



CompTIA

Exam Questions SY0-701

CompTIA Security+ Exam

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NEW QUESTION 1

- (Exam Topic 1)

A software company is analyzing a process that detects software vulnerabilities at the earliest stage possible. The goal is to scan the source looking for unsecure practices and weaknesses before the application is deployed in a runtime environment. Which of the following would BEST assist the company with this objective?

- A. Use fuzzing testing
- B. Use a web vulnerability scanner
- C. Use static code analysis
- D. Use a penetration-testing OS

Answer: C

Explanation:

Using static code analysis would be the best approach to scan the source code looking for unsecure practices and weaknesses before the application is deployed in a runtime environment. This method involves analyzing the source code without actually running the software, which can identify security vulnerabilities that may not be detected by other testing methods. References: CompTIA Security+ Study Guide, Exam SY0-601, 4th Edition, Chapter 6: Risk Management, pp. 292-295

NEW QUESTION 2

- (Exam Topic 1)

Which of the following is a cryptographic concept that operates on a fixed length of bits?

- A. Block cipher
- B. Hashing
- C. Key stretching
- D. Salting

Answer: A

Explanation:

Single-key or symmetric-key encryption algorithms create a fixed length of bits known as a block cipher with a secret key that the creator/sender uses to encipher data (encryption) and the receiver uses to decipher it.

NEW QUESTION 3

- (Exam Topic 1)

A company is planning to install a guest wireless network so visitors will be able to access the Internet. The stakeholders want the network to be easy to connect to so time is not wasted during meetings. The WAPs are configured so that power levels and antennas cover only the conference rooms where visitors will attend meetings. Which of the following would BEST protect the company's internal wireless network against visitors accessing company resources?

- A. Configure the guest wireless network to be on a separate VLAN from the company's internal wireless network
- B. Change the password for the guest wireless network every month.
- C. Decrease the power levels of the access points for the guest wireless network.
- D. Enable WPA2 using 802.1X for logging on to the guest wireless network.

Answer: A

Explanation:

Configuring the guest wireless network on a separate VLAN from the company's internal wireless network will prevent visitors from accessing company resources. References: CompTIA Security+ Study Guide: Exam SY0-601, Chapter 4

NEW QUESTION 4

- (Exam Topic 1)

If a current private key is compromised, which of the following would ensure it cannot be used to decrypt all historical data?

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

Answer: A

Explanation:

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

NEW QUESTION 5

- (Exam Topic 1)

A security engineer is installing a WAF to protect the company's website from malicious web requests over SSL. Which of the following is needed to meet the objective?

- A. A reverse proxy
- B. A decryption certificate
- C. A split-tunnel VPN
- D. Load-balanced servers

Answer: B

Explanation:

A Web Application Firewall (WAF) is a security solution that protects web applications from various types of attacks such as SQL injection, cross-site scripting (XSS), and others. It is typically deployed in front of web servers to inspect incoming traffic and filter out malicious requests. To protect the company's website from malicious web requests over SSL, a decryption certificate is needed to decrypt the SSL traffic before it reaches the WAF. This allows the WAF to inspect the traffic and filter out malicious requests.

NEW QUESTION 6

- (Exam Topic 1)

A retail company that is launching @ new website to showcase the company's product line and other information for online shoppers registered the following URLs:

- * www companysite com
- * shop companysite com
- * about-us companysite com contact-us. companysite com secure-logon company site com

Which of the following should the company use to secure its website if the company is concerned with convenience and cost?

- A. A self-signed certificate
- B. A root certificate
- C. A code-signing certificate
- D. A wildcard certificate
- E. An extended validation certificate

Answer: D

Explanation:

The company can use a wildcard certificate to secure its website if it is concerned with convenience and cost. A wildcard certificate can secure multiple subdomains, which makes it cost-effective and convenient for securing the various registered domains.

The retail company should use a wildcard certificate if it is concerned with convenience and c1o2s.tA wildcard SSL certificate is a single SSL/TLS certificate that can provide significant time and cost savings, particularly for small businesses. The certificate includes a wildcard character (*) in the domain name field, and can secure multiple subdomains of the primary domain1

NEW QUESTION 7

- (Exam Topic 1)

Which of the following environments would MOST likely be used to assess the execution of component parts of a system at both the hardware and software levels and to measure performance characteristics?

- A. Test
- B. Staging
- C. Development
- D. Production

Answer: A

Explanation:

The test environment is used to assess the execution of component parts of a system at both the hardware and software levels and to measure performance characteristics. References: CompTIA Security+ Study Guide 601, Chapter 2

NEW QUESTION 8

- (Exam Topic 1)

Which of the following would produce the closet experience of responding to an actual incident response scenario?

- A. Lessons learned
- B. Simulation
- C. Walk-through
- D. Tabletop

Answer: B

Explanation:

A simulation exercise is designed to create an experience that is as close as possible to a real-world incident response scenario. It involves simulating an attack or other security incident and then having security personnel respond to the situation as they would in a real incident. References: CompTIA Security+ SY0-601 Exam Objectives: 1.1 Explain the importance of implementing security concepts, methodologies, and practices.

NEW QUESTION 9

- (Exam Topic 1)

A network engineer and a security engineer are discussing ways to monitor network operations. Which of the following is the BEST method?

- A. Disable Telnet and force SSH.
- B. Establish a continuous ping.
- C. Utilize an agentless monitor
- D. Enable SNMPv3 With passwords.

Answer: C

Explanation:

An agentless monitor is the best method to monitor network operations because it does not require any software or agents to be installed on the devices being monitored, making it less intrusive and less likely to disrupt network operations. This method can monitor various aspects of network operations, such as traffic, performance, and security.

CompTIA Security+ Study Guide, Sixth Edition (SY0-601), Chapter 4: Attacks, Threats, and Vulnerabilities, Monitoring and Detection Techniques, pg. 167-170.

NEW QUESTION 10

- (Exam Topic 1)

A Chief Information Officer is concerned about employees using company-issued laptops to steal data when accessing network shares. Which of the following should the company implement?

- A. DLP
- B. CASB
- C. HIDS
- D. EDR
- E. UEFI

Answer: A**Explanation:**

The company should implement Data Loss Prevention (DLP) to prevent employees from stealing data when accessing network shares. References:

➤ CompTIA Security+ Study Guide Exam SY0-601, Chapter 8

NEW QUESTION 10

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- B. CASB
- C. HIDS
- D. EDR
- E. UEFI

Answer: A**Explanation:**

The company should implement Data Loss Prevention (DLP) to prevent employees from stealing data. References: CompTIA Security+ Study Guide: Exam SY0-601, Chapter 8

NEW QUESTION 12

- (Exam Topic 1)

A security assessment found that several embedded systems are running unsecure protocols. These Systems were purchased two years ago and the company that developed them is no longer in business. Which of the following constraints BEST describes the reason the findings cannot be remediated?

- A. inability to authenticate
- B. Implied trust
- C. Lack of computing power
- D. Unavailable patch

Answer: D**Explanation:**

If the systems are running unsecure protocols and the company that developed them is no longer in business, it is likely that there are no patches available to remediate the issue. References:

➤ CompTIA Security+ Study Guide, Sixth Edition, pages 35-36

NEW QUESTION 13

- (Exam Topic 1)

A help desk technician receives an email from the Chief Information Officer (C/O) asking for documents. The technician knows the CIO is on vacation for a few weeks. Which of the following should the technician do to validate the authenticity of the email?

- A. Check the metadata in the email header of the received path in reverse order to follow the email's path.
- B. Hover the mouse over the CIO's email address to verify the email address.
- C. Look at the metadata in the email header and verify the "From." line matches the CIO's email address.
- D. Forward the email to the CIO and ask if the CIO sent the email requesting the documents.

Answer: B**Explanation:**

The "From" line in the email header can be easily spoofed or manipulated by an attacker to make it look like the email is coming from the CIO's email address. However, this does not mean that the email address is actually valid or that the email is actually sent by the CIO. A better way to check the email address is to hover over it and see if it matches the CIO's email address exactly. This can help to spot any discrepancies or typos that might indicate a phishing attempt. For example, if the CIO's email address is cio@company.com, but when you hover over it, it shows cio@compnay.com, then you know that the email is not authentic and likely a phishing attempt.

NEW QUESTION 16

- (Exam Topic 1)

The following are the logs of a successful attack.

```
[DATA] attacking service ftp on port 21
[ATTEMPT] 09:00:01UTC target 192.168.50.1 - login "admin" -pass "p@55w0rd"
[ATTEMPT] 09:00:01UTC target 192.168.50.1 - login "admin" -pass "AcCe55"
[ATTEMPT] 09:00:01UTC target 192.168.50.1 - login "admin" -pass "A110w!"
[ATTEMPT] 09:00:01UTC target 192.168.50.1 - login "admin" -pass "FTPL0gin!"
[ATTEMPT] 09:00:01UTC target 192.168.50.1 - login "admin" -pass "L3tM31N!"
[21][ftp] host: 192.168.50.1 login: admin password: L3tM31N!
1 of 1 target successfully completed, 1 valid password found in <1 second
```

Which of the following controls would be BEST to use to prevent such a breach in the future?

- A. Password history
- B. Account expiration
- C. Password complexity
- D. Account lockout

Answer: C

Explanation:

To prevent such a breach in the future, the BEST control to use would be Password complexity.

Password complexity is a security measure that requires users to create strong passwords that are difficult to guess or crack. It can help prevent unauthorized access to systems and data by making it more difficult for attackers to guess or crack passwords.

The best control to use to prevent a breach like the one shown in the logs is password complexity. Password complexity requires users to create passwords that are harder to guess, by including a mix of upper and lowercase letters, numbers, and special characters. In the logs, the attacker was able to guess the user's password using a dictionary attack, which means that the password was not complex enough. References:

➤ CompTIA Security+ Certification Exam Objectives - Exam SY0-601

NEW QUESTION 17

- (Exam Topic 1)

A security administrator has discovered that workstations on the LAN are becoming infected with malware.

The cause of the infections appears to be users receiving phishing emails that are bypassing the current email-filtering technology. As a result, users are being tricked into clicking on malicious URLs, as no internal controls currently exist in the environment to evaluate their safety. Which of the following would be BEST to implement to address the issue?

