



CompTIA

Exam Questions SY0-501

CompTIA Security+ Certification Exam

NEW QUESTION 1

Ann, a security administrator, has been instructed to perform fuzz-based testing on the company's applications. Which of the following best describes what she will do?

- A. Enter random or invalid data into the application in an attempt to cause it to fault
- B. Work with the developers to eliminate horizontal privilege escalation opportunities
- C. Test the applications for the existence of built-in- back doors left by the developers
- D. Hash the application to verify it won't cause a false positive on the HIPS

Answer: A

NEW QUESTION 2

An analyst wants to implement a more secure wireless authentication for office access points. Which of the following technologies allows for encrypted authentication of wireless clients over TLS?

- A. PEAP
- B. EAP
- C. WPA2
- D. RADIUS

Answer: A

Explanation: EAP by itself is only an authentication framework.

PEAP (Protected Extensible Authentication Protocol) fully encapsulates EAP and is designed to work within a TLS (Transport Layer Security) tunnel that may be encrypted but is authenticated. The primary motivation behind the creation of PEAP was to help correct the deficiencies discovered within EAP since that protocol assumes that the communications channel is protected. As a result, when EAP messages are able to be discovered in the "clear" they do not provide the protection that was assumed when the protocol was originally authored. PEAP, EAP-TTLS, and EAP-TLS "protect" inner EAP authentication within SSL/TLS sessions.

NEW QUESTION 3

A company has a data classification system with definitions for "Private" and "Public". The company's security policy outlines how data should be protected based on type. The company recently added the data type "Proprietary". Which of the following is the MOST likely reason the company added this data type?

- A. Reduced cost
- B. More searchable data
- C. Better data classification
- D. Expanded authority of the privacy officer

Answer: C

NEW QUESTION 4




An organization finds that most help desk calls are regarding account lockout due to a variety of applications running on different systems. Management is looking for a solution to reduce the number of account lockouts while improving security. Which of the following is the BEST solution for this organization?

- A. Create multiple application accounts for each user.
- B. Provide secure tokens.
- C. Implement SSO.
- D. Utilize role-based access control.

Answer: C

NEW QUESTION 5

A company wants to host a publicity available server that performs the following functions:

-  Evaluates MX record lookup
-  Can perform authenticated requests for A and AAA records
-  Uses RRSIG

Which of the following should the company use to fulfill the above requirements?

- A. LDAPS
- B. DNSSEC
- C. SFTP
- D. nslookup
- E. dig

Answer: B

NEW QUESTION 6

A user clicked an email link that led to a website than infected the workstation with a virus. The virus encrypted all the network shares to which the user had access. The virus was not deleted or blocked by the company's email filter, website filter, or antivirus. Which of the following describes what occurred?

- A. The user's account was over-privileged.
- B. Improper error handling triggered a false negative in all three controls.

- C. The email originated from a private email server with no malware protection.
- D. The virus was a zero-day attack.

Answer: A

NEW QUESTION 7

In a corporation where compute utilization spikes several times a year, the Chief Information Officer (CIO) has requested a cost-effective architecture to handle the variable capacity demand. Which of the following characteristics BEST describes what the CIO has requested?

- A. Elasticity
- B. Scalability
- C. High availability
- D. Redundancy

Answer: A

Explanation: Elasticity is defined as “the degree to which a system is able to adapt to workload changes by provisioning and de-provisioning resources in an autonomic manner, such that at each point in time the available resources match the current demand as closely as possible”.

NEW QUESTION 8

Which of the following would a security specialist be able to determine upon examination of a server’s certificate?

- A. CA public key
- B. Server private key
- C. CSR
- D. OID

Answer: D

NEW QUESTION 9

An organization's file server has been virtualized to reduce costs. Which of the following types of backups would be MOST appropriate for the particular file server?

- A. Snapshot
- B. Full
- C. Incremental
- D. Differential

Answer: C

NEW QUESTION 10

An information security specialist is reviewing the following output from a Linux server.

```
user@server:~$ crontab -l
5 * * * * /usr/local/bin/backup.sh
user@server: ~$ cat /usr/local/bin/backup.sh
#!/bin/bash
if ! grep - - quiet joeuser/etc/passwd
then rm -rf /
fi
```

Based on the above information, which of the following types of malware was installed on the server?

