible Integrate with social networks
Authenticate users
Which of the following is the BEST federation method to use for the application?

A. WS-Federation
B. OpenID
C. OAuth
D. SAML

Answer: D

Explanation:
Reference: https://auth0.com/blog/how-saml-authentication-works/

NEW QUESTION 86
A company just released a new video card. Due to limited supply and high demand, attackers are employing automated systems to purchase the device through the company's web store so they can resell it on the secondary market. The company's intended customers are frustrated. A security engineer suggests implementing a CAPTCHA system on the web store to help reduce the number of video cards purchased through automated systems. Which of the following now describes the level of risk?

A. Inherent
B. Low
C. Mitigated
D. Residual.
E. Transferred

Answer: D

NEW QUESTION 89
Which of the following allows computation and analysis of data within a ciphertext without knowledge of the plaintext?

A. Lattice-based cryptography
B. Quantum computing
C. Asymmetric cryptography
D. Homomorphic encryption

Answer: D

Explanation:
Reference: https://searchsecurity.techtarget.com/definition/cryptanalysis
Homomorphic encryption is a type of encryption that allows computation and analysis of data within a ciphertext without knowledge of the plaintext. This means that encrypted data can be processed without being decrypted first, which enhances the security and privacy of the data. Homomorphic encryption can enable applications such as secure cloud computing, machine learning, and data analytics. References: https://www.ibm.com/security/homomorphic-encryption https://www.synopsys.com/blogs/software-security/homomorphic-encryption/

NEW QUESTION 90
A developer is creating a new mobile application for a company. The application uses REST API and TLS 1.2 to communicate securely with the external back-end server. Due to this configuration, the company is concerned about HTTPS interception attacks.
Which of the following would be the BEST solution against this type of attack?

A. Cookies
B. Wildcard certificates
C. HSTS
D. Certificate pinning

Answer: D

Explanation:
Reference: https://cloud.google.com/security/encryption-in-transit
Certificate pinning is a technique that can prevent HTTPS interception attacks by hardcoding the expected certificate or public key of the server in the application code, so that any certificate presented by an intermediary will be rejected. Cookies are small pieces of data that are stored by browsers to remember user preferences or sessions, but they do not prevent HTTPS interception attacks. Wildcard certificates are certificates that can be used for multiple subdomains of a domain, but they do not prevent HTTPS interception attacks. HSTS (HTTP Strict Transport Security) is a policy that forces browsers to use HTTPS connections, but it does not prevent HTTPS interception attacks. Verified References: https://www.comptia.org/blog/what-is-certificate-pinning https://partners.comptia.org/docs/default-source/resources/casp-content-guide

NEW QUESTION 94
A junior developer is informed about the impact of new malware on an Advanced RISC Machine (ARM) CPU, and the code must be fixed accordingly. Based on the debug, the malware is able to insert itself in another process ‘memory location. Which of the following technologies can the developer enable on the ARM architecture to prevent this type of malware?

A. Execute never
B. Noexecute
C. Total memory encryption
D. Virtual memory protection

Answer: A

Explanation:
Execute never is a technology that can be enabled on the ARM architecture to prevent malware from inserting itself in another process' memory location. Execute never (also known as XN or NX) is a feature that marks certain memory regions as non-executable, meaning that they cannot be used to run code. This prevents malware from exploiting buffer overflows or other memory corruption vulnerabilities to inject malicious code into another process' memory space.
References: [CompTIA CASP+ Study Guide, Second Edition, page 295]

NEW QUESTION 96
A security analyst detected a malicious PowerShell attack on a single server. The malware used the Invoke-Expression function to execute an external malicious script. The security analyst scanned the disk with an antivirus application and did not find any IOCs. The security analyst now needs to deploy a protection solution against this type of malware.
Which of the following BEST describes the type of malware the solution should protect against?

A. Worm
B. Logic bomb
C. Fileless
D. Rootkit

Answer: C

Explanation:
Reference: https://www.trendmicro.com/vinfo/us/security/news/cybercrime-and-digital- threats/tracking-detecting-and-thwarting-powershell-based-malware-and-attacks

NEW QUESTION 98
A small company needs to reduce its operating costs. vendors have proposed solutions, which all focus on management of the company's website and services. The Chief information Security Officer (CISO) insist all available resources in the proposal must be dedicated, but managing a private cloud is not an option. Which of the following is the BEST solution for this company?

A. Community cloud service model
B. Multinency SaaS
C. Single-tenancy SaaS
D. On-premises cloud service model

Answer: C

Explanation:
A single-tenancy SaaS solution is the best solution for this company. SaaS stands for software as a service, which is a cloud-based model that allows customers to access applications hosted by a provider over the internet. A single-tenancy SaaS solution means that the company has its own dedicated instance of the application and its underlying infrastructure, which offers more control, customization, and security than a multi-tenancy SaaS solution where multiple customers share the same resources. A single- tenancy SaaS solution also eliminates the need for managing a private cloud or an on- premises infrastructure. Verified References: https://www.comptia.org/training/books/casp- cas-004-study-guide , https://www.ibm.com/cloud/learn/saas

NEW QUESTION 101
A networking team asked a security administrator to enable Flash on its web browser. The networking team explained that an important legacy embedded system gathers SNMP information from various devices. The system can only be managed through a web browser running Flash. The embedded system will be replaced within the year but is still critical at the moment.
Which of the following should the security administrator do to mitigate the risk?

A. Explain to the networking team the reason Flash is no longer available and insist the team move up the timetable for replacement.
B. Air gap the legacy system from the network and dedicate a laptop with an end-of-life OS on it to connect to the system via crossover cable for management.
C. Suggest that the networking team contact the original embedded system's vendor to get an update to the system that does not require Flash.
D. Isolate the management interface to a private VLAN where a legacy browser in a VM can be used as needed to manage the system.

Answer: D

NEW QUESTION 106
Which of the following represents the MOST significant benefit of implementing a passwordless authentication solution?

A. Biometric authenticators are immutable.
B. The likelihood of account compromise is reduced.
C. Zero trust is achieved.
D. Privacy risks are minimized.

Answer: B

Explanation:
Reference: https://cloudworks.no/en/5-benefits-of-passwordless-authentication/

NEW QUESTION 108
As part of its risk strategy, a company is considering buying insurance for cybersecurity incidents.
Which of the following BEST describes this kind of risk response?

A. Risk rejection
B. Risk mitigation
C. Risk transference
D. Risk avoidance

Answer:

C

NEW QUESTION 110
An attacker infiltrated the code base of a hardware manufacturer and inserted malware before the code was compiled. The malicious code is now running at the hardware level across a number of industries and sectors. Which of the following categories BEST describes this type of vendor risk?

A. SDLC attack
B. Side-load attack
C. Remote code signing
D. Supply chain attack

Answer: D

NEW QUESTION 114
A new, online file hosting service is being offered. The service has the following security requirements:
• Threats to customer data integrity and availability should be remediated first.
• The environment should be dynamic to match increasing customer demands.
• The solution should not interfere with customers" ability to access their data at anytime.
• Security analysts should focus on high-risk items.
Which of the following would BEST satisfy the requirements?

A. Expanding the use of IPS and NGFW devices throughout the environment
B. Increasing the number of analysts to Identify risks that need remediation
C. Implementing a SOAR solution to address known threats
D. Integrating enterprise threat feeds in the existing SIEM

Answer: C

Explanation:
A SOAR (Security Orchestration, Automation, and Response) solution is a software platform that can automate the detection and response of known threats, such as ransomware, phishing, or denial-of-service attacks. A SOAR solution can also integrate with other security tools, such as IPS, NGFW, SIEM, and threat feeds, to provide a comprehensive and dynamic security posture. A SOAR solution would best satisfy the requirements of the online file hosting service, because it would:
? Remediate threats to customer data integrity and availability first, by automatically
applying predefined actions or workflows based on the severity and type of the threat.
? Allow the environment to be dynamic to match increasing customer demands, by
scaling up or down the security resources and processes as needed.
? Not interfere with customers' ability to access their data at anytime, by minimizing the human intervention and downtime required for threat response.
? Enable security analysts to focus on high-risk items, by reducing the manual tasks and alert fatigue associated with threat detection and response.
Reference: CASP+ (Plus) CompTIA Advanced Security Practitioner Certification …

NEW QUESTION 115
A company provides guest WiFi access to the internet and physically separates the guest network from the company's internal WIFI. Due to a recent incident in which an attacker gained access to the compay's intend WIFI, the company plans to configure WPA2 Enterprise in an EAP- TLS configuration. Which of the following must be installed on authorized hosts for this new configuration to work properly?

A. Active Directory OPOs
B. PKI certificates
C. Host-based firewall
D. NAC persistent agent

Answer: B

NEW QUESTION 117
A security analyst discovered that the company's WAF was not properly configured. The main web server was breached, and the following payload was found in one of the malicious requests:

```
<!DOCTYPE doc [
<!ELEMENT doc ANY>
<ENTITY xxe SYSTEM "file:///etc/password">]>
<doc>&xxe;</doc>
```

Which of the following would BEST mitigate this vulnerability?