- A. Forward proxy
- B. HIDS
- C. Awareness training
- D. A jump server
- E. IPS

Answer: C

Explanation:

Awareness training should be implemented to educate users on the risks of clicking on malicious URLs. References: CompTIA Security+ Study Guide: Exam SY0-601, Chapter 9

NEW QUESTION 18

- (Exam Topic 1)

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

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

Answer: B

Explanation:

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

NEW QUESTION 23

- (Exam Topic 1)

Which of the following is the MOST secure but LEAST expensive data destruction method for data that is stored on hard drives?

- A. Pulverizing
- B. Shredding
- C. Incinerating
- D. Degaussing

Answer: B

Explanation:

Shredding may be the most secure and cost-effective way to destroy electronic data in any media that contain hard drives or solid-state drives and have reached their end-of-life¹. Shredding reduces electronic devices to pieces no larger than 2 millimeters². Therefore, shredding is the most secure but least expensive data destruction method for data that is stored on hard drives.

NEW QUESTION 28

- (Exam Topic 1)

Which of the following should a technician consider when selecting an encryption method for data that needs to remain confidential for a specific length of time?

- A. The key length of the encryption algorithm
- B. The encryption algorithm's longevity
- C. A method of introducing entropy into key calculations
- D. The computational overhead of calculating the encryption key

Answer: B

Explanation:

When selecting an encryption method for data that needs to remain confidential for a specific length of time, the longevity of the encryption algorithm should be considered to ensure that the data remains secure for the required period. References: CompTIA Security+ Certification Exam Objectives - 3.2 Given a scenario, use appropriate cryptographic methods. Study Guide: Chapter 4, page 131.

NEW QUESTION 33

- (Exam Topic 1)

A new plug-and-play storage device was installed on a PC in the corporate environment. Which of the following safeguards will BEST help to protect the PC from malicious files on the storage device?

- A. Change the default settings on the PC.
- B. Define the PC firewall rules to limit access.
- C. Encrypt the disk on the storage device.
- D. Plug the storage device in to the UPS

Answer: A

Explanation:

The best option that will help to protect the PC from malicious files on the storage device would be A. Change the default settings on the PC. Changing the default settings on the PC can include disabling the autorun or autoplay feature, which can prevent malicious files from executing automatically when the storage device is plugged in. Changing the default settings can also include enabling antivirus software, updating the operating system and applications, and configuring user account control and permissions.

NEW QUESTION 37

- (Exam Topic 1)

An organization discovered a disgruntled employee exfiltrated a large amount of PII data by uploading files Which of the following controls should the organization consider to mitigate this risk?

- A. EDR
- B. Firewall
- C. HIPS
- D. DLP

Answer: D

Explanation:

DLP stands for data loss prevention, which is a set of tools and processes that aim to prevent unauthorized access, use, or transfer of sensitive data. DLP can help mitigate the risk of data exfiltration by disgruntled employees or external attackers by monitoring and controlling data flows across endpoints, networks, and cloud services. DLP can also detect and block attempts to copy, print, email, upload, or download sensitive data based on predefined policies and rules. References: <https://www.comptia.org/certifications/security#examdetails> <https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives> <https://www.forcepoint.com/cyber-edu/data-loss-prevention-dlp>

NEW QUESTION 39

- (Exam Topic 1)

Which of the following authentication methods is considered to be the LEAST secure?

- A. TOTP
- B. SMS
- C. HOTP
- D. Token key

Answer: B

Explanation:

SMS-based authentication is considered to be the least secure among the given options. This is because SMS messages can be intercepted or redirected by attackers through techniques such as SIM swapping, man-in-the-middle attacks, or exploiting weaknesses in the SS7 protocol used by mobile networks. Additionally, SMS messages can be compromised if a user's phone is lost, stolen, or infected with malware. In contrast, TOTP (Time-based One-Time Password), HOTP (HMAC-based One-Time Password), and token keys are more secure as they rely on cryptographic algorithms or physical devices to generate one-time use codes, which are less susceptible to interception or unauthorized access. Reference: 1. National Institute of Standards and Technology (NIST). (2017). Digital Identity Guidelines: Authentication and Lifecycle Management (NIST SP 800-63B). <https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-63b.pdf>

NEW QUESTION 43

- (Exam Topic 1)

A bad actor tries to persuade someone to provide financial information over the phone in order to gain access to funds. Which of the following types of attacks does this scenario describe?

- A. Vishing
- B. Phishing
- C. Spear phishing
- D. Whaling

Answer: A

Explanation:

Vishing is a social engineering attack that uses phone calls or voicemail messages to trick people into divulging sensitive information, such as financial information or login credentials.

NEW QUESTION 46

- (Exam Topic 1)

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

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

Answer: D

Explanation:

The responsibilities of ensuring backups are properly maintained and implementing technical controls to protect data are the responsibilities of the data custodian role. References: CompTIA Security+ Study Guide by Emmett Dulaney, Chapter 7: Securing Hosts and Data, Data Custodian

NEW QUESTION 51

- (Exam Topic 1)

An information security manager for an organization is completing a PCI DSS self-assessment for the first time. which of the is following MOST likely reason for this type of assessment?

- A. An international expansion project is currently underway.
- B. Outside consultants utilize this tool to measure security maturity.
- C. The organization is expecting to process credit card information.
- D. A government regulator has requested this audit to be completed

Answer: C

Explanation:

PCI DSS (Payment Card Industry Data Security Standard) is a set of security standards designed to ensure that all companies that accept, process, store, or transmit credit card information maintain a secure environment. Any organization that accepts credit card payments is required to comply with PCI DSS.

NEW QUESTION 56

- (Exam Topic 1)

Which of the following environments typically hosts the current version configurations and code, compares user-story responses and workflow, and uses a modified version of actual data for testing?

- A. Development
- B. Staging
- C. Production
- D. Test

Answer: B

Explanation:

Staging is an environment in the software development lifecycle that is used to test a modified version of the actual data, current version configurations, and code. This environment compares user-story responses and workflow before the software is released to the production environment. References: CompTIA Security+ Study Guide, Sixth Edition, Sybex, pg. 496

NEW QUESTION 57

- (Exam Topic 1)

A security analyst is running a vulnerability scan to check for missing patches during a suspected security rodent During which of the following phases of the response process is this activity MOST likely occurring?

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

Answer: B

Explanation:

Vulnerability scanning is a proactive security measure used to identify vulnerabilities in the network and systems. References: CompTIA Security+ Study Guide 601, Chapter 4

NEW QUESTION 59

- (Exam Topic 1)

A systems engineer is building a new system for production. Which of the following is the FINAL step to be performed prior to promoting to production?

- A. Disable unneeded services.
- B. Install the latest security patches.
- C. Run a vulnerability scan.
- D. Encrypt all disks.

Answer: C

Explanation:

Running a vulnerability scan is the final step to be performed prior to promoting a system to production. This allows any remaining security issues to be identified and resolved before the system is put into production. References: CompTIA Security+ Study Guide, Exam SY0-601, 4th Edition, Chapter 3

NEW QUESTION 64

- (Exam Topic 1)

After a hardware incident, an unplanned emergency maintenance activity was conducted to rectify the issue. Multiple alerts were generated on the SIEM during this period of time. Which of the following BEST explains what happened?

- A. The unexpected traffic correlated against multiple rules, generating multiple alerts.
- B. Multiple alerts were generated due to an attack occurring at the same time.
- C. An error in the correlation rules triggered multiple alerts.
- D. The SIEM was unable to correlate the rules, triggering the alert

Answer: A

Explanation:

Multiple alerts were generated on the SIEM during the emergency maintenance activity due to unexpected traffic correlated against multiple rules. The SIEM generates alerts when it detects an event that matches a rule in its rulebase. If the event matches multiple rules, the SIEM will generate multiple alerts.

Reference: CompTIA Security+ Study Guide, Exam SY0-601, Chapter 3: Architecture and Design

NEW QUESTION 65

- (Exam Topic 1)

Ann, a customer, received a notification from her mortgage company stating her PII may be shared with partners, affiliates, and associates to maintain day-to-day business operations.

Which of the following documents did Ann receive?

- A. An annual privacy notice
- B. A non-disclosure agreement
- C. A privileged-user agreement
- D. A memorandum of understanding

Answer: A

Explanation:

Ann received an annual privacy notice from her mortgage company. An annual privacy notice is a statement from a financial institution or creditor that outlines the institution's privacy policy and explains how the institution collects, uses, and shares customers' personal information. It informs the customer about their rights under the Gramm-Leach-Bliley Act (GLBA) and the institution's practices for protecting their personal information. References:

➤ CompTIA Security+ Certification Exam Objectives - Exam SY0-601

NEW QUESTION 69

- (Exam Topic 1)

Which of the following is a risk that is specifically associated with hosting applications in the public cloud?

- A. Unsecured root accounts
- B. Zero day
- C. Shared tenancy
- D. Insider threat

Answer: C

Explanation:

When hosting applications in the public cloud, there is a risk of shared tenancy, meaning that multiple organizations are sharing the same infrastructure. This can potentially allow one tenant to access another tenant's data, creating a security risk. References: CompTIA Security+ Certification Exam Objectives (SY0-601)

NEW QUESTION 73

- (Exam Topic 1)

A financial institution would like to store its customer data in a cloud but still allow the data to be accessed and manipulated while encrypted. Doing so would prevent the cloud service provider from being able to decipher the data due to its sensitivity. The financial institution is not concerned about computational overheads and slow speeds. Which of the following cryptographic techniques would BEST meet the requirement?

- A. Asymmetric
- B. Symmetric
- C. Homomorphic
- D. Ephemeral

Answer: B

Explanation:

Symmetric encryption allows data to be encrypted and decrypted using the same key. This is useful when the data needs to be accessed and manipulated while still encrypted. References: CompTIA Security+ Study Guide, Exam SY0-601, Chapter 6

NEW QUESTION 75

- (Exam Topic 1)

Which of the following uses six initial steps that provide basic control over system security by including hardware and software inventory, vulnerability management, and continuous monitoring to minimize risk in all network environments?