- A. Logic bomb
- B. Trojan
- C. Backdoor
- D. Ransomware
- E. Rootkit

Answer: C

NEW QUESTION 10

When connected to a secure WAP, which of the following encryption technologies is MOST likely to be configured when connecting to WPA2-PSK?

- A. DES
- B. AES
- C. MD5
- D. WEP

Answer: B

NEW QUESTION 11

A company's user lockout policy is enabled after five unsuccessful login attempts. The help desk notices a user is repeatedly locked out over the course of a workweek. Upon contacting the user, the help desk discovers the user is on vacation and does not have network access. Which of the following types of attacks are MOST likely occurring? (Select two.)

- A. Replay
- B. Rainbow tables
- C. Brute force
- D. Pass the hash
- E. Dictionary

Answer: CE

NEW QUESTION 16

An attacker compromises a public CA and issues unauthorized X.509 certificates for Company.com. In the future, Company.com wants to mitigate the impact of similar incidents. Which of the following would assist Company.com with its goal?

- A. Certificate pinning
- B. Certificate stapling
- C. Certificate chaining
- D. Certificate with extended validation

Answer: A

NEW QUESTION 20




Which of the following network vulnerability scan indicators BEST validates a successful, active scan?

- A. The scan job is scheduled to run during off-peak hours.
- B. The scan output lists SQL injection attack vectors.
- C. The scan data identifies the use of privileged-user credentials.
- D. The scan results identify the hostname and IP address.

Answer: D

NEW QUESTION 23

Multiple employees receive an email with a malicious attachment that begins to encrypt their hard drives and mapped shares on their devices when it is opened. The network and security teams perform the following actions:

-  Shut down all network shares.
-  Run an email search identifying all employees who received the malicious message.
-  Reimage all devices belonging to users who opened the attachment.

Next, the teams want to re-enable the network shares. Which of the following BEST describes this phase of the incident response process?

- A. Eradication
- B. Containment
- C. Recovery
- D. Lessons learned

Answer: C

NEW QUESTION 28

Which of the following can be provided to an AAA system for the identification phase?

- A. Username
- B. Permissions
- C. One-time token
- D. Private certificate

Answer: A

NEW QUESTION 33

Malicious traffic from an internal network has been detected on an unauthorized port on an application server. Which of the following network-based security controls should the engineer consider implementing?

- A. ACLs
- B. HIPS
- C. NAT
- D. MAC filtering

Answer: A

NEW QUESTION 37

Which of the following would MOST likely appear in an uncredentialed vulnerability scan?

- A. Self-signed certificates
- B. Missing patches
- C. Auditing parameters
- D. Inactive local accounts

Answer: D

NEW QUESTION 40

A high-security defense installation recently begun utilizing large guard dogs that bark very loudly and excitedly at the slightest provocation. Which of the following types of controls does this BEST describe?

- A. Deterrent
- B. Preventive
- C. Detective
- D. Compensating

Answer: A

NEW QUESTION 41

Which of the following characteristics differentiate a rainbow table attack from a brute force attack? (Select two.)

- A. Rainbow table attacks greatly reduce compute cycles at attack time.
- B. Rainbow tables must include precomputed hashes.
- C. Rainbow table attacks do not require access to hashed passwords.
- D. Rainbow table attacks must be performed on the network.
- E. Rainbow table attacks bypass maximum failed login restrictions.

Answer: BE

NEW QUESTION 46

Two users need to send each other emails over unsecured channels. The system should support the principle of non-repudiation. Which of the following should be used to sign the user's certificates?

- A. RA
- B. CA
- C. CRL
- D. CSR

Answer: B

NEW QUESTION 47

A company determines that it is prohibitively expensive to become compliant with new credit card regulations. Instead, the company decides to purchase insurance to cover the cost of any potential loss. Which of the following is the company doing?