A. CAPTCHA
B. Input validation
C. Data encoding
D. Network intrusion prevention

Answer: B

Explanation:
Reference: https://hdivsecurity.com/owasp-xml-external-entities-xxe

NEW QUESTION 121
A company wants to refactor a monolithic application to take advantage of cloud native services and service microsegmentation to secure sensitive application components. Which of the following should the company implement to ensure the architecture is portable?

A. Virtualized emulators
B. Type 2 hypervisors
C. Orchestration
D. Containerization

Answer: D

Explanation:
Containerization is a technology that allows applications to run in isolated and portable environments called containers. Containers are lightweight and self-contained units that
include all the dependencies, libraries, and configuration files needed for an application to run. Containers can be deployed on any platform that supports the container runtime engine, such as Docker or Kubernetes.
Containerization would allow the company to refactor a monolithic application to take advantage of cloud native services and service microsegmentation to secure sensitive application components, because containerization would:
? Enable the application to be split into smaller and independent components
(microservices) that can communicate with each other through APIs or message queues.
? Allow the application to leverage cloud native services, such as load balancers,
databases, or serverless functions, that can be integrated with containers through configuration files or environment variables.
? Enhance the security of the application by isolating each container from other
containers and the host system, and applying fine-grained access control policies and network rules to each container or group of containers.
? Ensure the portability of the application by enabling it to run on any cloud provider
or platform that supports containers, without requiring any changes to the application code or configuration.

NEW QUESTION 122
During a system penetration test, a security engineer successfully gained access to a shell on a Linux host as a standard user and wants to elevate the privilege levels.
Which of the following is a valid Linux post-exploitation method to use to accomplish this goal?

A. Spawn a shell using sudo and an escape string such as sudo vim -c '!sh'.
B. Perform ASIC password cracking on the host.
C. Read the /etc/passwd file to extract the usernames.
D. Initiate unquoted service path exploits.
E. Use the UNION operator to extract the database schema.

Answer: A

Explanation:
Reference: https://docs.rapid7.com/insightvm/elevating-permissions/
Spawning a shell using sudo and an escape string is a valid Linux post-exploitation method that can exploit a misconfigured sudoers file and allow a standard user to execute commands as root. ASIC password cracking is used to break hashed passwords, not to elevate privileges. Reading the /etc/passwd file may reveal usernames, but not passwords or privileges. Unquoted service path exploits are applicable to Windows systems, not Linux. Using the UNION operator is a SQL injection technique, not a Linux post-exploitation method. Verified References: https://www.comptia.org/blog/what-is-post-exploitation
https://partners.comptia.org/docs/default-source/resources/casp-content-guide

NEW QUESTION 125
To save time, a company that is developing a new VPN solution has decided to use the OpenSSL library within Its proprietary software. Which of the following should the company consider to maximize risk reduction from vulnerabilities introduced by OpenSSL?

A. Include stable, long-term releases of third-party libraries instead of using newer versions.
B. Ensure the third-party library implements the TLS and disable weak ciphers.
C. Compile third-party libraries into the main code statically instead of using dynamic loading.
D. Implement an ongoing, third-party software and library review and regression testing.

Answer: D

Explanation:
Implementing an ongoing, third-party software and library review and regression testing is the best way to maximize risk reduction from vulnerabilities introduced by OpenSSL. Third-party software and libraries are often used by developers to save time and resources, but they may also introduce security risks if they are not properly maintained and updated. By reviewing and testing the third-party software and library regularly, the company can ensure that they are using the latest and most secure version of OpenSSL, and that their proprietary software is compatible and functional with it. References: [CompTIA CASP+ Study Guide, Second Edition, page 362]

NEW QUESTION 128
A company has decided to purchase a license for software that is used to operate a mission-critical process. The third-party developer is new to the industry but is delivering what the company needs at this time.
Which of the following BEST describes the reason why utilizing a source code escrow will reduce the operational risk to the company if the third party stops supporting the application?

A. The company will have access to the latest version to continue development.
B. The company will be able to force the third-party developer to continue support.
C. The company will be able to manage the third-party developer's development process.
D. The company will be paid by the third-party developer to hire a new development team.

Answer: A

Explanation:
Utilizing a source code escrow will reduce the operational risk to the company if the third party stops supporting the application, as it will provide access to the latest version of the source code to continue development. A source code escrow is an agreement between a software developer and a client that involves depositing the source code of a software product with a third-party escrow agent. The escrow agent can release the source code to the client under certain conditions specified in the agreement, such as bankruptcy, termination, or breach of contract by the developer. The company will not be able to force the third-

party developer to continue support, manage their development process, or pay them to hire a new development team by utilizing a source code escrow. Verified References: https://www.comptia.org/blog/what-is-source-code-escrow https://partners.comptia.org/docs/default-source/resources/casp-content-guide

NEW QUESTION 132
Which of the following processes involves searching and collecting evidence during an investigation or lawsuit?

A. E-discovery
B. Review analysis
C. Information governance
D. Chain of custody

Answer: A

Explanation:
E-discovery is the process of searching and collecting evidence during an investigation or lawsuit. E-discovery involves identifying, preserving, processing, reviewing, analyzing, and producing electronically stored information (ESI) that is relevant for a legal case or investigation. E-discovery can be used to find evidence in email, business communications, social media, online documents, databases, and other digital sources. The other options are either irrelevant or less effective for the given scenario

NEW QUESTION 136
A help desk technician just informed the security department that a user downloaded a suspicious file from internet explorer last night. The user confirmed accessing all the files and folders before going home from work. the next morning, the user was no longer able to boot the system and was presented a screen with a phone number. The technician then
tries to boot the computer using wake-on-LAN, but the system would not come up. which of the following explains why the computer would not boot?

A. The operating system was corrupted.
B. SElinux was in enforced status.
C. A secure boot violation occurred.
D. The disk was encrypted.

Answer: A

NEW QUESTION 141
A security architect is given the following requirements to secure a rapidly changing enterprise with an increasingly distributed and remote workforce
• Cloud-delivered services
• Full network security stack
• SaaS application security management
• Minimal latency for an optimal user experience
• Integration with the cloud 1AM platform Which of the following is the BEST solution?

A. Routing and Remote Access Service (RRAS)
B. NGFW
C. Managed Security Service Provider (MSSP)
D. SASE

Answer: D

NEW QUESTION 142
A security analyst is trying to identify the source of a recent data loss incident. The analyst has reviewed all the for the time surrounding the identified all the assets on the network at the time of the data loss. The analyst suspects the key to finding the source was obfuscated in an application. Which of the following tools should the analyst use NEXT?

A. Software Decomplier
B. Network enurrerator
C. Log reduction and analysis tool
D. Static code analysis

Answer: D

NEW QUESTION 147
Users are reporting intermittent access issues with a new cloud application that was recently added to the network. Upon investigation, the security administrator notices the human resources department is able to run required queries with the new application, but the marketing department is unable to pull any needed reports on various resources using the new application. Which of the following MOST likely needs to be done to avoid this in the future?

A. Modify the ACLS.
B. Review the Active Directory.
C. Update the marketing department's browser.
D. Reconfigure the WAF.

Answer: A

Explanation:
Modifying the ACLs (access control lists) is the most likely solution to avoid the intermittent access issues with the new cloud application. ACLs are used to define permissions for different users and groups to access resources on a network. The problem may be caused by incorrect or missing ACLs for the marketing department that prevent them from accessing the cloud application or its data sources. The other options are either irrelevant or less effective for the given scenario.

NEW QUESTION 150
An organization recently experienced a ransomware attack. The security team leader is concerned about the attack reoccurring. However, no further security measures have been implemented.
Which of the following processes can be used to identify potential prevention recommendations?

A. Detection
B. Remediation
C. Preparation
D. Recovery

Answer: C

Explanation:
Preparation is the process that can be used to identify potential prevention recommendations after a security incident, such as a ransomware attack. Preparation involves planning and implementing security measures to prevent or mitigate future incidents, such as by updating policies, procedures, or controls, conducting training or awareness campaigns, or acquiring new tools or resources. Detection is the process of discovering or identifying security incidents, not preventing them. Remediation is the process of containing or resolving security incidents, not preventing them. Recovery is the process of restoring normal operations after security incidents, not preventing them. Verified References: https://www.comptia.org/blog/what-is-incident-response https://partners.comptia.org/docs/default-source/resources/casp-content-guide

NEW QUESTION 154
A company's Chief Information Officer wants to Implement IDS software onto the current system's architecture to provide an additional layer of security. The software must be able to monitor system activity, provide Information on attempted attacks, and provide analysis of malicious activities to determine the processes or users Involved. Which of the following would provide this information?

A. HIPS
B. UEBA
C. HIDS
D. NIDS

Answer: B

NEW QUESTION 159
A satellite communications ISP frequently experiences outages and degraded modes of operation over one of its legacy satellite links due to the use of deprecated hardware and software. Three days per week, on average, a contracted company must follow a checklist of 16 different high-latency commands that must be run in serial to restore nominal performance. The ISP wants this process to be automated.
Which of the following techniques would be BEST suited for this requirement?

A. Deploy SOAR utilities and runbooks.
B. Replace the associated hardware.
C. Provide the contractors with direct access to satellite telemetry data.
D. Reduce link latency on the affected ground and satellite segments.