- A. ISO 27701
- B. The Center for Internet Security
- C. SSAE SOC 2
- D. NIST Risk Management Framework

Answer: B

Explanation:

The Center for Internet Security (CIS) uses six initial steps that provide basic control over system security, including hardware and software inventory, vulnerability management, and continuous monitoring to minimize risk in all network environments. References:

- > CompTIA Security+ Certification Exam Objectives 1.1: Compare and contrast different types of security concepts.
- > CompTIA Security+ Study Guide, Sixth Edition, pages 15-16

NEW QUESTION 78

- (Exam Topic 1)

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

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

Answer: B

Explanation:

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

NEW QUESTION 79

- (Exam Topic 1)

A company recently experienced a major breach. An investigation concludes that customer credit card data was stolen and exfiltrated through a dedicated business partner connection to a vendor, who is not held to the same security control standards. Which of the following is the MOST likely source of the breach?

- A. Side channel
- B. Supply chain
- C. Cryptographic downgrade
- D. Malware

Answer: B

Explanation:

A supply chain attack occurs when a third-party supplier or business partner is compromised, leading to an attacker gaining unauthorized access to the targeted organization's network. In this scenario, the dedicated business partner connection to a vendor was used to exfiltrate customer credit card data, indicating that the vendor's network was breached and used as a supply chain attack vector.

NEW QUESTION 84

- (Exam Topic 1)

Which of the following environments can be stood up in a short period of time, utilizes either dummy data or actual data, and is used to demonstrate and model system capabilities and functionality for a fixed, agreed-upon duration of time?

- A. PoC
- B. Production
- C. Test
- D. Development

Answer: A

Explanation:

A proof of concept (PoC) environment can be stood up quickly and is used to demonstrate and model system capabilities and functionality for a fixed, agreed-upon duration of time. This environment can utilize either dummy data or actual data. References: CompTIA Security+ Certification Guide, Exam SY0-501

NEW QUESTION 85

- (Exam Topic 1)

A desktop support technician recently installed a new document-scanning software program on a computer. However, when the end user tried to launch the

program, it did not respond. Which of the following is MOST likely the cause?

- A. A new firewall rule is needed to access the application.
- B. The system was quarantined for missing software updates.
- C. The software was not added to the application whitelist.
- D. The system was isolated from the network due to infected software

Answer: C

Explanation:

The most likely cause of the document-scanning software program not responding when launched by the end user is that the software was not added to the application whitelist. An application whitelist is a list of approved software applications that are allowed to run on a system. If the software is not on the whitelist, it may be blocked from running by the system's security policies. Adding the software to the whitelist should resolve the issue and allow the program to run.

References: <https://www.techopedia.com/definition/31541/application-whitelisting>

NEW QUESTION 87

- (Exam Topic 1)

Which of the following biometric authentication methods is the MOST accurate?

- A. Gait
- B. Retina
- C. Signature
- D. Voice

Answer: B

Explanation:

Retina authentication is the most accurate biometric authentication method. Retina authentication is based on recognizing the unique pattern of blood vessels and other features in the retina. This makes it virtually impossible to duplicate or bypass, making it the most secure form of biometric authentication currently available.

NEW QUESTION 90

- (Exam Topic 1)

A company has discovered unauthorized devices are using its WiFi network, and it wants to harden the access point to improve security. Which of the following configuration should an analyst enable to improve security? (Select TWO.)

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

Answer: AF

Explanation:

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

NEW QUESTION 92

- (Exam Topic 1)

Certain users are reporting their accounts are being used to send unauthorized emails and conduct suspicious activities. After further investigation, a security analyst notices the following:

- All users share workstations throughout the day.
- Endpoint protection was disabled on several workstations throughout the network.
- Travel times on logins from the affected users are impossible.
- Sensitive data is being uploaded to external sites.
- All user account passwords were forced to be reset and the issue continued. Which of the following attacks is being used to compromise the user accounts?

- A. Brute-force
- B. Keylogger
- C. Dictionary
- D. Rainbow

Answer: B

Explanation:

The symptoms suggest a keylogger is being used to compromise the user accounts, allowing the attackers to obtain the users' passwords and other sensitive information. References:

➤ [CompTIA Security+ Study Guide Exam SY0-601, Chapter 6](#)

NEW QUESTION 93

- (Exam Topic 1)

A network analyst is investigating compromised corporate information. The analyst leads to a theory that network traffic was intercepted before being transmitted to the internet. The following output was captured on an internal host:

```
IPv4 Address ..... 10.0.0.87
Subnet Mask ..... 255.255.255.0
Default Gateway ..... 10.0.0.1
```

| Internet Address | Physical Address |
|------------------|-------------------|
| 10.10.255.255 | ff-ff-ff-ff-ff-ff |
| 10.0.0.1 | aa-aa-aa-aa-aa-aa |
| 10.0.0.254 | aa-aa-aa-aa-aa-aa |
| 224.0.0.2 | 01-00-5e-00-00-02 |

Based on the IoCS, which of the following was the MOST likely attack used to compromise the network communication?

- A. Denial of service
- B. ARP poisoning
- C. Command injection
- D. MAC flooding

Answer: B

Explanation:

ARP poisoning (also known as ARP spoofing) is a type of attack where an attacker sends falsified ARP messages over a local area network to link the attacker's MAC address with the IP address of another host on the network. References: CompTIA Security+ Certification Exam Objectives - 2.5 Given a scenario, analyze potential indicators to determine the type of attack. Study Guide: Chapter 6, page 271.

NEW QUESTION 96

- (Exam Topic 1)

Which of the following cryptographic concepts would a security engineer utilize while implementing non-repudiation? (Select TWO)

- A. Block cipher
- B. Hashing
- C. Private key
- D. Perfect forward secrecy
- E. Salting
- F. Symmetric keys

Answer: BC

Explanation:

Non-repudiation is the ability to ensure that a party cannot deny a previous action or event. Cryptographic concepts that can be used to implement non-repudiation include hashing and digital signatures, which use a private key to sign a message and ensure that the signature is unique to the signer. References: CompTIA Security+ Certification Exam Objectives (SY0-601)

NEW QUESTION 99

- (Exam Topic 1)

A major clothing company recently lost a large amount of proprietary information. The security officer must find a solution to ensure this never happens again.

Which of the following is the BEST technical implementation to prevent this from happening again?

- A. Configure DLP solutions
- B. Disable peer-to-peer sharing
- C. Enable role-based
- D. Mandate job rotation
- E. Implement content filters

Answer: A

Explanation:

Data loss prevention (DLP) solutions can prevent the accidental or intentional loss of sensitive data. DLP tools can identify and protect sensitive data by classifying and categorizing it, encrypting it, or blocking it from being transferred outside the organization's network.

NEW QUESTION 101

- (Exam Topic 1)

A company would like to provide flexibility for employees on device preference. However, the company is concerned about supporting too many different types of hardware. Which of the following deployment models will provide the needed flexibility with the GREATEST amount of control and security over company data and infrastructure?

- A. BYOD
- B. VDI
- C. COPE
- D. CYOD

Answer: D

Explanation:

Choose Your Own Device (CYOD) is a deployment model that allows employees to select from a predefined list of devices. It provides employees with flexibility in device preference while allowing the company to maintain control and security over company data and infrastructure. CYOD deployment model provides a compromise between the strict control provided by Corporate-Owned, Personally Enabled (COPE) deployment model and the flexibility provided by Bring Your Own Device (BYOD) deployment model. References: CompTIA Security+ Study Guide, Chapter 6: Securing Application, Data, and Host Security, 6.5 Implement Mobile Device Management, pp. 334-335

NEW QUESTION 103

- (Exam Topic 1)

Which of the following identifies the point in time when an organization will recover data in the event of an outage?

- A. SLA
- B. RPO
- C. MTBF
- D. ARO

Answer: B

Explanation:

Detailed

Recovery Point Objective (RPO) is the maximum duration of time that an organization can tolerate data loss in the event of an outage. It identifies the point in time when data recovery must begin, and any data loss beyond that point is considered unacceptable.

Reference: CompTIA Security+ Certification Guide, Exam SY0-601 by Mike Chapple and David Seidl, Chapter-7: Incident Response and Recovery, Objective 7.2: Compare and contrast business continuity and disaster recovery concepts, pp. 349-350.

NEW QUESTION 104

- (Exam Topic 1)

A junior security analyst is reviewing web server logs and identifies the following pattern in the log file:

```
http://comptia.org/../../../../etc/passwd
```

Which of the following types of attacks is being attempted and how can it be mitigated?

- A. XS
- B. mplement a SIEM
- C. CSR
- D. implement an IPS
- E. Directory traversal implement a WAF
- F. SQL infection, mplement an IDS

Answer: C

Explanation:

Detailed

The attack being attempted is directory traversal, which is a web application attack that allows an attacker to access files and directories outside of the web root directory. A WAF can help mitigate this attack by detecting and blocking attempts to access files outside of the web root directory.

References: CompTIA Security+ Study Guide: Exam SY0-601, Chapter 4: Securing Application Development and Deployment, p. 191

NEW QUESTION 108

- (Exam Topic 1)

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

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

Answer: B

Explanation:

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

Reference: <https://www.cloudflare.com/learning/dns/dns-hijacking/>

NEW QUESTION 110

- (Exam Topic 1)

A grocery store is expressing security and reliability concerns regarding the on-site backup strategy currently being performed by locally attached disks. The main concerns are the physical security of the backup media and the durability of the data stored on these devices Which of the following is a cost-effective approach to address these concerns?

- A. Enhance resiliency by adding a hardware RAID.
- B. Move data to a tape library and store the tapes off-site
- C. Install a local network-attached storage.
- D. Migrate to a cloud backup solution

Answer: D

Explanation:

a backup strategy is a plan that defines how to protect data from loss or corruption by creating and storing copies of data on a different medium or location1. A backup strategy should consider the security and reliability of the backup data and the backup storage234.

Based on these definitions, the best option that is a cost-effective approach to address the security and reliability concerns regarding the on-site backup strategy would be D. Migrate to a cloud backup solutio2n4. A cloud backup solution can provide several benefits, such as:

➤ Enhanced physical security of the backup data by storing it in a remote location that is protected by multiple layers of security measures.