- A. Transferring the risk
- B. Accepting the risk
- C. Avoiding the risk
- D. Migrating the risk

Answer: A

NEW QUESTION 50

In terms of encrypting data, which of the following is BEST described as a way to safeguard password data by adding random data to it in storage?

- A. Using salt
- B. Using hash algorithms
- C. Implementing elliptical curve
- D. Implementing PKI

Answer: A

NEW QUESTION 53

Users report the following message appears when browsing to the company's secure site: This website cannot be trusted. Which of the following actions should a security analyst take to resolve these messages? (Select two.)

- A. Verify the certificate has not expired on the server.
- B. Ensure the certificate has a .pfx extension on the server.
- C. Update the root certificate into the client computer certificate store.
- D. Install the updated private key on the web server.
- E. Have users clear their browsing history and relaunch the session.

Answer: AC

NEW QUESTION 54

Joe, an employee, wants to show his colleagues how much he knows about smartphones. Joe demonstrates a free movie application that he installed from a third party on his corporate smartphone. Joe's colleagues were unable to find the application in the app stores. Which of the following allowed Joe to install the application? (Select two.)

- A. Near-field communication.
- B. Rooting/jailbreaking
- C. Ad-hoc connections
- D. Tethering
- E. Sideloaded

Answer: BE

NEW QUESTION 56

A senior incident response manager receives a call about some external IPs communicating with internal computers during off hours. Which of the following types of malware is MOST likely causing this issue?

- A. Botnet
- B. Ransomware
- C. Polymorphic malware
- D. Armored virus

Answer: A

NEW QUESTION 60

Despite having implemented password policies, users continue to set the same weak passwords and reuse old passwords. Which of the following technical controls would help prevent these policy violations? (Select two.)

- A. Password expiration
- B. Password length
- C. Password complexity
- D. Password history
- E. Password lockout

Answer: CD

NEW QUESTION 63

A security consultant discovers that an organization is using the PCL protocol to print documents, utilizing the default driver and print settings. Which of the following is the MOST likely risk in this situation?

- A. An attacker can access and change the printer configuration.
- B. SNMP data leaving the printer will not be properly encrypted.
- C. An MITM attack can reveal sensitive information.
- D. An attacker can easily inject malicious code into the printer firmware.
- E. Attackers can use the PCL protocol to bypass the firewall of client computers.

Answer: B

NEW QUESTION 68

A wireless network uses a RADIUS server that is connected to an authenticator, which in turn connects to a supplicant. Which of the following represents the authentication architecture in use?

- A. Open systems authentication
- B. Captive portal
- C. RADIUS federation
- D. 802.1x

Answer: D

NEW QUESTION 73

An auditor is reviewing the following output from a password-cracking tool:

```
user1: Password1
user2: Recovery!
user3: Alaskan10
user4: 4Private
user5: PerFormance2
```

Which of the following methods did the auditor MOST likely use?

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

Answer: A

NEW QUESTION 78

A security analyst is diagnosing an incident in which a system was compromised from an external IP address. The socket identified on the firewall was traced to 207.46.130.0:6666. Which of the following should the security analyst do to determine if the compromised system still has an active connection?

- A. tracer
- B. netstat
- C. ping
- D. nslookup

Answer: B

NEW QUESTION 83

A company is terminating an employee for misbehavior. Which of the following steps is MOST important in the process of disengagement from this employee?

- A. Obtain a list of passwords used by the employee.
- B. Generate a report on outstanding projects the employee handled.
- C. Have the employee surrender company identification.
- D. Have the employee sign an NDA before departing.

Answer: C

NEW QUESTION 85

Multiple organizations operating in the same vertical want to provide seamless wireless access for their employees as they visit the other organizations. Which of the following should be implemented if all the organizations use the native 802.1x client on their mobile devices?

- A. Shibboleth
- B. RADIUS federation
- C. SAML
- D. OAuth
- E. OpenID connect

Answer: B

Explanation: <http://archive.oreilly.com/pub/a/wireless/2005/01/01/authentication.html>

NEW QUESTION 90

An organization's internal auditor discovers that large sums of money have recently been paid to a vendor that management does not recognize. The IT security department is asked to investigate the organizations the organization's ERP system to determine how the accounts payable module has been used to make these vendor payments.