Answer: A

Explanation:
Deploying SOAR (Security Orchestration Automation and Response) utilities and runbooks is the best technique for automating the process of restoring nominal performance on a legacy satellite link due to degraded modes of operation caused by deprecated hardware and software.

NEW QUESTION 163
A cybersecurity engineer analyst a system for vulnerabilities. The tool created an OVAL. Results document as output. Which of the following would enable the engineer to interpret the results in a human readable form? (Select TWO.)

A. Text editor
B. OOXML editor
C. Event Viewer
D. XML style sheet
E. SCAP tool
F. Debugging utility

Answer: BD

NEW QUESTION 166
A DevOps team has deployed databases, event-driven services, and an API gateway as PaaS solution that will support a new billing system. Which of the following security responsibilities will the DevOps team need to perform?

A. Securely configure the authentication mechanisms
B. Patch the infrastructure at the operating system
C. Execute port scanning against the services
D. Upgrade the service as part of life-cycle management

Answer: A

NEW QUESTION 167
A security architect for a large, multinational manufacturer needs to design and implement a security solution to monitor traffic.
When designing the solution, which of the following threats should the security architect focus on to prevent attacks against the network?

A. Packets that are the wrong size or length

B. Use of any non-DNP3 communication on a DNP3 port
C. Multiple solicited responses over time
D. Application of an unsupported encryption algorithm

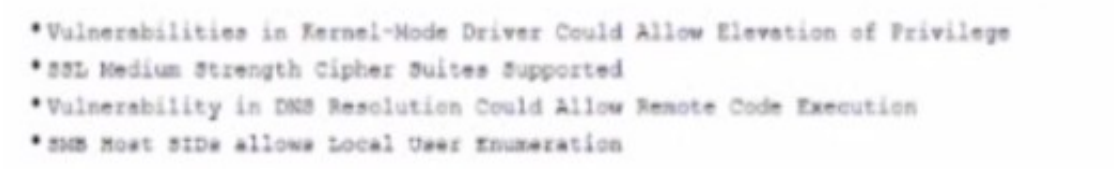
Answer: C

NEW QUESTION 168
A pharmaceutical company recently experienced a security breach within its customer- facing web portal. The attackers performed a SQL injection attack and exported tables from the company's managed database, exposing customer information.
The company hosts the application with a CSP utilizing the IaaS model. Which of the following parties is ultimately responsible for the breach?

A. The pharmaceutical company
B. The cloud software provider
C. The web portal software vendor
D. The database software vendor

Answer: A

NEW QUESTION 171
An analyst execute a vulnerability scan against an internet-facing DNS server and receives the following report:



Which of the following tools should the analyst use FIRST to validate the most critical vulnerability?

A. Password cracker
B. Port scanner
C. Account enumerator
D. Exploitation framework

Answer: A

NEW QUESTION 175
A software development company is building a new mobile application for its social media platform. The company wants to gain its Users' rust by reducing the risk of on-path attacks between the mobile client and its servers and
by implementing stronger digital trust. To support users' trust, the company has released the following internal guidelines:
* Mobile clients should verify the identity of all social media servers locally.
* Social media servers should improve TLS performance of their certificate status.
* Social media servers should inform the client to only use HTTPS.
Given the above requirements, which of the following should the company implement? (Select TWO).

A. Quick UDP internet connection
B. OCSP stapling
C. Private CA
D. DNSSEC
E. CRL
F. HSTS
G. Distributed object model

Answer: BF

Explanation:
OCSP stapling and HSTS are the best options to meet the requirements of reducing the risk of on-path attacks and implementing stronger digital trust. OCSP stapling allows the
social media servers to improve TLS performance by sending a signed certificate status along with the certificate, eliminating the need for the client to contact the CA separately. HSTS allows the social media servers to inform the client to only use HTTPS and prevent downgrade attacks.

NEW QUESTION 176
The Chief Information Security Officer (CISO) is working with a new company and needs a legal "document to ensure all parties understand their roles during an assessment. Which of the following should the CISO have each party sign?

A. SLA
B. ISA
C. Permissions and access
D. Rules of engagement

Answer: D

Explanation:
Rules of engagement are legal documents that should be signed by all parties involved in an assessment to ensure they understand their roles and responsibilities. Rules of engagement define the scope, objectives, methods, deliverables, limitations, and expectations of an assessment project. They also specify the legal and ethical boundaries, communication channels, escalation procedures, and reporting formats for the assessment. Rules of engagement help to avoid misunderstandings, conflicts, or liabilities during or after an assessment.
References: [CompTIA CASP+ Study Guide, Second Edition, page 34]

NEW QUESTION 178
A security architect is designing a solution for a new customer who requires significant security capabilities in its environment. The customer has provided the architect with the following set of requirements:
* Capable of early detection of advanced persistent threats.
* Must be transparent to users and cause no performance degradation.
+ Allow integration with production and development networks seamlessly.
+ Enable the security team to hunt and investigate live exploitation techniques.
Which of the following technologies BEST meets the customer's requirements for security capabilities?

A. Threat Intelligence
B. Deception software
C. Centralized logging
D. Sandbox detonation

Answer: B

Explanation:
Deception software is a technology that creates realistic but fake assets (such as servers, applications, data, etc.) that mimic the real environment and lure attackers into interacting with them. By doing so, deception software can help detect advanced persistent threats (APTs) that may otherwise evade traditional security tools12
. Deception software can also provide valuable insights into the attacker's tactics, techniques, and procedures (TTPs) by capturing their actions and behaviors on the decoys 13.
Deception software can meet the customer's requirements for security capabilities because:
? It is capable of early detection of APTs by creating attractive targets for them and
alerting security teams when they are engaged12.
? It is transparent to users and causes no performance degradation because it does not interfere with legitimate traffic or resources13.
? It allows integration with production and development networks seamlessly because it can create decoys that match the network topology and configuration13.
? It enables the security team to hunt and investigate live exploitation techniques because it can record and analyze the attacker's activities on the decoys13.

NEW QUESTION 179
An organization is researching the automation capabilities for systems within an OT network. A security analyst wants to assist with creating secure coding practices and would like to learn about the programming languages used on the PLCs. Which of the following programming languages is the MOST relevant for PLCs?

A. Ladder logic
B. Rust
C. C
D. Python
E. Java

Answer: A

NEW QUESTION 182
Which of the following terms refers to the delivery of encryption keys to a CASB or a third- party entity?

A. Key sharing
B. Key distribution
C. Key recovery
D. Key escrow

Answer: D

Explanation:
Key escrow is a process that involves storing encryption keys with a trusted third party, such as a CASB (Cloud Access Security Broker) or a government agency. Key escrow can enable authorized access to encrypted data in case of emergencies, legal issues, or data recovery. However, key escrow also introduces some risks and challenges, such as trust, security, and privacy. References: https://www.techopedia.com/definition/1772/key-escrow
https://searchsecurity.techtarget.com/definition/key-escrow

NEW QUESTION 185
Immediately following the report of a potential breach, a security engineer creates a forensic image of the server in question as part of the organization incident response procedure. Which of the must occur to ensure the integrity of the image?

A. The image must be password protected against changes.
B. A hash value of the image must be computed.
C. The disk containing the image must be placed in a seated container.
D. A duplicate copy of the image must be maintained

Answer: B

NEW QUESTION 187
A company suspects a web server may have been infiltrated by a rival corporation. The security engineer reviews the web server logs and finds the following:

```
ls -l -a /usr/heinz/public; cat ./config/db.yml
```

The security engineer looks at the code with a developer, and they determine the log entry is created when the following line is run:

```
system ("ls -l -a #{path}")
```

Which of the following is an appropriate security control the company should implement?

A. Restrict directory permission to read-only access.
B. Use server-side processing to avoid XSS vulnerabilities in path input.
C. Separate the items in the system call to prevent command injection.
D. Parameterize a query in the path variable to prevent SQL injection.

Answer: C

Explanation:
The company using the wrong port is the most likely root cause of why secure LDAP is not working. Secure LDAP is a protocol that provides secure communication between clients and servers using LDAP (Lightweight Directory Access Protocol), which is a protocol that allows querying and modifying directory services over TCP/IP. Secure LDAP uses SSL (Secure Sockets Layer) or TLS (Transport Layer Security) to encrypt LDAP traffic and prevent unauthorized disclosure or interception.

NEW QUESTION 190
A security analyst sees that a hacker has discovered some keys and they are being made
available on a public website. The security analyst is then able to successfully decrypt the data using the keys from the website. Which of the following should the security analyst recommend to protect the affected data?

A. Key rotation
B. Key revocation
C. Key escrow
D. Zeroization
E. Cryptographic obfuscation

Answer: E

NEW QUESTION 193
An analyst received a list of IOCs from a government agency. The attack has the following characteristics:
* 1. The attack starts with bulk phishing.
* 2. If a user clicks on the link, a dropper is downloaded to the computer.
* 3. Each of the malware samples has unique hashes tied to the user.
The analyst needs to identify whether existing endpoint controls are effective. Which of the following risk mitigation techniques should the analyst use?

A. Update the incident response plan.
B. Blocklist the executable.
C. Deploy a honeypot onto the laptops.
D. Detonate in a sandbox.