- Enhanced durability of the backup data by storing it on highly reliable storage devices that are replicated across multiple availability zones or regions.
- Reduced costs of backup storage by paying only for the amount of data stored and transferred, and by using features such as compression, deduplication, encryption, and lifecycle management.
- Increased flexibility and scalability of backup storage by choosing from various storage classes and tiers that match the performance and availability requirements of the backup data.

NEW QUESTION 112

- (Exam Topic 1)

A security architect is implementing a new email architecture for a company. Due to security concerns, the Chief Information Security Officer would like the new architecture to support email encryption, as well as provide for digital signatures. Which of the following should the architect implement?

- A. TOP
- B. IMAP
- C. HTTPS
- D. S/MIME

Answer: D

Explanation:

S/MIME (Secure/Multipurpose Internet Mail Extensions) is a protocol that enables secure email messages to be sent and received. It provides email encryption, as well as digital signatures, which can be used to verify the authenticity of the sender. S/MIME can be used with a variety of email protocols, including POP and IMAP.

References:

- <https://www.comptia.org/content/guides/what-is-smime>
- CompTIA Security+ Study Guide, Sixth Edition (SY0-601), page 139

NEW QUESTION 114

- (Exam Topic 1)

Which of the following are the MOST likely vectors for the unauthorized inclusion of vulnerable code in a software company's final software releases? (Select TWO.)

- A. Unsecure protocols
- B. Use of penetration-testing utilities
- C. Weak passwords
- D. Included third-party libraries
- E. Vendors/supply chain
- F. Outdated anti-malware software

Answer: DE

Explanation:

The most likely vectors for the unauthorized inclusion of vulnerable code in a software company's final software releases are included third-party libraries and vendors/supply chain. References: CompTIA Security+ Study Guide by Emmett Dulaney, Chapter 8: Application, Data, and Host Security, Supply Chain and Software Development Life Cycle

NEW QUESTION 118

- (Exam Topic 1)

During a security assessment, a security finds a file with overly permissive permissions. Which of the following tools will allow the analyst to reduce the permission for the existing users and groups and remove the set-user-ID from the file?

- A. 1s
- B. chflags
- C. chmod
- D. lsof
- E. setuid

Answer: C

Explanation:

The chmod command is used to change the permissions of a file or directory. The analyst can use chmod to reduce the permissions for existing users and groups and remove the set-user-ID bit from the file. References:

- CompTIA Security+ Study Guide Exam SY0-601, Chapter 6

NEW QUESTION 123

- (Exam Topic 1)

During an incident, a company's CIRT determines it is necessary to observe the continued network-based transactions between a callback domain and the malware running on an enterprise PC. Which of the following techniques would be BEST to enable this activity while reducing the risk of lateral spread and the risk that the adversary would notice any changes?

- A. Physically move the PC to a separate Internet point of presence.
- B. Create and apply microsegmentation rules,
- C. Emulate the malware in a heavily monitored DMZ segment
- D. Apply network blacklisting rules for the adversary domain

Answer: C

Explanation:

Emulating the malware in a heavily monitored DMZ segment is the best option for observing network-based transactions between a callback domain and the

malware running on an enterprise PC. This approach provides an isolated environment for the malware to run, reducing the risk of lateral spread and detection by the adversary. Additionally, the DMZ can be monitored closely to gather intelligence on the adversary's tactics and techniques. References: CompTIA Security+ Study Guide, page 129

NEW QUESTION 125

- (Exam Topic 1)

A global company is experiencing unauthorized logging due to credential theft and account lockouts caused by brute-force attacks. The company is considering implementing a third-party identity provider to help mitigate these attacks. Which of the following would be the BEST control for the company to require from prospective vendors?

- A. IP restrictions
- B. Multifactor authentication
- C. A banned password list
- D. A complex password policy

Answer: B

Explanation:

Multifactor authentication (MFA) would be the best control to require from a third-party identity provider to help mitigate attacks such as credential theft and brute-force attacks. References: CompTIA Security+ Study Guide, Exam SY0-601, Chapter 2

NEW QUESTION 130

- (Exam Topic 1)

An employee received multiple messages on a mobile device. The messages instructing the employee to pair the device to an unknown device. Which of the following BEST describes What a malicious person might be doing to cause this issue to occur?

- A. Jamming
- B. Bluesnarfing
- C. Evil twin
- D. Rogue access point

Answer: B

Explanation:

Bluesnarfing is a hacking technique that exploits Bluetooth connections to snatch data from a wireless device. An attacker can perform bluesnarfing when the Bluetooth function is on and your device is discoverable by other devices within range. In some cases, attackers can even make calls from their victim's phone.

NEW QUESTION 135

- (Exam Topic 1)

A company is required to continue using legacy software to support a critical service. Which of the following BEST explains a risk of this practice?

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

Answer: C

Explanation:

Using legacy software to support a critical service poses a risk due to lack of vendor support. Legacy software is often outdated and unsupported, which means that security patches and upgrades are no longer available. This can leave the system vulnerable to exploitation by attackers who may exploit known vulnerabilities in the software to gain unauthorized access to the system.

Reference: CompTIA Security+ Study Guide, Exam SY0-601, Chapter 1: Attacks, Threats, and Vulnerabilities

NEW QUESTION 136

- (Exam Topic 1)

A security team suspects that the cause of recent power consumption overloads is the unauthorized use of empty power outlets in the network rack Which of the following options will mitigate this issue without compromising the number of outlets available?

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

Answer: B

Explanation:

A managed Power Distribution Unit (PDU) allows you to monitor and control power outlets on the rack. This will allow the security team to identify which devices are drawing power and from which outlets, which can help to identify any unauthorized devices. Moreover, with a managed PDU, you can also control the power to outlets, turn off outlets that are not in use, and set up alerts if an outlet is overloaded. This will help to mitigate the issue of power consumption overloads without compromising the number of outlets available.

Reference: CompTIA Security+ Study Guide (SY0-601) 7th Edition by Emmett Dulaney, Chuck Easttom

NEW QUESTION 137

- (Exam Topic 1)

A dynamic application vulnerability scan identified code injection could be performed using a web form. Which of the following will be BEST remediation to prevent this vulnerability?

- A. Implement input validations
- B. Deploy MFA
- C. Utilize a WAF
- D. Configure HIPS

Answer: A

Explanation:

Implementing input validations will prevent code injection attacks by verifying the type and format of user input. References: CompTIA Security+ Study Guide: Exam SY0-601, Chapter 8

NEW QUESTION 142

- (Exam Topic 1)

Which of the following BEST describes a social-engineering attack that relies on an executive at a small business visiting a fake banking website where credit card and account details are harvested?

- A. Whaling
- B. Spam
- C. Invoice scam
- D. Pharming

Answer: A

Explanation:

A social engineering attack that relies on an executive at a small business visiting a fake banking website where credit card and account details are harvested is known as whaling. Whaling is a type of phishing attack that targets high-profile individuals, such as executives, to steal sensitive information or gain access to their accounts.

NEW QUESTION 143

- (Exam Topic 1)

A security engineer is reviewing the logs from a SAML application that is configured to use MFA, during this review the engineer notices a high volume of successful logins that did not require MFA from users who were traveling internationally. The application, which can be accessed without a VPB, has a policy that allows time-based tokens to be generated. Users who changed locations should be required to reauthenticate but have been Which of the following statements BEST explains the issue?

- A. OpenID is mandatory to make the MFA requirements work
- B. An incorrect browser has been detected by the SAML application
- C. The access device has a trusted certificate installed that is overwriting the session token
- D. The user's IP address is changing between logins, but the application is not invalidating the token

Answer: D

NEW QUESTION 145

- (Exam Topic 1)

A Chief Information Officer receives an email stating a database will be encrypted within 24 hours unless a payment of \$20,000 is credited to the account mentioned In the email. This BEST describes a scenario related to:

- A. whaling.
- B. smishing.
- C. spear phishing
- D. vishing

Answer: C

Explanation:

The scenario of receiving an email stating a database will be encrypted unless a payment is made is an example of spear phishing. References: CompTIA Security+ Study Guide by Emmett Dulaney, Chapter 2: Threats, Attacks, and Vulnerabilities, Social Engineering

NEW QUESTION 148

- (Exam Topic 1)

Which of the following involves the inclusion of code in the main codebase as soon as it is written?

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

Answer: D

Explanation:

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

NEW QUESTION 153

- (Exam Topic 1)

Which of the following must be in place before implementing a BCP?

- A. SLA
- B. AUP
- C. NDA
- D. BIA

Answer: D

Explanation:

A Business Impact Analysis (BIA) is a critical component of a Business Continuity Plan (BCP). It identifies and prioritizes critical business functions and determines the impact of their disruption. References: CompTIA Security+ Study Guide 601, Chapter 10

NEW QUESTION 158

- (Exam Topic 1)

After segmenting the network, the network manager wants to control the traffic between the segments. Which of the following should the manager use to control the network traffic?

- A. A DMZ
- B. A VPN a
- C. A VLAN
- D. An ACL

Answer: D

Explanation:

After segmenting the network, a network manager can use an access control list (ACL) to control the traffic between the segments. An ACL is a set of rules that permit or deny traffic based on its characteristics, such as the source and destination IP addresses, protocol type, and port number. References: CompTIA Security+ Certification Guide, Exam SY0-501

NEW QUESTION 163

- (Exam Topic 1)

Which of the following roles would MOST likely have direct access to the senior management team?

- A. Data custodian
- B. Data owner
- C. Data protection officer
- D. Data controller

Answer: C

Explanation:

A data protection officer (DPO) is a role that oversees the data protection strategy and compliance of an organization. A DPO is responsible for ensuring that the organization follows data protection laws and regulations, such as the General Data Protection Regulation (GDPR), and protects the privacy rights of data subjects. A DPO also acts as a liaison between the organization and data protection authorities, as well as data subjects and other stakeholders. A DPO would most likely have direct access to the senior management team, as they need to report on data protection issues, risks, and incidents, and advise on data protection policies and practices.

The other options are not correct because:

- A. Data custodian is a role that implements and maintains the technical controls and procedures for data security and integrity. A data custodian does not have direct access to the senior management team, as they are more involved in operational tasks than strategic decisions.
- B. Data owner is a role that determines the classification and usage of data within an organization. A data owner does not have direct access to the senior management team, as they are more involved in business functions than data protection compliance.
- D. Data controller is a role that determines the purposes and means of processing personal data within an organization. A data controller does not have direct access to the senior management team, as they are more involved in data processing activities than data protection oversight.