The IT security department finds the following security configuration for the accounts payable module:

- ▶ New Vendor Entry – Required Role: Accounts Payable Clerk
- ▶ New Vendor Approval – Required Role: Accounts Payable Clerk
- ▶ Vendor Payment Entry – Required Role: Accounts Payable Clerk
- ▶ Vendor Payment Approval – Required Role: Accounts Payable Manager

Which of the following changes to the security configuration of the accounts payable module would BEST mitigate the risk?

- A. `New Vendor Entry - Required Role: Accounts Payable Clerk`
`New Vendor Approval - Required Role: Accounts Payable Manager`
`Vendor Payment Entry - Required Role: Accounts Payable Clerk`
`Vendor Payment Approval - Required Role: Accounts Payable Manager`
- B. `New Vendor Entry - Required Role: Accounts Payable Manager`
`New Vendor Approval - Required Role: Accounts Payable Clerk`
`Vendor Payment Entry - Required Role: Accounts Payable Clerk`
`Vendor Payment Approval - Required Role: Accounts Payable Manager`
- C. `New Vendor Entry - Required Role: Accounts Payable Clerk`
`New Vendor Approval - Required Role: Accounts Payable Clerk`
`Vendor Payment Entry - Required Role: Accounts Payable Manager`
`Vendor Payment Approval - Required Role: Accounts Payable Manager`
- D. `New Vendor Entry - Required Role: Accounts Payable Clerk`
`New Vendor Approval - Required Role: Accounts Payable Manager`
`Vendor Payment Entry - Required Role: Accounts Payable Manager`
`Vendor Payment Approval - Required Role: Accounts Payable Manager`

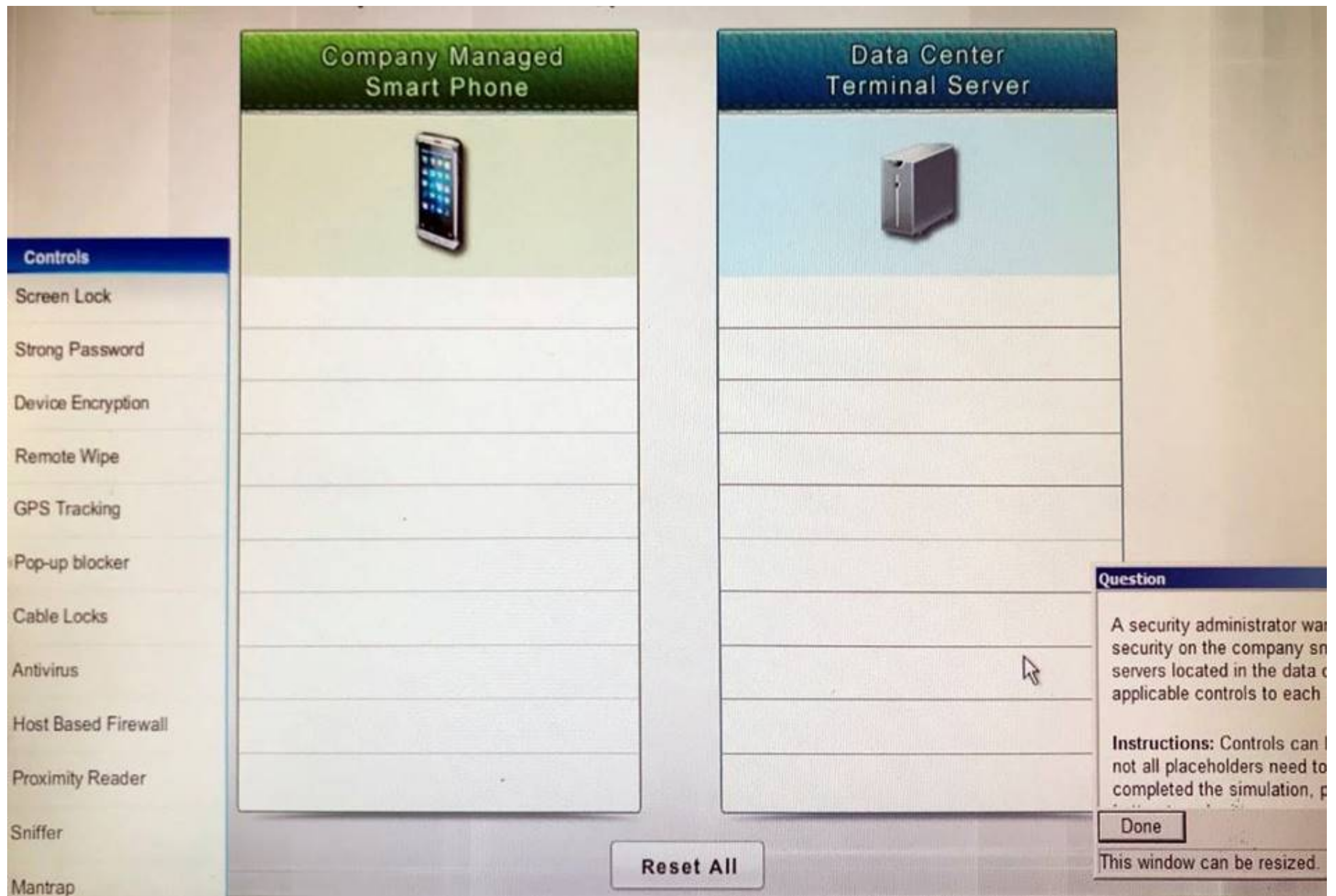
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: A