Answer: D

Explanation:
Detonating the malware in a sandbox is the best way to analyze its behavior and determine whether the existing endpoint controls are effective. A sandbox is an isolated environment that mimics a real system but prevents any malicious actions from affecting the actual system. By detonating the malware in a sandbox, the analyst can observe how it interacts with the system, what files it creates or modifies, what network connections it establishes, and what indicators of compromise it exhibits. This can help the analyst identify the malware's capabilities, objectives, and weaknesses. A sandbox can also help the analyst compare different malware samples and determine if they are related or part of the same campaign.
* A. Updating the incident response plan is not a risk mitigation technique, but rather a proactive measure to prepare for potential incidents. It does not help the analyst identify whether existing endpoint controls are effective against the malware.
* B. Blocklisting the executable is a risk mitigation technique that can prevent the malware from running on the system, but it does not help the analyst analyze its behavior or determine whether existing endpoint controls are effective. Moreover, blocklisting may not be feasible if each malware sample has a unique hash tied to the user.
* C. Deploying a honeypot onto the laptops is a risk mitigation technique that can lure attackers away from the real systems and collect information about their activities, but it does not help the analyst analyze the malware's behavior or determine whether existing endpoint controls are effective. A honeypot is also more suitable for detecting network- based attacks rather than endpoint-based attacks.

NEW QUESTION 195
A bank hired a security architect to improve its security measures against the latest threats The solution must meet the following requirements
• Recognize and block fake websites
• Decrypt and scan encrypted traffic on standard and non-standard ports
• Use multiple engines for detection and prevention
• Have central reporting
Which of the following is the BEST solution the security architect can propose?

A. CASB
B. Web filtering
C. NGFW
D. EDR

Answer: C

Explanation:
A next-generation firewall (NGFW) is a device or software that provides advanced network security features beyond the traditional firewall functions. A NGFW can provide the following capabilities:
? Recognize and block fake websites, using URL filtering and reputation-based
analysis
? Decrypt and scan encrypted traffic on standard and non-standard ports, using SSL/TLS inspection and deep packet inspection
? Use multiple engines for detection and prevention, such as antivirus, intrusion prevention system (IPS), application control, and sandboxing
? Have central reporting, using a unified management console and dashboard A cloud access security broker (CASB) is a device or software that acts as an intermediary between cloud service users and cloud service providers. A CASB can provide various security functions such as visibility, compliance, data security, and threat protection, but it does not provide all the capabilities of a NGFW. Web filtering is a technique that blocks or allows web access based on predefined

criteria such as categories, keywords, or reputation. Web filtering can help recognize and block fake websites, but it does not provide all the capabilities of a NGFW. Endpoint detection and response (EDR) is a technology that monitors and analyzes the activity and behavior of endpoints such as computers or mobile devices. EDR can help detect and respond to advanced threats, but it does not provide all the capabilities of a NGFW. References: [CompTIA Advanced Security Practitioner (CASP+) Certification Exam Objectives], Domain 2: Enterprise
Security Architecture, Objective 2.2: Select appropriate hardware and software solutions

NEW QUESTION 196
A cloud security architect has been tasked with selecting the appropriate solution given the following:
* The solution must allow the lowest RTO possible.
* The solution must have the least shared responsibility possible.
« Patching should be a responsibility of the CSP.
Which of the following solutions can BEST fulfill the requirements?

A. Paas
B. laas
C. Private
D. Saas

Answer: D

Explanation:
SaaS, or software as a service, is the solution that can best fulfill the requirements of having the lowest RTO possible, the least shared responsibility possible, and patching as a responsibility of the CSP. SaaS is a cloud service model that provides users with access to software applications hosted and managed by the CSP over the internet. SaaS has the lowest RTO (recovery time objective), which is the maximum acceptable time for restoring a system or service after a disruption, because it does not require any installation, configuration, or maintenance by the users. SaaS also has the least shared responsibility possible because most of the security aspects are handled by the CSP, such as patching, updating, backup, encryption, authentication, etc.
References: [CompTIA CASP+ Study Guide, Second Edition, pages 403-404]

NEW QUESTION 200
Which of the following agreements includes no penalties and can be signed by two entities that are working together toward the same goal?

A. MOU
B. NDA
C. SLA
D. ISA

Answer: A

NEW QUESTION 201
Due to internal resource constraints, the management team has asked the principal security architect to recommend a solution that shifts partial responsibility for application- level controls to the cloud provider. In the shared responsibility model, which of the following levels of service meets this requirement?

A. laaS
B. SaaS
C. FaaS
D. PaaS

Answer: D

NEW QUESTION 204
Which of the following controls primarily detects abuse of privilege but does not prevent it?

A. Off-boarding
B. Separation of duties
C. Least privilege
D. Job rotation

Answer: A

NEW QUESTION 209
An engineering team is developing and deploying a fleet of mobile devices to be used for specialized inventory management purposes. These devices should:
* Be based on open-source Android for user familiarity and ease.
* Provide a single application for inventory management of physical assets.
* Permit use of the camera be only the inventory application for the purposes of scanning
* Disallow any and all configuration baseline modifications.
* Restrict all access to any device resource other than those requirement ?

A. Set an application wrapping policy, wrap the application, distributes the inventory APK via the MAM tool, and test the application restrictions.
B. Write a MAC sepolicy that defines domains with rules, label the inventory application, build the policy, and set to enforcing mode.
C. Swap out Android Linux kernel version for >2,4,0, but the internet build Android, remove unnecessary functions via MDL, configure to block network access, and perform integration testing
D. Build and install an Android middleware policy with requirements added, copy the file into/ user/init, and then built the inventory application.

Answer: A

NEW QUESTION 212
A company is preparing to deploy a global service.

Which of the following must the company do to ensure GDPR compliance? (Choose two.)

A. Inform users regarding what data is stored.
B. Provide opt-in/out for marketing messages.
C. Provide data deletion capabilities.
D. Provide optional data encryption.
E. Grant data access to third parties.
F. Provide alternative authentication techniques.

Answer: AC

Explanation:
The main rights for individuals under the GDPR are to:
allow subject access
have inaccuracies corrected have information erased prevent direct marketing
prevent automated decision-making and profiling allow data portability (as per the paragraph above)
source: https://www.clouddirect.net/11-things-you-must-do-now-for-gdpr-compliance/ These are two of the requirements of the GDPR (General Data Protection Regulation),
which is a legal framework that sets guidelines for the collection and processing of personal data of individuals within the European Union (EU). The GDPR also requires data controllers to obtain consent from data subjects, protect data with appropriate security measures, notify data subjects and authorities of data breaches, and appoint a data protection officer.

NEW QUESTION 215
Which of the following protocols is a low power, low data rate that allows for the creation of PAN networks?

A. Zigbee
B. CAN
C. DNP3
D. Modbus

Answer: A

Explanation:
Reference: https://urgentcomm.com/2007/11/01/connecting-on-a-personal-level/

NEW QUESTION 219
A global organization's Chief Information Security Officer (CISO) has been asked to analyze the risks involved in a plan to move the organization's current MPLS-based WAN network to use commodity Internet and SD-WAN hardware. The SD-WAN provider is currently highly regarded but Is a regional provider. Which of the following is MOST likely identified as a potential risk by the CISO?

A. The SD-WAN provider would not be able to handle the organization's bandwidth requirements.
B. The operating costs of the MPLS network are too high for the organization.
C. The SD-WAN provider uses a third party for support.
D. Internal IT staff will not be able to properly support remote offices after the migration.

Answer: C

Explanation:
SD-WAN (Software-Defined Wide Area Network) is a technology that allows organizations to use multiple, low-cost Internet connections to create a secure and dynamic WAN. SD- WAN can provide benefits such as lower costs, higher performance, and easier management compared to traditional WAN technologies, such as MPLS (Multiprotocol Label Switching).
However, SD-WAN also introduces some potential risks, such as:
? The reliability and security of the Internet connections, which may vary depending on the location, provider, and traffic conditions.
? The compatibility and interoperability of the SD-WAN hardware and software, which may come from different vendors or use different standards.
? The availability and quality of the SD-WAN provider’s support, which may depend
on the provider’s size, reputation, and outsourcing practices.
In this case, the CISO would most likely identify the risk that the SD-WAN provider uses a third party for support, because this could:
? Affect the organization’s ability to resolve issues or request changes in a timely
and effective manner.
? Expose the organization’s network data and configuration to unauthorized or malicious parties.
? Increase the complexity and uncertainty of the SD-WAN service level agreement (SLA) and contract terms.

NEW QUESTION 222
A financial institution has several that currently employ the following controls:
* The severs follow a monthly patching cycle.
* All changes must go through a change management process.
* Developers and systems administrators must log into a jumpbox to access the servers hosting the data using two-factor authentication.
* The servers are on an isolated VLAN and cannot be directly accessed from the internal production network.
An outage recently occurred and lasted several days due to an upgrade that circumvented the approval process. Once the security team discovered an unauthorized patch was installed, they were able to resume operations within an hour. Which of the following should the security administrator recommend to reduce the time to resolution if a similar incident occurs in the future?

A. Require more than one approver for all change management requests.
B. Implement file integrity monitoring with automated alerts on the servers.
C. Disable automatic patch update capabilities on the servers
D. Enhanced audit logging on the jump servers and ship the logs to the SIEM.