According to CompTIA Security+ SY0-601 Exam Objectives 2.3 Given a scenario, implement secure protocols:

“A data protection officer (DPO) is a role that oversees the data protection strategy and compliance of an organization.”

References: <https://www.comptia.org/certifications/security#examdetails> <https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives>
<https://gdpr-info.eu/issues/data-protection-officer/>

NEW QUESTION 165

- (Exam Topic 1)

A security analyst is investigating a phishing email that contains a malicious document directed to the company's Chief Executive Officer (CEO). Which of the following should the analyst perform to understand the threat and retrieve possible IoCs?

- A. Run a vulnerability scan against the CEOs computer to find possible vulnerabilities
- B. Install a sandbox to run the malicious payload in a safe environment
- C. Perform a traceroute to identify the communication path
- D. Use netstat to check whether communication has been made with a remote host

Answer: B

Explanation:

To understand the threat and retrieve possible Indicators of Compromise (IoCs) from a phishing email containing a malicious document, a security analyst should install a sandbox to run the malicious payload in a safe environment. References: CompTIA Security+ Certification Exam Objectives - 2.5 Given a scenario, analyze potential indicators to determine the type of attack. Study Guide: Chapter 5, page 209.

NEW QUESTION 166

- (Exam Topic 1)

Which of the following would be BEST for a technician to review to determine the total risk an organization can bear when assessing a "cloud-first" adoption strategy?

- A. Risk matrix
- B. Risk tolerance
- C. Risk register
- D. Risk appetite

Answer: B

Explanation:

To determine the total risk an organization can bear, a technician should review the organization's risk tolerance, which is the amount of risk the organization is willing to accept. This information will help determine the organization's "cloud-first" adoption strategy. References: CompTIA Security+ Certification Exam Objectives (SY0-601)

NEW QUESTION 171

- (Exam Topic 1)

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

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

Answer: B

Explanation:

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

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

NEW QUESTION 173

- (Exam Topic 1)

A security incident has been resolved Which of the following BEST describes the importance of the final phase of the incident response plan?

- A. It examines and documents how well the team responded discovers what caused the incident, and determines how the incident can be avoided in the future
- B. It returns the affected systems back into production once systems have been fully patched, data restored and vulnerabilities addressed
- C. It identifies the incident and the scope of the breach how it affects the production environment, and the ingress point
- D. It contains the affected systems and disconnects them from the network, preventing further spread of the attack or breach

Answer: A

Explanation:

The final phase of an incident response plan is the post-incident activity, which involves examining and documenting how well the team responded, discovering what caused the incident, and determining how the incident can be avoided in the future. References: CompTIA Security+ Certification Exam Objectives - 2.5 Given a scenario, analyze potential indicators to determine the type of attack. Study Guide: Chapter 5, page 225.

NEW QUESTION 178

- (Exam Topic 1)

Per company security policy, IT staff members are required to have separate credentials to perform administrative functions using just-in-time permissions. Which of the following solutions is the company Implementing?

- A. Privileged access management
- B. SSO
- C. RADIUS
- D. Attribute-based access control

Answer: A

Explanation:

The company is implementing privileged access management, which provides just-in-time permissions for administrative functions.

NEW QUESTION 181

- (Exam Topic 1)

A security analyst has received several reports of an issue on an internal web application. Users state they are having to provide their credentials twice to log in. The analyst checks with the application team and notes this is not an expected behavior. After looking at several logs, the analyst decides to run some commands on the gateway and obtains the following output:

| Internet address | Physical address | Type |
|------------------|-------------------|---------|
| 192.168.1.1 | ff-ec-ab-00-aa-78 | dynamic |
| 192.168.1.5 | ff-00-5e-48-00-fb | dynamic |
| 192.168.1.8 | 00-0c-29-1a-e7-fa | dynamic |
| 192.168.1.10 | fc-41-5e-48-00-ff | dynamic |
| 224.215.54.47 | fc-00-5e-48-00-fb | static |

Which of the following BEST describes the attack the company is experiencing?

- A. MAC flooding
- B. URL redirection
- C. ARP poisoning
- D. DNS hijacking

Answer: C

Explanation:

The output of the “netstat -ano” command shows that there are two connections to the same IP address and port number. This indicates that there are two active sessions between the client and server.

The issue of users having to provide their credentials twice to log in is known as a double login prompt issue. This issue can occur due to various reasons such as incorrect configuration of authentication settings, incorrect configuration of web server settings, or issues with the client's browser.

Based on the output of the “netstat -ano” command, it is difficult to determine the exact cause of the issue. However, it is possible that an attacker is intercepting traffic between the client and server and stealing user credentials. This type of attack is known as C. ARP poisoning.

ARP poisoning is a type of attack where an attacker sends fake ARP messages to associate their MAC address with the IP address of another device on the network. This allows them to intercept traffic between the two devices and steal sensitive information such as user credentials.

NEW QUESTION 184

- (Exam Topic 1)

During an investigation, the incident response team discovers that multiple administrator accounts were suspected of being compromised. The host audit logs indicate a repeated brute-force attack on a single administrator account followed by suspicious logins from unfamiliar geographic locations. Which of the following data sources would be BEST to use to assess the accounts impacted by this attack?

- A. User behavior analytics
- B. Dump files
- C. Bandwidth monitors
- D. Protocol analyzer output

Answer: A

Explanation:

User behavior analytics (UBA) would be the best data source to assess the accounts impacted by the attack, as it can identify abnormal activity, such as repeated brute-force attacks and logins from unfamiliar geographic locations, and provide insights into the behavior of the impacted accounts. References: CompTIA Security+ Study Guide, Exam SY0-601, 4th Edition, Chapter 7: Incident Response, pp. 338-341

NEW QUESTION 189

- (Exam Topic 1)

Hackers recently attacked a company's network and obtained several unfavorable pictures from the Chief Executive Officer's workstation. The hackers are threatening to send the images to the press if a ransom is not paid. Which of the following is impacted the MOST?

- A. Identify theft
- B. Data loss
- C. Data exfiltration
- D. Reputation

Answer: D

Explanation:

The best option that describes what is impacted the most by the hackers' attack and threat would be D. Reputation. Reputation is the perception or opinion that others have about a person or an organization. Reputation can affect the trust, credibility, and success of a person or an organization. In this scenario, if the hackers send the unfavorable pictures to the press, it can damage the reputation of the Chief Executive Officer and the company, and cause negative consequences such as loss of customers, partners, investors, or employees.

NEW QUESTION 192

- (Exam Topic 1)

one of the attendees starts to notice delays in the connection. and the HTTPS site requests are reverting to HTTP. Which of the following BEST describes what is happening?

- A. Birthday collision on the certificate key
- B. DNS hacking to reroute traffic
- C. Brute force to the access point
- D. A SSL/TLS downgrade

Answer: D

Explanation:

The scenario describes a Man-in-the-Middle (MitM) attack where the attacker intercepts traffic and downgrades the secure SSL/TLS connection to an insecure HTTP connection. This type of attack is commonly known as SSL/TLS downgrade attack or a stripping attack. The attacker is able to see and modify the communication between the client and server.

NEW QUESTION 194

- (Exam Topic 1)

The Chief Technology Officer of a local college would like visitors to utilize the school's WiFi but must be able to associate potential malicious activity to a specific person. Which of the following would BEST allow this objective to be met?

- A. Requiring all new, on-site visitors to configure their devices to use WPS
- B. Implementing a new SSID for every event hosted by the college that has visitors
- C. Creating a unique PSK for every visitor when they arrive at the reception area
- D. Deploying a captive portal to capture visitors' MAC addresses and names

Answer: D

Explanation:

A captive portal is a web page that requires visitors to authenticate or agree to an acceptable use policy before allowing access to the network. By capturing visitors' MAC addresses and names, potential malicious activity can be traced back to a specific person.

NEW QUESTION 198

- (Exam Topic 1)

Which of the following environments utilizes dummy data and is MOST likely to be installed locally on a system that allows code to be assessed directly and modified easily with each build?

- A. Production
- B. Test
- C. Staging
- D. Development

Answer: D

Explanation:

A development environment is the environment that is used to develop and test software. It is typically installed locally on a system that allows code to be assessed directly and modified easily with each build. In this environment, dummy data is often utilized to test the software's functionality.

Reference: CompTIA Security+ Study Guide, Exam SY0-601, Chapter 3: Architecture and Design

NEW QUESTION 202

- (Exam Topic 1)

A security analyst needs an overview of vulnerabilities for a host on the network. Which of the following is the BEST type of scan for the analyst to run to discover which vulnerable services are running?

- A. Non-credentialed
- B. Web application
- C. Privileged
- D. Internal

Answer: C

Explanation:

Privileged scanning, also known as credentialed scanning, is a type of vulnerability scanning that uses a valid user account to log in to the target host and examine vulnerabilities from a trusted user's perspective. It can provide more accurate and comprehensive results than unprivileged scanning, which does not use any credentials and only scans for externally visible vulnerabilities.

NEW QUESTION 203

- (Exam Topic 1)

An enterprise has hired an outside security firm to facilitate penetration testing on its network and applications. The firm has agreed to pay for each vulnerability that ts discovered. Which of the following BEST represents the type of testing that is being used?

- A. White-box
- B. Red-learn
- C. Bug bounty
- D. Gray-box
- E. Black-box

Answer: C

Explanation:

Bug bounty is a type of testing in which an organization offers a reward or compensation to anyone who can identify vulnerabilities or security flaws in their network or applications. The outside security firm has agreed to pay for each vulnerability found, which is an example of a bug bounty program.

NEW QUESTION 205

- (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 210

- (Exam Topic 2)

Which of the following can reduce vulnerabilities by avoiding code reuse?

- A. Memory management
- B. Stored procedures
- C. Normalization
- D. Code obfuscation

Answer: A

Explanation:

Memory management is a technique that can allocate and deallocate memory for applications and processes. Memory management can reduce vulnerabilities by avoiding code reuse, which is a technique that exploits a memory corruption vulnerability to execute malicious code that already exists in memory. Memory management can prevent code reuse by implementing features such as address space layout randomization (ASLR), data execution prevention (DEP), or stack canaries.