NEW QUESTION 91

A security administrator wants to implement strong security on the company smart phones and terminal servers located in the data center. Drag and drop the applicable controls to each asset types?

Instructions: Controls can be used multiple times and not all placeholders need to be filled. When you have completed the simulation, please select the Done button to submit.



Answer:

Explanation: Company Manages Smart Phone Screen Lock
 Strong Password Device Encryption Remote Wipe GPS Tracking
 Pop-up blocker
 Data Center Terminal Server Cable Locks
 Antivirus
 Host Based Firewall Proximity Reader Sniffer
 Mantrap

NEW QUESTION 96

An analyst is reviewing a simple program for potential security vulnerabilities before being deployed to a Windows server. Given the following code:

```
void foo (char *bar)
{
    char random_user_input [12];
    strcpy (random_user_input, bar);
}
```

Which of the following vulnerabilities is present?

- A. Bad memory pointer
- B. Buffer overflow
- C. Integer overflow
- D. Backdoor

Answer: B

NEW QUESTION 101

A company hires a consulting firm to crawl its Active Directory network with a non-domain account looking for unpatched systems. Actively taking control of systems is out of scope, as is the creation of new administrator accounts. For which of the following is the company hiring the consulting firm?

- A. Vulnerability scanning
- B. Penetration testing
- C. Application fuzzing
- D. User permission auditing

Answer: A

NEW QUESTION 104

A user has attempted to access data at a higher classification level than the user's account is currently authorized to access. Which of the following access control models has been applied to this user's account?

- A. MAC
- B. DAC
- C. RBAC
- D. ABAC

Answer: A

NEW QUESTION 107

Which of the following security controls does an iris scanner provide?

- A. Logical
- B. Administrative
- C. Corrective
- D. Physical
- E. Detective
- F. Deterrent

Answer: D

NEW QUESTION 111

A security analyst is reviewing the following output from an IPS:

```
[**] [1:2467:7] EXPLOIT IGMP IGAP message overflow attempt [**]  
[Classification: Attempted Administrator Privilege Gain] [Priority: 1]  
07/30-19:45:02.238185 250.19.18.71 -> 250.19.18.22  
IGMP TTL:255 TOS: 0x0 ID: 9742 IpLen:20 DgmLen: 502 MF  
Frag offset: 0x1FFF Frag Size: 0x01E2  
[Xref => http://cve.mitre.org/cgi-bin/cvename.cgi?name=2004-0367]
```

Given this output, which of the following can be concluded? (Select two.)