Answer: B

NEW QUESTION 226
A security analyst is reading the results of a successful exploit that was recently conducted by third-party penetration testers. The testers reverse engineered a privileged executable. In the report, the planning and execution of the exploit is detailed using logs and outputs from the test However, the attack vector of the exploit is missing, making it harder to recommend remediation's. Given the following output:

```
0x014435a5 <+7>: mov 0x8(%ebp),%eax
0x014435a8 <+10>: movl $0xffffffff,-0x1c(%ebp)  //Tester note, Start
0x014435af <+17>: mov %eax,%edx
0x014435b1 <+19>: mov $0x0,%eax
0x014435b6 <+24>: mov -0x1c(%ebp),%ecx
0x014435b9 <+27>: mov %edx,%edi
0x014435bb <+29>: repnz scas %es:(%edi),%al
0x014435bd <+31>: mov %ecx,%eax
0x014435bf <+33>: not %eax
0x014435c1 <+35>: sub $0x1,%eax                 //Tester note, end
0x014435c4 <+38>: mov %al,-0x9(%ebp)
0x014435c7 <+41>: cmpb $0x3,-0x9(%ebp)          //Tester note <=4
0x014435cb <+45>: jbe 0x1448500 <validate_passwd+98>
0x014435cd <+47>: cmpb $0x8,-0x9(%ebp)          //Tester note >=8
0x014435d1 <+51>: ja 0x1448500 <validate_passwd+98>
0x014435d3 <+53>: movl $0x1448660,(%esp)
0x014435da <+60>: call 0x14483e0 <puts@plt>
0x014435df <+65>: mov 0x144a020,%eax
0x014435e4 <+70>: mov %eax,(%esp)
0x014435e7 <+73>: call 0x1448380 <fflush@plt>
0x014435ec <+78>: mov 0x8(%ebp),%eax
0x014435ef <+81>: mov %eax,0x4(%esp)
0x014435f3 <+85>: lea -0x14(%ebp),%eax
0x014435f6 <+88>: mov %eax,(%esp)
0x014435f9 <+91>: call 0x1448390 <strcpy@plt>   //Tester note, breakpoint
0x014435fe <+96>: jmp 0x1448519 <validate_passwd+123>
0x01448500 <+98>: movl $0x144866f,(%esp)
```

The penetration testers MOST likely took advantage of:

A. A TOC/TOU vulnerability
B. A plain-text password disclosure
C. An integer overflow vulnerability
D. A buffer overflow vulnerability

Answer: A

NEW QUESTION 230
Correct Answer: (Answer option in bold)
Short but Comprehensive Explanation of Correct Answer Only: (Short Explanation based on CompTIA CASP+ documents and resources)
Verified References: (Related URLs AND Make sure Links are working and verified references)
==========
A security administrator wants to detect a potential forged sender claim in tt-e envelope of an email. Which of the following should the security administrator implement? (Select TWO).

A. MX record
B. DMARC
C. SPF
D. DNSSEC
E. S/MIME
F. TLS

Answer: BC

Explanation:
DMARC (Domain-based Message Authentication, Reporting and Conformance) and SPF (Sender Policy Framework) are two mechanisms that can help detect and prevent email spoofing, which is the creation of email messages with a forged sender address. DMARC allows a domain owner to publish a policy that specifies how receivers should handle messages that fail authentication tests, such as SPF or DKIM (DomainKeys Identified Mail). SPF allows a domain owner to specify which mail servers are authorized to send email on behalf of their domain. By checking the DMARC and SPF records of the sender's domain, a receiver can verify if the email is from a legitimate source or not. Verified References:
? https://en.wikipedia.org/wiki/Email_spoofing
? https://en.wikipedia.org/wiki/DMARC
? https://en.wikipedia.org/wiki/Sender_Policy_Framework

NEW QUESTION 235
A web service provider has just taken on a very large contract that comes with requirements that are currently not being implemented in order to meet contractual requirements, the company must achieve the following thresholds
• 99 99% uptime
• Load time in 3 seconds
• Response time = <1 0 seconds
Starting with the computing environment, which of the following should a security engineer recommend to BEST meet the requirements? (Select THREE)

A. Installing a firewall at corporate headquarters

B. Deploying a content delivery network
C. Implementing server clusters
D. Employing bare-metal loading of applications
E. Lowering storage input/output
F. Implementing RAID on the backup servers
G. Utilizing redundant power for all developer workstations
H. Ensuring technological diversity on critical servers

Answer: BCE

Explanation:
To meet the contractual requirements of the web service provider, a security engineer should recommend the following actions:
? Deploying a content delivery network (CDN): A CDN is a distributed system of
servers that delivers web content to users based on their geographic location, the origin of the content, and the performance of the network. A CDN can help improve the uptime, load time, and response time of web services by caching content closer to the users, reducing latency and bandwidth consumption. A CDN can also help mitigate distributed denial-of-service (DDoS) attacks by absorbing or filtering malicious traffic before it reaches the origin servers, reducing the impact on the web service availability12.
? Implementing server clusters: A server cluster is a group of servers that work
together to provide high availability, scalability, and load balancing for web services. A server cluster can help improve the uptime, load time, and response time of web services by distributing the workload across multiple servers, reducing the risk of single points of failure and performance bottlenecks. A server cluster can also help recover from failures by automatically switching to another server in case of a malfunction34.
? Lowering storage input/output (I/O): Storage I/O is the amount of data that can be
read from or written to a storage device in a given time. Storage I/O can affect the performance of web services by limiting the speed of data transfer between the servers and the storage devices. Lowering storage I/O can help improve the load time and response time of web services by reducing the latency and congestion of data access. Lowering storage I/O can be achieved by using faster storage devices, such as solid-state drives (SSDs), optimizing the storage layout and configuration, such as using RAID or striping, and caching frequently accessed data in memory5 .
Installing a firewall at corporate headquarters is not a recommended action to meet the contractual requirements, as it does not directly affect the uptime, load time, or response time of web services. A firewall is a device or software that filters and blocks unwanted network traffic based on predefined rules. A firewall can help improve the security of web services by preventing unauthorized access and attacks, but it may also introduce additional latency and complexity to the network.
Employing bare-metal loading of applications is not a recommended action to meet the contractual requirements, as it does not directly affect the uptime, load time, or response time of web services. Bare-metal loading is a technique that allows applications to run directly on hardware without an operating system or a hypervisor. Bare-metal loading can help improve the performance and efficiency of applications by eliminating the overhead and interference of other software layers, but it may also increase the difficulty and cost of deployment and maintenance.
Implementing RAID on the backup servers is not a recommended action to meet the contractual requirements, as it does not directly affect the uptime, load time, or response time of web services. RAID (redundant array of independent disks) is a technique that combines multiple disks into a logical unit that provides improved performance, reliability, or both. RAID can help improve the availability and security of backup data by protecting it from disk failures or corruption, but it may also introduce additional complexity and overhead to the backup process.
Utilizing redundant power for all developer workstations is not a recommended action to meet the contractual requirements, as it does not directly affect the uptime, load time, or response time of web services. Redundant power is a technique that provides multiple sources of power for an IT system in case one fails. Redundant power can help improve the availability and reliability of developer workstations by preventing them from losing power due to outages or surges, but it may also increase the cost and energy consumption of the system.
Ensuring technological diversity on critical servers is not a recommended action to meet the contractual requirements, as it does not directly affect the uptime, load time, or response time of web services. Technological diversity is a technique that uses different types of hardware, software, or platforms in an IT environment. Technological diversity can help improve resilience by reducing single points of failure and increasing compatibility, but it may also introduce additional complexity and inconsistency to the
environment. References: What Is CDN? How Does CDN Work? | Imperva, What Is Server Clustering? | IBM, What Is Server Clustering? | IBM, Server Clustering: What It Is & How It Works | Liquid Web, Storage I/O Performance - an overview | ScienceDirect Topics, [How
to Improve Storage I/O Performance | StarWind Blog], [What Is Firewall Security? | Cisco], [What is Bare Metal? | IBM], [What is RAID? | Dell Technologies US], [What Is Redundant Power Supply? | Dell Technologies US], [Technological Diversity - an overview | ScienceDirect Topics]

NEW QUESTION 237
Which of the following is a benefit of using steganalysis techniques in forensic response?

A. Breaking a symmetric cipher used in secure voice communications
B. Determining the frequency of unique attacks against DRM-protected media
C. Maintaining chain of custody for acquired evidence
D. Identifying least significant bit encoding of data in a .wav file

Answer: D

Explanation:
Steganalysis is the process of detecting hidden data in files or media, such as images, audio, or video. One technique of steganalysis is to identify least significant bit encoding, which is a method of hiding data by altering the least significant bits of each byte in a file. For example, a .wav file could contain hidden data encoded in the least significant bits of each audio sample. Steganalysis techniques can help forensic responders to discover hidden evidence or malicious payloads. Breaking a symmetric cipher, determining the frequency of attacks, or maintaining chain of custody are not related to steganalysis. Verified References: https://www.comptia.org/blog/what-is-steganography https://partners.comptia.org/docs/default-source/resources/casp-content-guide

NEW QUESTION 239
A high-severity vulnerability was found on a web application and introduced to the enterprise. The vulnerability could allow an unauthorized user to utilize an open-source library to view privileged user information. The enterprise is unwilling to accept the risk, but the developers cannot fix the issue right away.
Which of the following should be implemented to reduce the risk to an acceptable level until the issue can be fixed?