NEW QUESTION 213

- (Exam Topic 2)

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 following 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 215

- (Exam Topic 2)

A network manager is concerned that business may be negatively impacted if the firewall in its data center goes offline. The manager would like to implement a high availability pair to:

- A. decrease the mean time between failures.
- B. remove the single point of failure.
- C. cut down the mean time to repair
- D. reduce the recovery time objective

Answer: B

Explanation:

A single point of failure is a component or element of a system that, if it fails, will cause the entire system to fail or stop functioning. It can pose a high risk and impact for business continuity and availability. A high availability pair is a configuration that involves two identical devices or systems that operate in parallel and provide redundancy and failover capabilities. It can remove the single point of failure by ensuring that if one device or system fails, the other one can take over its functions without interruption or downtime.

NEW QUESTION 217

- (Exam Topic 2)

Which of the following would be best to ensure data is saved to a location on a server, is easily scaled, and is centrally monitored?

- A. Edge computing
- B. Microservices
- C. Containers
- D. Thin client

Answer: C

Explanation:

Containers are a method of virtualization that allow you to run multiple isolated applications on a single server. Containers are lightweight, portable, and scalable, which means they can save resources, improve performance, and simplify deployment. Containers also enable centralized monitoring and management of the applications running on them, using tools such as Docker or Kubernetes. Containers are different from edge computing, which is a distributed computing paradigm that brings computation and data storage closer to the location where it is needed. Microservices are a software architecture style that breaks down complex applications into smaller, independent services that communicate with each other. Thin clients are devices that rely on a server to perform most of the processing tasks and only provide a user interface.

NEW QUESTION 220

- (Exam Topic 2)

Which of the following would satisfy three-factor authentication requirements?

- A. Password, PIN, and physical token
- B. PIN, fingerprint scan, and iris scan
- C. Password, fingerprint scan, and physical token
- D. PIN, physical token, and ID card

Answer: C

Explanation:

Three-factor authentication combines three types of authentication methods: something you know (password), something you have (physical token), and something you are (fingerprint scan). Option C satisfies these requirements, as it uses a password (something you know), a physical token (something you have), and a fingerprint scan (something you are) for authentication.

Reference: CompTIA Security+ Study Guide (SY0-601) 7th Edition by Emmett Dulaney, Chuck Easttom Note: There could be other options as well that could satisfy the three-factor authentication requirements as per the organization's security policies.

NEW QUESTION 221

- (Exam Topic 2)

Which Of the following is a primary security concern for a setting up a BYOD program?

- A. End of life
- B. Buffer overflow
- C. VM escape
- D. Jailbreaking

Answer: D

Explanation:

Jailbreaking is a process of bypassing or removing the manufacturer-imposed restrictions on a mobile device's operating system, allowing users to install unauthorized applications, modify settings, etc. It is a primary security concern for setting up a BYOD program because it can expose the device and its data to malware, vulnerabilities, unauthorized access, etc

NEW QUESTION 222

- (Exam Topic 2)

Recent changes to a company's BYOD policy require all personal mobile devices to use a two-factor authentication method that is not something you know or have. Which of the following will meet this requirement?

- A. Facial recognition
- B. Six-digit PIN
- C. PKI certificate
- D. Smart card

Answer: A

Explanation:

Facial recognition is a type of biometric authentication that uses the unique features of a person's face to verify their identity. Facial recognition is not something you know or have, but something you are, which is one of the three factors of authentication. Facial recognition can use various methods and technologies, such as 2D or 3D images, infrared sensors, machine learning and more, to capture, analyze and compare facial data. Facial recognition can provide a convenient and secure way to authenticate users on personal mobile devices, as it does not require any additional hardware or input from the user. Facial recognition can also be used in conjunction with other factors, such as passwords or tokens, to provide multi-factor authentication. Verified References:

➤ Biometrics - SY0-601 CompTIA Security+ : 2.4 - Professor Messer IT Certification Training Courses <https://www.professormesser.com/security-plus/sy0-601/sy0-601-video/biometrics/> (See Facial Recognition)

➤ Security+ (Plus) Certification | CompTIA IT Certifications <https://www.comptia.org/certifications/security> (See Domain 2: Architecture and Design, Objective 2.4: Given a scenario, implement identity and access management controls.)

➤ Biometric and Facial Recognition - CompTIA Security+ Certification (SY0-501) https://www.oreilly.com/library/view/comptia-security-certification/9781789953091/video9_6.html (See Biometric and Facial Recognition)

NEW QUESTION 225

- (Exam Topic 2)

Which of the following cloud models provides clients with servers, storage, and networks but nothing else?

- A. SaaS
- B. PaaS
- C. IaaS
- D. DaaS

Answer: C

Explanation:

IaaS (Infrastructure as a Service) is a cloud model that provides clients with servers, storage, and networks but nothing else. It allows clients to have more control and flexibility over the configuration and management of their infrastructure resources, but also requires them to install and maintain their own operating systems, applications, etc.

NEW QUESTION 227

- (Exam Topic 2)

Which of the following would be most effective to contain a rapidly spreading attack that is affecting a large number of organizations?

- A. Machine learning
- B. DNS sinkhole
- C. Blocklist
- D. Honey pot

Answer: B

Explanation:

A DNS sinkhole would be most effective to contain a rapidly spreading attack that is affecting a large number of organizations. A DNS sinkhole is a technique that involves redirecting malicious or unwanted domain names to an alternative IP address, such as a black hole, a honeypot, or a warning page. A DNS sinkhole can

help to prevent or disrupt the communication between infected systems and command-and-control servers, malware distribution sites, phishing sites, or botnets. A DNS sinkhole can also help to identify and isolate infected systems by monitoring the traffic to the sinkhole IP address. References:

<https://www.comptia.org/blog/what-is-a-dns-sinkhole>

<https://www.certblaster.com/wp-content/uploads/2020/11/CompTIA-Security-SY0-601-Exam-Objectives-1.0.pdf>

NEW QUESTION 232

- (Exam Topic 2)

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 234

- (Exam Topic 2)

A security analyst is hardening a network infrastructure. The analyst is given the following requirements:

- Preserve the use of public IP addresses assigned to equipment on the core router
- Enable "in transport" encryption protection to the web server with the strongest ciphers. Which of the following should the analyst implement to meet these requirements? (Select two).

- A. Configure VLANs on the core router
- B. Configure NAT on the core router.
- C. Configure BGP on the core router
- D. Enable AES encryption on the web server
- E. Enable 3DES encryption on the web server
- F. Enable TLSv2 encryption on the web server

Answer: BF

Explanation:

NAT (Network Address Translation) is a technique that allows a router to translate private IP addresses into

public IP addresses and vice versa. It can preserve the use of public IP addresses assigned to equipment on the core router by allowing multiple devices to share a single public IP address. TLSv2 (Transport Layer Security version 2) is a cryptographic protocol that provides secure communication over the internet. It can enable "in transport" encryption protection to the web server with the strongest ciphers by encrypting the data transmitted between the web server and the clients using advanced algorithms and key exchange methods.

NEW QUESTION 236

- (Exam Topic 2)

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

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

Answer: C

Explanation:

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

NEW QUESTION 239

- (Exam Topic 2)

A security analyst is investigating network issues between a workstation and a company server. The workstation and server occasionally experience service disruptions, and employees are forced to

reconnect to the server. In addition, some reports indicate sensitive information is being leaked from the server to the public.

The workstation IP address is 192.168.1.103, and the server IP address is 192.168.1.101. The analyst runs `arp -a` On a separate workstation and obtains the following results:

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

Which of the following is most likely occurring?

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

Answer: C

Explanation:

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

NEW QUESTION 241

- (Exam Topic 2)

A security team discovered a large number of company-issued devices with non-work-related software installed. Which of the following policies would most likely contain language that would prohibit this activity?

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

Answer: C

Explanation:

AUP stands for acceptable use policy, which is a document that defines the rules and guidelines for using an organization's network, systems, devices, and resources. An AUP typically covers topics such as authorized and unauthorized activities, security requirements, data protection, user responsibilities, and consequences for violations. An AUP can help prevent non-work-related software installation on company-issued devices by clearly stating what types of software are allowed or prohibited, and what actions will be taken if users do not comply with the policy.

References: <https://www.comptia.org/certifications/security#examdetails> <https://www.comptia.org/content/guides/comptia-security-sy0-601-exam-objectives>
<https://www.techopedia.com/definition/2471/acceptable-use-policy-aup>

NEW QUESTION 243

- (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 245

- (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. Configuring 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 250

- (Exam Topic 2)

Which Of the following vulnerabilities is exploited an attacker Overwrite a reg-ister with a malicious address that changes the execution path?

- A. VM escape
- B. SQL injection
- C. Buffer overflow
- D. Race condition

Answer: C

Explanation:

A buffer overflow is a type of vulnerability that occurs when an attacker sends more data than a buffer can hold, causing the excess data to overwrite adjacent memory locations such as registers. It can allow an attacker to overwrite a register with a malicious address that changes the execution path and executes arbitrary code on the target system

NEW QUESTION 253

- (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 256

- (Exam Topic 2)

A security analyst is creating baselines for the server team to follow when hardening new devices for deployment. Which of the following best describes what the analyst is creating?

- A. Change management procedure
- B. Information security policy
- C. Cybersecurity framework
- D. Secure configuration guide

Answer: D

Explanation:

A secure configuration guide is a document that provides an overview of the security features and best practices for a specific product, system, or application. A secure configuration guide helps to reduce unnecessary cyber vulnerabilities and enhance overall security by applying consistent and standardized settings and policies. A security analyst can create baselines for the server team to follow when hardening new devices for deployment based on a secure configuration guide.

* A. Change management procedure. This is not the correct answer, because a change management procedure is a document that describes the steps and processes for implementing, reviewing, and approving changes to an IT system or environment. A change management procedure helps to minimize the risks and impacts of changes on the system performance, availability, and security.

* B. Information security policy. This is not the correct answer, because an information security policy is a document that defines the rules and principles for protecting the confidentiality, integrity, and availability of information assets within an organization. An information security policy helps to establish the roles and responsibilities of employees, managers, and stakeholders regarding information security.