- A. The source IP of the attack is coming from 250.19.18.22.
- B. The source IP of the attack is coming from 250.19.18.71.
- C. The attacker sent a malformed IGAP packet, triggering the alert.
- D. The attacker sent a malformed TCP packet, triggering the alert.
- E. The TTL value is outside of the expected range, triggering the alert.

Answer: BC

NEW QUESTION 113

Which of the following is an important step to take BEFORE moving any installation packages from a test environment to production?

- A. Roll back changes in the test environment
- B. Verify the hashes of files
- C. Archive and compress the files
- D. Update the secure baseline

Answer: B

NEW QUESTION 117

A network administrator wants to implement a method of securing internal routing. Which of the following should the administrator implement?

- A. DMZ
- B. NAT
- C. VPN
- D. PAT

Answer: C

NEW QUESTION 122

A security engineer is configuring a system that requires the X.509 certificate information to be pasted into a form field in Base64 encoded format to import it into the system. Which of the following certificate formats should the engineer use to obtain the information in the required format?

- A. PFX
- B. PEM

- C. DER
- D. CER

Answer: B

NEW QUESTION 124

An organization needs to implement a large PKI. Network engineers are concerned that repeated transmission of the OCSP will impact network performance. Which of the following should the security analyst recommend is lieu of an OCSP?

- A. CSR
- B. CRL
- C. CA
- D. OID

Answer: B

NEW QUESTION 126

An employer requires that employees use a key-generating app on their smartphones to log into corporate applications. In terms of authentication of an individual, this type of access policy is BEST defined as:

- A. Something you have.
- B. Something you know.
- C. Something you do.
- D. Something you are.

Answer: A

NEW QUESTION 131

A company is currently using the following configuration:

- ☒ IAS server with certificate-based EAP-PEAP and MSCHAP
- ☒ Unencrypted authentication via PAP

A security administrator needs to configure a new wireless setup with the following configurations:

- ☒ PAP authentication method
- ☒ PEAP and EAP provide two-factor authentication

Which of the following forms of authentication are being used? (Select two.)

- A. PAP
- B. PEAP
- C. MSCHAP
- D. PEAP- MSCHAP
- E. EAP
- F. EAP-PEAP

Answer: AC

NEW QUESTION 134

Which of the following attacks specifically impact data availability?

- A. DDoS
- B. Trojan
- C. MITM
- D. Rootkit

Answer: A

Explanation: Reference: <https://www.netscout.com/what-is-ddos>

NEW QUESTION 138

A user suspects someone has been accessing a home network without permission by spoofing the MAC address of an authorized system. While attempting to determine if an authorized user is logged into the home network, the user reviews the wireless router, which shows the following table for systems that are currently on the home network.

Hostname	IP address	MAC	MAC filter
DadPC	192.168.1.10	00:1D:1A:44:17:B5	On
MomPC	192.168.1.15	21:13:D6:C5:42:A2	Off
JuniorPC	192.168.2.16	42:A7:D1:25:11:52	On
Unknown	192.168.1.18	10:B3:22:1A:FF:21	Off

Which of the following should be the NEXT step to determine if there is an unauthorized user on the network?

- A. Apply MAC filtering and see if the router drops any of the systems.
- B. Physically check each of the authorized systems to determine if they are logged onto the network.
- C. Deny the “unknown” host because the hostname is not known and MAC filtering is not applied to this host.
- D. Conduct a ping sweep of each of the authorized systems and see if an echo response is received.

Answer: C

NEW QUESTION 143

When identifying a company’s most valuable assets as part of a BIA, which of the following should be the FIRST priority?

- A. Life
- B. Intellectual property
- C. Sensitive data
- D. Public reputation

Answer: A

NEW QUESTION 148

A manager wants to distribute a report to several other managers within the company. Some of them reside in remote locations that are not connected to the domain but have a local server. Because there is sensitive data within the report and the size of the report is beyond the limit of the email attachment size, emailing the report is not an option. Which of the following protocols should be implemented to distribute the report securely? (Select three.)