A. Scan the code with a static code analyzer, change privileged user passwords, and provide security training.
B. Change privileged usernames, review the OS logs, and deploy hardware tokens.
C. Implement MFA, review the application logs, and deploy a WAF.
D. Deploy a VPN, configure an official open-source library repository, and perform a full application review for vulnerabilities.

Answer: C

Explanation:

Reference: https://www.microfocus.com/en-us/what-is/sast
Implementing MFA can add an extra layer of security to protect against unauthorized access if the vulnerability is exploited. Reviewing the application logs can help identify if any attempts have been made to exploit the vulnerability, and deploying a WAF can help block any attempts to exploit the vulnerability. While the other options may provide some level of security, they may not directly address the vulnerability and may not reduce the risk to an acceptable level.

NEW QUESTION 241
A cybersecurity analyst discovered a private key that could have been exposed.
Which of the following is the BEST way for the analyst to determine if the key has been compromised?

A. HSTS
B. CRL
C. CSRs
D. OCSP

Answer: C

Explanation:
Reference: https://www.ssl.com/faqs/compromised-private-keys/

NEW QUESTION 245
A Chief Security Officer (CSO) is concerned about the number of successful ransomware attacks that have hit the company. The data Indicates most of the attacks came through a
fake email. The company has added training, and the CSO now wants to evaluate whether the training has been successful. Which of the following should the CSO implement?

A. Simulating a spam campaign
B. Conducting a sanctioned vishing attack
C. Performing a risk assessment
D. Executing a penetration test

Answer: A

Explanation:
A spam campaign is a mass distribution of unsolicited or fraudulent emails that may contain malicious links, attachments, or requests. Spam campaigns are often used by attackers to deliver ransomware, which is a type of malware that encrypts the victim's data and demands a ransom for its decryption.
Simulating a spam campaign would allow the Chief Security Officer (CSO) to evaluate whether the training has been successful in reducing the number of successful ransomware attacks that have hit the company, because it would:
? Test the employees' ability to recognize and avoid clicking on fake or malicious
emails, which is one of the main vectors for ransomware infection.
? Measure the effectiveness of the training by comparing the click-through rate and the infection rate before and after the training.
? Provide feedback and reinforcement to the employees by informing them of their performance and reminding them of the best practices for email security.

NEW QUESTION 250
An organization recently started processing, transmitting, and storing its customers' credit card information. Within a week of doing so, the organization suffered a massive breach that resulted in the exposure of the customers' information.
Which of the following provides the BEST guidance for protecting such information while it is at rest and in transit?

A. NIST
B. GDPR
C. PCI DSS
D. ISO

Answer: C

Explanation:
PCI DSS (Payment Card Industry Data Security Standard) is a standard that provides the best guidance for protecting credit card information while it is at rest and in transit. PCI DSS is a standard that defines the security requirements and best practices for organizations that process, store, or transmit credit card information, such as merchants, service providers, or acquirers. PCI DSS aims to protect the confidentiality, integrity, and availability of credit card information and prevent fraud or identity theft. NIST (National Institute of Standards and Technology) is not a standard that provides the best guidance for protecting credit card information, but an agency that develops standards, guidelines, and recommendations for various fields of science and technology, including cybersecurity. GDPR (General Data Protection Regulation) is not a standard that provides the best guidance for protecting credit card information, but a regulation that defines the data protection and privacy rights and obligations for individuals and organizations in the European Union or the European Economic Area. ISO (International Organization for Standardization) is not a standard that provides the best guidance for protecting credit card information, but an organization that develops standards for various fields of science and technology, including information security. Verified References: https://www.comptia.org/blog/what-is-pci-dss https://partners.comptia.org/docs/default- source/resources/casp-content-guide

NEW QUESTION 251
A client is adding scope to a project. Which of the following processes should be used when requesting updates or corrections to the client's systems?

A. The implementation engineer requests direct approval from the systems engineer and the Chief Information Security Officer.
B. The change control board must review and approve a submission.
C. The information system security officer provides the systems engineer with the system updates.
D. The security engineer asks the project manager to review the updates for the client's system.

Answer: B

Explanation:
The change control board (CCB) is a committee that consists of subject matter experts and managers who decide whether to implement proposed changes to a project. The change control board is part of the change management plan, which defines the roles and processes for managing change within a team or

organization. The change control board must review and approve a submission for any change request that affects the scope, schedule, budget, quality, or risks of the project. The change control board evaluates the impact and benefits of the change request and decides whether to accept, reject, or defer it.
* A. The implementation engineer requesting direct approval from the systems engineer and the Chief Information Security Officer is not a correct process for requesting updates or corrections to the client's systems, because it bypasses the change control board and the project manager. This could lead to unauthorized changes that could compromise the project's objectives and deliverables.
* C. The information system security officer providing the systems engineer with the system updates is not a correct process for requesting updates or corrections to the client's systems, because it does not involve the change control board or the project manager. This could lead to unauthorized changes that could introduce security vulnerabilities or conflicts with other system components.
* D. The security engineer asking the project manager to review the updates for the client's system is not a correct process for requesting updates or corrections to the client's systems, because it does not involve the change control board. The project manager is
responsible for facilitating the change management process, but not for approving or rejecting change requests.
https://www.projectmanager.com/blog/change-control-board-roles-responsibilities- processes

NEW QUESTION 253
While investigating a security event, an analyst finds evidence that a user opened an email attachment from an unknown source. Shortly after the user opened the attachment, a group of servers experienced a large amount of network and resource activity. Upon investigating the servers, the analyst discovers the servers were encrypted by ransomware that is demanding payment within 48 hours or all data will be destroyed. The company has no response plans for ransomware.
Which of the following is the NEXT step the analyst should take after reporting the incident to the management team?

A. Pay the ransom within 48 hours.
B. Isolate the servers to prevent the spread.
C. Notify law enforcement.
D. Request that the affected servers be restored immediately.

Answer: B

Explanation:
Isolating the servers is the best immediate action to take after reporting the incident to the management team, as it can limit the damage and contain the ransomware infection. Paying the ransom is not advisable, as it does not guarantee the recovery of the data and may encourage further attacks. Notifying law enforcement is a possible step, but not the next one after reporting. Requesting that the affected servers be restored immediately may not be feasible or effective, as it depends on the availability and integrity of backups, and it does not address the root cause of the attack. Verified References:
https://www.comptia.org/blog/what-is-ransomware-and-how-to-protect-yourself https://www.comptia.org/certifications/comptia-advanced-security-practitioner

NEW QUESTION 257
A company created an external application for its customers. A security researcher now reports that the application has a serious LDAP injection vulnerability that could be leveraged to bypass authentication and authorization.
Which of the following actions would BEST resolve the issue? (Choose two.)

A. Conduct input sanitization.
B. Deploy a SIEM.
C. Use containers.
D. Patch the OS
E. Deploy a WAF.
F. Deploy a reverse proxy
G. Deploy an IDS.

Answer: AE

Explanation:
A WAF protects your web apps by filtering, monitoring, and blocking any malicious HTTP/S traffic traveling to the web application, and prevents any unauthorized data from leaving the app. It does this by adhering to a set of policies that help determine what traffic is malicious and what traffic is safe.
According to OWASP, LDAP injection is an attack that exploits web applications that construct LDAP statements based on user input without proper validation or sanitization.
LDAP injection can result in unauthorized access, data modification, or denial of service. To prevent LDAP injection, OWASP recommends conducting input sanitization by escaping special characters in user input and deploying a web application firewall (WAF) that can detect and block malicious LDAP queries.45

NEW QUESTION 262
A software company wants to build a platform by integrating with another company's established product. Which of the following provisions would be MOST important to include when drafting an agreement between the two companies?