* C. Cybersecurity framework. This is not the correct answer, because a cybersecurity framework is a document that provides a set of standards, guidelines, and best practices for managing cybersecurity risks and improving resilience. A cybersecurity framework helps to align the business objectives and priorities with the security requirements and capabilities.

* D. Secure configuration guide. This is the correct answer, because a secure configuration guide is a document that provides an overview of the security features and best practices for a specific product, system, or application. A secure configuration guide helps to reduce unnecessary cyber vulnerabilities and enhance overall security by applying consistent and standardized settings and policies.

Reference: Secure Configuration Guide, Security Technical Implementation Guide - Wikipedia.

NEW QUESTION 261

- (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 263

- (Exam Topic 2)

Select the appropriate attack and remediation from each drop-down list to label the corresponding attack with its remediation.

INSTRUCTIONS

Not all attacks and remediation actions will be used.

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

| Attack Description | Target | Attack Identified | BEST Preventative or Remediation Action |
|---|-----------------|---|---|
| An attacker sends multiple SYN packets from multiple sources. | Web server | <div>Botnet</div> <div>RAT</div> <div>Logic Bomb</div> <div>Backdoor</div> <div>Virus</div> <div>Spyware</div> <div>Worm</div> <div>Adware</div> <div>Ransomware</div> <div>Keylogger</div> <div>Phishing</div> | <div>Enable DDoS protection</div> <div>Patch vulnerable systems</div> <div>Disable vulnerable services</div> <div>Change the default system password</div> <div>Update the cryptographic algorithms</div> <div>Change the default application password</div> <div>Implement 2FA using push notification</div> <div>Conduct a code review</div> <div>Implement application fuzzing</div> <div>Implement a host-based IPS</div> <div>Disable remote access services</div> |
| The attack establishes a connection, which allows remote commands to be executed. | User | <div>Botnet</div> <div>RAT</div> <div>Logic Bomb</div> <div>Backdoor</div> <div>Virus</div> <div>Spyware</div> <div>Worm</div> <div>Adware</div> <div>Ransomware</div> <div>Keylogger</div> <div>Phishing</div> | <div>Enable DDoS protection</div> <div>Patch vulnerable systems</div> <div>Disable vulnerable services</div> <div>Change the default system password</div> <div>Update the cryptographic algorithms</div> <div>Change the default application password</div> <div>Implement 2FA using push notification</div> <div>Conduct a code review</div> <div>Implement application fuzzing</div> <div>Implement a host-based IPS</div> <div>Disable remote access services</div> |
| The attack is self propagating and compromises a SQL database using well-known credentials as it moves through the network. | Database server | <div>Botnet</div> <div>RAT</div> <div>Logic Bomb</div> <div>Backdoor</div> <div>Virus</div> <div>Spyware</div> <div>Worm</div> <div>Adware</div> <div>Ransomware</div> <div>Keylogger</div> <div>Phishing</div> | <div>Enable DDoS protection</div> <div>Patch vulnerable systems</div> <div>Disable vulnerable services</div> <div>Change the default system password</div> <div>Update the cryptographic algorithms</div> <div>Change the default application password</div> <div>Implement 2FA using push notification</div> <div>Conduct a code review</div> <div>Implement application fuzzing</div> <div>Implement a host-based IPS</div> <div>Disable remote access services</div> |
| The attacker uses hardware to remotely monitor a user's input activity to harvest credentials. | Executive | <div>Botnet</div> <div>RAT</div> <div>Logic Bomb</div> <div>Backdoor</div> <div>Virus</div> <div>Spyware</div> <div>Worm</div> <div>Adware</div> <div>Ransomware</div> <div>Keylogger</div> <div>Phishing</div> | <div>Enable DDoS protection</div> <div>Patch vulnerable systems</div> <div>Disable vulnerable services</div> <div>Change the default system password</div> <div>Update the cryptographic algorithms</div> <div>Change the default application password</div> <div>Implement 2FA using push notification</div> <div>Conduct a code review</div> <div>Implement application fuzzing</div> <div>Implement a host-based IPS</div> <div>Disable remote access services</div> |
| The attacker embeds hidden access in an internally developed application that bypasses account login. | Application | <div>Botnet</div> <div>RAT</div> <div>Logic Bomb</div> <div>Backdoor</div> <div>Virus</div> <div>Spyware</div> <div>Worm</div> <div>Adware</div> <div>Ransomware</div> <div>Keylogger</div> <div>Phishing</div> | <div>Enable DDoS protection</div> <div>Patch vulnerable systems</div> <div>Disable vulnerable services</div> <div>Change the default system password</div> <div>Update the cryptographic algorithms</div> <div>Change the default application password</div> <div>Implement 2FA using push notification</div> <div>Conduct a code review</div> <div>Implement application fuzzing</div> <div>Implement a host-based IPS</div> <div>Disable remote access services</div> |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Web server Botnet Enable DDoS protection User RAT Implement a host-based IPS Database server Worm Change the default application password Executive

Keylogger Disable vulnerable services Application Backdoor Implement 2FA using push notification

A screenshot of a computer program Description automatically generated with low confidence

| Attack Description | Target | Attack Identified | BEST Preventative or Remediation Action |
|---|-----------------|-------------------|---|
| An attacker sends multiple SYN packets from multiple sources. | Web server | Botnet ▾ | Enable DDoS protection ▾ |
| The attack establishes a connection, which allows remote commands to be executed. | User | RAT ▾ | Implement a host-based IPS ▾ |
| The attack is self propagating and compromises a SQL database using well-known credentials as it moves through the network. | Database server | Worm ▾ | Change the default application password ▾ |
| The attacker uses hardware to remotely monitor a user's input activity to harvest credentials. | Executive | Keylogger ▾ | Disable vulnerable services ▾ |
| The attacker embeds hidden access in an internally developed application that bypasses account login. | Application | Backdoor ▾ | Implement 2FA using push notification ▾ |

NEW QUESTION 267

- (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 271

- (Exam Topic 2)

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 274

- (Exam Topic 2)

An analyst is concerned about data leaks and wants to restrict access to internet services to authorized users only. The analyst also wants to control the actions each user can perform on each service. Which of the following would be the best technology for the analyst to consider implementing?

- A. DLP
- B. VPC
- C. CASB
- D. Content filtering

Answer: C

Explanation:

A cloud access security broker (CASB) is a technology that can restrict access to internet services to authorized users only and control the actions each user can perform on each service. A CASB is a type of software or service that acts as an intermediary between users and cloud service providers. A CASB can enforce security policies, monitor user activity, detect and prevent data leaks, encrypt data, and provide visibility and auditability of cloud usage. References:

<https://www.comptia.org/blog/what-is-a-cloud-access-security-broker>

<https://www.certblaster.com/wp-content/uploads/2020/11/CompTIA-Security-SY0-601-Exam-Objectives-1.0.pdf>

NEW QUESTION 279

- (Exam Topic 2)

A malicious actor recently penetrated a company's network and moved laterally to the data center. Upon investigation, a forensics firm wants to know what was in the memory on the compromised server. Which of the following files should be given to the forensics firm?

- A. Security
- B. Application
- C. Dump
- D. Syslog

Answer: C

Explanation:

A dump file is a file that contains the contents of memory at a specific point in time. It can be used for debugging or forensic analysis of a system or an application. It can reveal what was in the memory on the compromised server, such as processes, variables, passwords, encryption keys, etc.

NEW QUESTION 281

- (Exam Topic 2)

An organization is outlining data stewardship roles and responsibilities. Which of the following employee roles would determine the purpose of data and how to process it?

- A. Data custodian
- B. Data controller
- C. Data protection officer
- D. Data processor

Answer: B

Explanation:

A data controller is an employee role that would determine the purpose of data and how to process it. A data controller is a person or entity that decides why and how personal data is collected, used, stored, shared, or deleted. A data controller has the responsibility to comply with data protection laws and regulations, such as the General Data Protection Regulation (GDPR), and to ensure the rights and privacy of data subjects.

References: <https://www.comptia.org/blog/what-is-a-data-controller>

<https://www.certblaster.com/wp-content/uploads/2020/11/CompTIA-Security-SY0-601-Exam-Objectives-1.0.pdf>

NEW QUESTION 286

- (Exam Topic 2)

Server administrators want to configure a cloud solution so that computing memory and processor usage are maximized most efficiently across a number of virtual servers. They also need to avoid potential denial-of-service situations caused by availability. Which of the following should administrators configure to maximize system availability while efficiently utilizing available computing power?

- A. Dynamic resource allocation
- B. High availability
- C. Segmentation
- D. Container security

Answer: A

Explanation:

Dynamic resource allocation is a technique that allows cloud providers to adjust the amount and distribution of computing resources according to the changing demand and capacity of the cloud environment¹. Dynamic resource allocation can improve the efficiency and utilization of available computing power, as well as reduce the cost and energy consumption of the cloud infrastructure¹. Dynamic resource allocation can also enhance the system availability and reliability by avoiding potential denial-of-service situations caused by overloading or under-provisioning of resources¹.

NEW QUESTION 288

- (Exam Topic 2)

The management team has requested that the security team implement 802.1X into the existing wireless network setup. The following requirements must be met:

- Minimal interruption to the end user
- Mutual certificate validation

Which of the following authentication protocols would meet these requirements?

- A. EAP-FAST
- B. PSK
- C. EAP-TTLS
- D. EAP-TLS

Answer: D

Explanation:

EAP-TLS (Extensible Authentication Protocol - Transport Layer Security) is an authentication protocol that uses certificates to provide mutual authentication between the client and the authentication server. It also allows for the encryption of user credentials, making EAP-TLS a secure and reliable authentication

protocol. According to the CompTIA Security+ SY0-601 Official Text Book, EAP-TLS is well-suited for wireless networks due to its mutual authentication capabilities and its ability to securely store credentials. It is also the preferred authentication protocol for 802.1X wireless networks.

NEW QUESTION 293

- (Exam Topic 2)

To reduce and limit software and infrastructure costs the Chief Information Officer has requested to move email services to the cloud. The cloud provider and the organization must have security controls to protect sensitive data Which of the following cloud services would best accommodate the request?