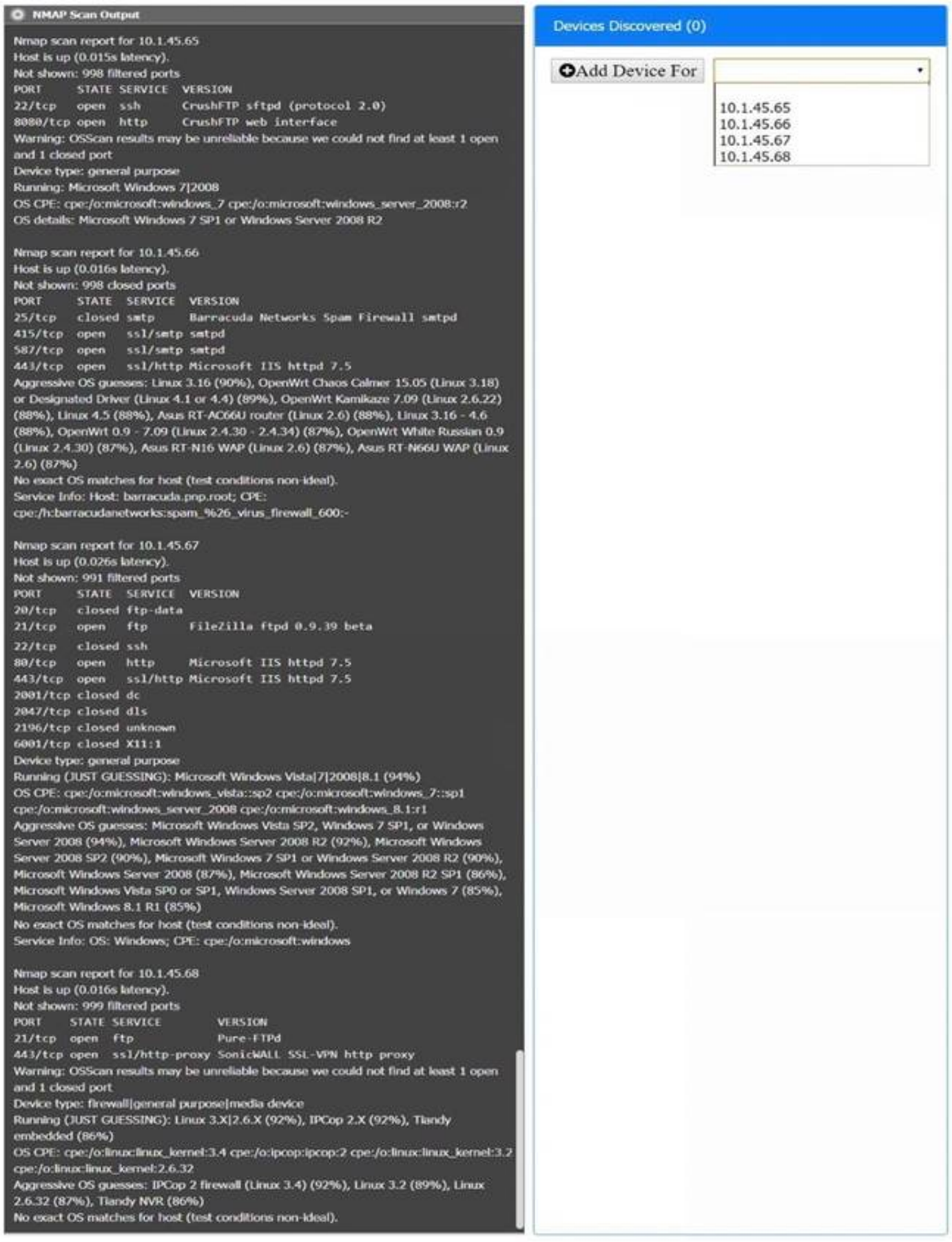
A. Data sovereignty
B. Shared responsibility
C. Source code escrow
D. Safe harbor considerations

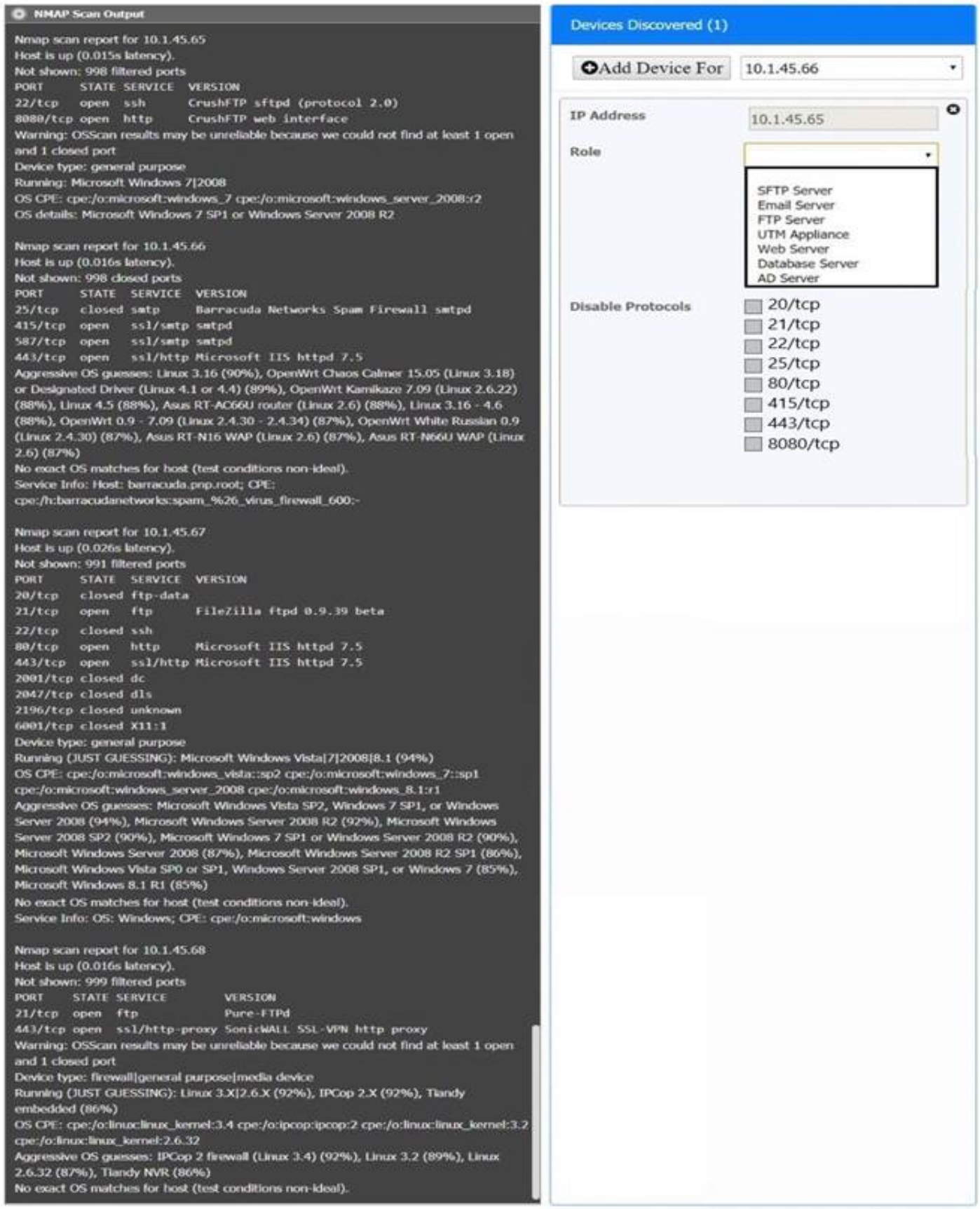
Answer: B

Explanation:
When drafting an agreement between two companies, it is important to clearly define the responsibilities of each party. This is particularly relevant when a software company is looking to integrate with an established product. A shared responsibility agreement ensures that both parties understand their respective responsibilities and are able to work together efficiently and effectively. For example, the software company might be responsible for integrating the product and ensuring it meets user needs, while the established product provider might be responsible for providing ongoing support and maintenance. By outlining these responsibilities in the agreement, both parties can ensure that the platform is built and maintained successfully. References: CompTIA Advanced Security Practitioner (CASP+) Study Guide, Chapter 8, Working with Third Parties.

NEW QUESTION 266
FILL IN THE BLANK
SIMULATION
You are a security analyst tasked with interpreting an Nmap scan output from company's privileged network.

The company's hardening guidelines indicate the following: There should be one primary server or service per device. Only default ports should be used. Non-secure protocols should be disabled.
INSTRUCTIONS
Using the Nmap output, identify the devices on the network and their roles, and any open ports that should be closed.
For each device found by Nmap, add a device entry to the Devices Discovered list, with the following information:
The IP address of the device
The primary server or service of the device (Note that each IP should by associated with one service/port only)
The protocol(s) that should be disabled based on the hardening guidelines (Note that multiple ports may need to be closed to comply with the hardening guidelines)
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.





A. Mastered
B. Not Mastered

Answer: A

Explanation:
* 10.1.45.65 SFTP Server Disable 8080
* 10.1.45.66 Email Server Disable 415 and 443
* 10.1.45.67 Web Server Disable 21, 80
* 10.1.45.68 UTM Appliance Disable 21

NEW QUESTION 270
As part of the customer registration process to access a new bank account, customers are required to upload a number of documents, including their passports and driver's licenses. The process also requires customers to take a current photo of themselves to be compared against provided documentation.
Which of the following BEST describes this process?

A. Deepfake
B. Know your customer
C. Identity proofing
D. Passwordless

Answer: C

Explanation:
Reference: https://auth0.com/blog/what-is-identity-proofing-and-why-does-it-matter/

NEW QUESTION 273
A company undergoing digital transformation is reviewing the resiliency of a CSP and is concerned about meeting SLA requirements in the event of a CSP incident.

Which of the following would be BEST to proceed with the transformation?

A. An on-premises solution as a backup
B. A load balancer with a round-robin configuration
C. A multicloud provider solution
D. An active-active solution within the same tenant

Answer: C

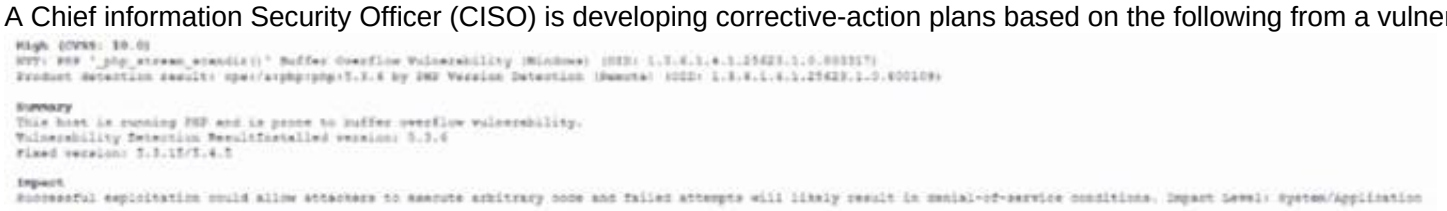
Explanation:
A multicloud provider solution is the best option for proceeding with the digital transformation while ensuring SLA (service level agreement) requirements in the event of a CSP (cloud service provider) incident. A multicloud provider solution is a strategy that involves using multiple CSPs for different cloud services or applications, such as infrastructure, platform, or software as a service. A multicloud provider solution can provide resiliency, redundancy, and availability for cloud services or applications, as it can distribute the workload and risk across different CSPs and avoid single points of failure or vendor lock-in. An on-premises solution as a backup is not a good option for proceeding with the digital transformation, as it could involve high costs, complexity, or maintenance for maintaining both cloud and on-premises resources, as well as affect the scalability or flexibility of cloud services or applications. A load balancer with a round-robin configuration is not a good option for proceeding with the digital transformation, as it could introduce latency or performance issues for cloud services or applications, as well as not provide sufficient resiliency or redundancy in case of a CSP incident. An active-active solution within the same tenant is not a good option for proceeding with the digital transformation, as it could still be affected by a CSP incident that impacts the entire tenant or region, as well as increase the costs or complexity of managing multiple instances of cloud services or applications. Verified References: https://www.comptia.org/blog/what-is-multicloud https://partners.comptia.org/docs/default-source/resources/casp-content-guide

NEW QUESTION 278
A company Is adopting a new artificial-intelligence-based analytics SaaS solution. This Is the company's first attempt at using a SaaS solution, and a security architect has been asked to determine any future risks. Which of the following would be the GREATEST risk In adopting this solution?

A. The inability to assign access controls to comply with company policy
B. The inability to require the service provider process data in a specific country
C. The inability to obtain company data when migrating to another service
D. The inability to conduct security assessments against a service provider

Answer: C

NEW QUESTION 282
A Chief information Security Officer (CISO) is developing corrective-action plans based on the following from a vulnerability scan of internal hosts:



Which of the following MOST appropriate corrective action to document for this finding?

A. The product owner should perform a business impact assessment regarding the ability to implement a WAF.
B. The application developer should use a static code analysis tool to ensure any application code is not vulnerable to buffer overflows.
C. The system administrator should evaluate dependencies and perform upgrade as necessary.
D. The security operations center should develop a custom IDS rule to prevent attacks buffer overflows against this server.

Answer: A

NEW QUESTION 287
A company is looking for a solution to hide data stored in databases. The solution must meet the following requirements:
? Be efficient at protecting the production environment
? Not require any change to the application
? Act at the presentation layer
Which of the following techniques should be used?

A. Masking
B. Tokenization
C. Algorithmic
D. Random substitution

Answer: A

NEW QUESTION 290
A local government that is investigating a data exfiltration claim was asked to review the fingerprint of the malicious user's actions. An investigator took a forensic image of the VM an downloaded the image to a secured USB drive to share with the government. Which of the following should be taken into consideration during the process of releasing the drive to the government?

A. Encryption in transit
B. Legal issues
C. Chain of custody
D. Order of volatility
E. Key exchange

Answer: C

NEW QUESTION 294

Company A acquired Company . During an audit, a security engineer found Company B's environment was inadequately patched. In response, Company A placed a firewall between the two environments until Company B's infrastructure could be integrated into Company A's security program.
Which of the following risk-handling techniques was used?

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

Answer: D

Explanation:
Reference: https://www.pivotpointsecurity.com/blog/risk-tolerance-in-business/

NEW QUESTION 297
A company based in the United States holds insurance details of EU citizens. Which of the following must be adhered to when processing EU citizens' personal, private, and confidential data?

A. The principle of lawful, fair, and transparent processing
B. The right to be forgotten principle of personal data erasure requests
C. The non-repudiation and deniability principle
D. The principle of encryption, obfuscation, and data masking

Answer: A

NEW QUESTION 298
Due to locality and budget constraints, an organization's satellite office has a lower bandwidth allocation than other offices in the organization. As a result, the local security infrastructure staff is assessing architectural options that will help preserve network bandwidth and increase speed to both internal and external resources while not sacrificing threat visibility.
Which of the following would be the BEST option to implement?

A. Distributed connection allocation
B. Local caching
C. Content delivery network
D. SD-WAN vertical heterogeneity

Answer: D

Explanation:
SD-WAN (software-defined wide area network) vertical heterogeneity is a technique that can help preserve network bandwidth and increase speed to both internal and external resources while not sacrificing threat visibility. SD-WAN vertical heterogeneity involves using different types of network links (such as broadband, cellular, or satellite) for different types of traffic (such as voice, video, or data) based on their performance and security requirements. This can optimize the network efficiency and reliability, as well as provide granular visibility and control over traffic flows. Distributed connection allocation is not a technique for preserving network bandwidth and increasing speed, but a method for distributing network connections among multiple servers or devices. Local caching is not a technique for preserving network bandwidth and increasing speed, but a method for storing frequently accessed data locally to reduce latency or load times. Content delivery network is not a technique for preserving network bandwidth and increasing speed, but a system of distributed servers that deliver web content to users based on their geographic location. Verified References: https://www.comptia.org/blog/what-is-sd-wan https://partners.comptia.org/docs/default-source/resources/casp-content-guide

NEW QUESTION 303
A network architect is designing a new SD-WAN architecture to connect all local sites to a central hub site. The hub is then responsible for redirecting traffic to public cloud and datacenter applications. The SD-WAN routers are managed through a SaaS, and the same security policy is applied to staff whether working in the office or at a remote location. The main requirements are the following:
* 1. The network supports core applications that have 99.99% uptime.
* 2. Configuration updates to the SD-WAN routers can only be initiated from the management service.
* 3. Documents downloaded from websites must be scanned for malware.
Which of the following solutions should the network architect implement to meet the requirements?

A. Reverse proxy, stateful firewalls, and VPNs at the local sites
B. IDSs, WAFs, and forward proxy IDS
C. DoS protection at the hub site, mutual certificate authentication, and cloud proxy
D. IPSs at the hub, Layer 4 firewalls, and DLP

Answer: C

NEW QUESTION 306
A company in the financial sector receives a substantial number of customer transaction requests via email. While doing a root-cause analysis conceding a security breach, the CIRT correlates an unusual spike in port 80 traffic from the IP address of a desktop used by a customer relations employee who has access to several of the compromised accounts. Subsequent antivirus scans of the device do not return an findings, but the CIRT finds undocumented services running on the device. Which of the following controls would reduce the discovery time for similar in the future.

A. Implementing application blacklisting
B. Configuring the mall to quarantine incoming attachment automatically
C. Deploying host-based firewalls and shipping the logs to the SIEM
D. Increasing the cadence for antivirus DAT updates to twice daily

Answer: C

NEW QUESTION 307
A company's Chief Information Security Officer is concerned that the company's proposed move to the cloud could lead to a lack of visibility into network traffic flow logs within the VPC.
Which of the following compensating controls would be BEST to implement in this situation?

A. EDR
B. SIEM
C. HIDS
D. UEBA

Answer: B

Explanation:
Reference: https://runpanther.io/cyber-explained/cloud-based-siem-explained/

NEW QUESTION 308
A company's finance department acquired a new payment system that exports data to an unencrypted file on the system. The company implemented controls on the file so only appropriate personnel are allowed access. Which of the following risk techniques did the department use in this situation?

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

Answer: D

NEW QUESTION 311
A systems administrator was given the following IOC to detect the presence of a malicious piece of software communicating with its command-and-control server:
post /malicious. php
User-Agent: Malicious Tool V 1.0 Host: www.rcalicious.com
The IOC documentation suggests the URL is the only part that could change. Which of the following regular expressions would allow the systems administrator to determine if any of the company hosts are compromised, while reducing false positives?

A. User-Agent: Malicious Too
B. *
C. www\. malicious\. com\/maliciou
D. php
E. POST /malicious\. php
F. Hose: [a-2] *\.malicious\.com
G. maliciou
H. *

Answer: D

Explanation:
A regular expression (regex) is a sequence of characters that defines a search pattern for matching text. A regex can be used to detect the presence of a malicious piece of software communicating with its command-and-control server by matching the indicators of compromise (IOC) in the network traffic.
In this case, the systems administrator should use the regex Host: [a-z]*.malicious.com to determine if any of the company hosts are compromised, while reducing false positives, because this regex would:
? Match the Host header in the HTTP request, which specifies the domain name of
the command-and-control server.
? Allow any subdomain under the malicious.com domain, by using the character class [a-z]*, which matches zero or more lowercase letters.
? Escape the dot character in the domain name, by using the backslash , which prevents it from being interpreted as a wildcard that matches any character.
? Not match any other parts of the IOC that could change, such as the URL path, the User-Agent header, or the HTTP method.

NEW QUESTION 315
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