- A. IaaS
- B. PaaS
- C. DaaS
- D. SaaS

Answer: D

Explanation:

SaaS (Software as a Service) is a cloud model that provides clients with applications and software that are hosted and managed by a cloud provider over the internet. It can move email services to the cloud by allowing clients to access and use email applications without installing or maintaining them on their own devices or servers

NEW QUESTION 294

- (Exam Topic 2)

A company's help desk has received calls about the wireless network being down and users being unable to connect to it The network administrator says all access points are up and running One of the help desk technicians notices the affected users are working in a building near the parking lot. Which of the following is the most likely reason for the outage?

- A. Someone near the building is jamming the signal
- B. A user has set up a rogue access point near the building
- C. Someone set up an evil twin access point in the affected area.
- D. The APs in the affected area have been unplugged from the network

Answer: A

Explanation:

Jamming is a type of denial-of-service attack that involves interfering with or blocking the wireless signal using a device that emits radio waves at the same frequency as the wireless network. It can cause the wireless network to be down and users to be unable to connect to it, especially if they are working in a building near the parking lot where someone could easily place a jamming device.

NEW QUESTION 295

- (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 296

- (Exam Topic 2)

Which of the following would help ensure a security analyst is able to accurately measure the overall risk to an organization when a new vulnerability is disclosed?

- A. A full inventory of all hardware and software
- B. Documentation of system classifications
- C. A list of system owners and their departments
- D. Third-party risk assessment documentation

Answer: A

Explanation:

A full inventory of all hardware and software would help ensure a security analyst is able to accurately measure the overall risk to an organization when a new vulnerability is disclosed, as it would allow the analyst to identify which systems and applications are affected by the vulnerability and prioritize the remediation efforts accordingly. A full inventory would also help the analyst to determine the impact and likelihood of a successful exploit, as well as the potential loss of confidentiality, integrity and availability of the data and services. References:

- <https://www.professormesser.com/security-plus/sy0-601/sy0-601-video/risk-analysis/>
- <https://www.comptia.org/landing/securityplus/index.html>
- <https://www.comptia.org/blog/complete-guide-to-risk-management>

NEW QUESTION 300

- (Exam Topic 2)

A security operations center wants to implement a solution that can execute files to test for malicious activity. The solution should provide a report of the files' activity against known threats.

Which of the following should the security operations center implement?

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

Answer: C

Explanation:

Cuckoo is a sandbox that is specifically written to run programs inside and identify any malware. A sandbox is a virtualized environment that isolates the program from the rest of the system and monitors its behavior. Cuckoo can analyze files of various types, such as executables, documents, URLs, and more. Cuckoo can provide a report of the files' activity against known threats, such as network traffic, file operations, registry changes, API calls, and so on.

A security operations center can implement Cuckoo to execute files to test for malicious activity and generate a report of the analysis. Cuckoo can help the security operations center to detect and prevent malware infections, investigate incidents, and perform threat intelligence.

NEW QUESTION 301

- (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 companVs 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 allows an attacker to modify the user-agent header of an HTTP request to impersonate another browser or device¹². User-agent spoofing can be used to bypass security controls that rely on user-agent filtering or validation¹². In this case, the attacker spoofed the user-agent header to match the company's mobile application, which was allowed to access the back-end server's API¹².

NEW QUESTION 304

- (Exam Topic 2)

A company would like to protect credit card information that is stored in a database from being exposed and reused. However, the current POS system does not support encryption. Which of the following would be BEST suited to secure this information?

(Give me related explanation and references from CompTIA Security+ SY0-601 documents for Correct answer option)

- A. Masking
- B. Tokenization
- C. DLP
- D. SSL/TLS

Answer: B

Explanation:

Tokenization replaces sensitive data with non-sensitive data, such as a unique identifier. This means that the data is still present in the system, but the sensitive information itself is replaced with the token. Tokenization is more secure than masking, which only obscures the data but does not eliminate it. DLP is not suitable for this task, as it is designed to prevent the loss or leakage of data from the system. SSL/TLS can be used to secure the transmission of data, but it cannot prevent the data itself from being exposed or reused. For more information, please refer to CompTIA Security+ SY0-601 Exam Objectives, Section 3.3: Explain the security purpose of authentication, authorization and accounting (AAA) services, and Section 4.7: Explain the purpose and characteristics of various types of encryption.

NEW QUESTION 309

- (Exam Topic 2)

Which Of the following is the best method for ensuring non-repudiation?

- A. SSO
- B. Digital certificate
- C. Token
- D. SSH key

Answer: B

Explanation:

A digital certificate is an electronic document that contains the public key and identity information of an entity, such as a person, organization, website, etc. It is issued and signed by a trusted authority called a certificate authority (CA). It can provide non-repudiation by proving the identity and authenticity of the sender and

verifying the integrity of the message or data.

NEW QUESTION 314

- (Exam Topic 2)

Security analysts have noticed the network becomes flooded with malicious packets at specific times of the day. Which of the following should the analysts use to investigate this issue?

- A. Web metadata
- B. Bandwidth monitors
- C. System files
- D. Correlation dashboards

Answer: D

Explanation:

Correlation dashboards are tools that allow security analysts to monitor and analyze multiple sources of data and events in real time. They can help identify patterns, trends, anomalies, and threats by correlating different types of data and events, such as network traffic, logs, alerts, and incidents. Correlation dashboards can help investigate network flooding by showing the source, destination, volume, and type of malicious packets and their impact on the network performance and availability. References:

<https://www.comptia.org/blog/what-is-a-correlation-dashboard>

NEW QUESTION 316

- (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 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 318

- (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 321

- (Exam Topic 2)

An organization needs to implement more stringent controls over administrator/root credentials and service accounts. Requirements for the project include:

- * Check-in/checkout of credentials
- * The ability to use but not know the password
- * Automated password changes
- * Logging of access to credentials

Which of the following solutions would meet the requirements?

- A. OAuth 2.0
- B. Secure Enclave
- C. A privileged access management system
- D. An OpenID Connect authentication system

Answer: C

Explanation:

A privileged access management (PAM) system is a solution that helps protect organizations against cyberthreats by monitoring, detecting, and preventing unauthorized privileged access to critical resources¹². A PAM system can meet the requirements of the project by providing features such as:

➤ Check-in/checkout of credentials: A PAM system can store and manage privileged credentials in a secure vault, and allow authorized users to check out credentials when needed and check them back in when done. This reduces the risk of credential theft, misuse, or sharin2g3.

➤ The ability to use but not know the password: A PAM system can enable users to access privileged accounts or resources without revealing the actual password, using methods such as password injection, session proxy, or single sign-on²³. This prevents users from copying, changing, or sharing password^{2s}.

➤ Automated password changes: A PAM system can automatically rotate and update passwords for privileged accounts according to predefined policies, such as frequency, complexity, and uniqueness²³.

. This ensures that passwords are always strong and unpredictable, and reduces the risk of password reuse or compromise².

➤ Logging of access to credentials: A PAM system can record and audit all activities related to privileged access, such as who accessed what credentials, when, why, and what they did with them²³. This provides visibility and accountability for privileged access, and enables detection and investigation of anomalies or incidents².

A PAM system is different from OAuth 2.0, which is an authorization framework that enables third-party applications to obtain limited access to an HTTP service on behalf of a resource owner⁴. OAuth 2.0 does not provide the same level of control and security over privileged access as a PAM system does.

A PAM system is also different from a secure enclave, which is a hardware-based security feature that creates an isolated execution environment within a processor to protect sensitive data from unauthorized access or modification⁵. A secure enclave does not provide the same functionality as a PAM system for managing privileged credentials and access.

A PAM system is also different from an OpenID Connect authentication system, which is an identity layer on top of OAuth 2.0 that enables users to verify their identity across multiple websites using a single login⁶. OpenID Connect does not provide the same scope and granularity as a PAM system for controlling and monitoring privileged access.

NEW QUESTION 323

- (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 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 333

- (Exam Topic 2)

A company is adopting a BYOD policy and is looking for a comprehensive solution to protect company information on user devices. Which of the following solutions would best support the policy?

- A. Mobile device management
- B. Full device encryption
- C. Remote wipe
- D. Biometrics

Answer: A

Explanation:

Mobile device management (MDM) is a solution that allows an organization to manage, monitor, and secure mobile devices that are used by employees for work purposes. It can protect company information on user devices by enforcing policies and controls such as encryption, password, remote wipe, etc., and detecting and preventing unauthorized access or data leakage.

NEW QUESTION 336

- (Exam Topic 2)

Which of the following allow access to remote computing resources, a operating system. and centrdized configuration and data

- A. Containers
- B. Edge computing

- C. Thin client
- D. Infrastructure as a service

Answer: C

Explanation:

Thin clients are devices that have minimal hardware and software components and rely on a remote server to provide access to computing resources, an operating system, and centralized configuration and data. Thin clients can reduce the cost, complexity, and security risks of managing multiple devices.

NEW QUESTION 339

- (Exam Topic 2)

Which of the following is used to validate a certificate when it is presented to a user?

- A. OCSP
- B. CSR
- C. CA
- D. CRC

Answer: A

Explanation:

Online Certificate Status Protocol (OCSP) is used to validate a certificate when it is presented to a user. OCSP is a protocol that allows a client or browser to query the status of a certificate from an OCSP responder, which is a server that maintains and provides the revocation status of certificates issued by a certificate authority (CA). OCSP can help to verify the authenticity and validity of a certificate and prevent the use of revoked or expired certificates. References:

<https://www.comptia.org/blog/what-is-ocsp>

<https://www.certblaster.com/wp-content/uploads/2020/11/CompTIA-Security-SY0-601-Exam-Objectives-1.0.pdf>

NEW QUESTION 343

- (Exam Topic 2)

Which of the following terms should be included in a contract to help a company monitor the ongoing security maturity of a new vendor?

- A. A right-to-audit clause allowing for annual security audits
- B. Requirements for event logs to be kept for a minimum of 30 days
- C. Integration of threat intelligence in the company's AV
- D. A data-breach clause requiring disclosure of significant data loss

Answer: A

Explanation:

A right-to-audit clause is a contractual provision that allows one party to audit the records and activities of another party to ensure compliance with security policies and standards. It can help a company monitor the ongoing security maturity of a new vendor by conducting annual security audits and identifying any gaps or issues that need to be addressed.

NEW QUESTION 344

- (Exam Topic 2)

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 348

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