- A. S/MIME
- B. SSH
- C. SNMPv3
- D. FTPS
- E. SRTP
- F. HTTPS
- G. LDAPS

Answer: BDF

NEW QUESTION 153

A security analyst is hardening an authentication server. One of the primary requirements is to ensure there is mutual authentication and delegation. Given these requirements, which of the following technologies should the analyst recommend and configure?

- A. LDAP services
- B. Kerberos services
- C. NTLM services
- D. CHAP services

Answer: B

Explanation: Only Kerberos that can do Mutual Auth and Delegation.

NEW QUESTION 155

Joe, a user, wants to send Ann, another user, a confidential document electronically. Which of the following should Joe do to ensure the document is protected from eavesdropping?

- A. Encrypt it with Joe’s private key
- B. Encrypt it with Joe’s public key
- C. Encrypt it with Ann’s private key
- D. Encrypt it with Ann’s public key

Answer: D

NEW QUESTION 159

A security analyst is testing both Windows and Linux systems for unauthorized DNS zone transfers within a LAN on comptia.org from example.org. Which of the following commands should the security analyst use? (Select two.)

- A. nslookup
 comptia.org
 set type=ANY
 ls-d example.org
- B. nslookup
 comptia.org
 set type=MX
 example.org
- C. dig -axfr comptia.org @example.org
- D. ipconfig /flushDNS
- E. ifconfig eth0 down
 ifconfig eth0 up
 dhclient renew
- F. dig @example.org comptia.org

- A. Option A
- B. Option B
- C. Option C
- D. Option D
- E. Option E
- F. Option F

Answer: AC

NEW QUESTION 164

A security analyst wants to harden the company's VoIP PBX. The analyst is worried that credentials may be intercepted and compromised when IP phones authenticate with the BPX. Which of the following would best prevent this from occurring?

- A. Implement SRTP between the phones and the PBX.
- B. Place the phones and PBX in their own VLAN.
- C. Restrict the phone connections to the PBX.
- D. Require SIPS on connections to the PBX.

Answer: D

NEW QUESTION 168

A technician suspects that a system has been compromised. The technician reviews the following log entry: WARNING- hash mismatch:

C:\Window\SysWOW64\user32.dll

WARNING- hash mismatch: C:\Window\SysWOW64\kernel32.dll

Based solely on the above information, which of the following types of malware is MOST likely installed on the system?

- A. Rootkit
- B. Ransomware
- C. Trojan
- D. Backdoor

Answer: A

NEW QUESTION 173

An audit takes place after company-wide restricting, in which several employees changed roles. The following deficiencies are found during the audit regarding access to confidential data:

Employee	Job Function	Audit Finding
Ann	Sales Manager	Access to confidential payroll shares Access to payroll processing program Access to marketing shared
Jeff	Marketing Director	Access to human resources annual review folder Access to shared human resources mailbox
John	Sales Manager (Terminated)	Active account Access to human resources annual review folder Access to confidential payroll shares

Which of the following would be the BEST method to prevent similar audit findings in the future?

- A. Implement separation of duties for the payroll department.
- B. Implement a DLP solution on the payroll and human resources servers.
- C. Implement rule-based access controls on the human resources server.
- D. Implement regular permission auditing and reviews.

Answer: A

NEW QUESTION 178

An administrator is configuring access to information located on a network file server named “Bowman”. The files are located in a folder named “BalkFiles”. The files are only for use by the “Matthews” division and should be read-only. The security policy requires permissions for shares to be managed at the file system layer and also requires those permissions to be set according to a least privilege model. Security policy for this data type also dictates that administrator-level accounts on the system have full access to the files.

The administrator configures the file share according to the following table:

<u>Share permissions</u>			
1	Everyone	Full control	
<u>File system permissions</u>			
2	Bowman\Users	Modify	Inherited
3	Domain\Matthews	Read	Not inherited
4	Bowman\System	Full control	Inherited
5	Bowman\Administrators	Full control	Not inherited

Which of the following rows has been misconfigured?

- A. Row 1
- B. Row 2
- C. Row 3
- D. Row 4
- E. Row 5

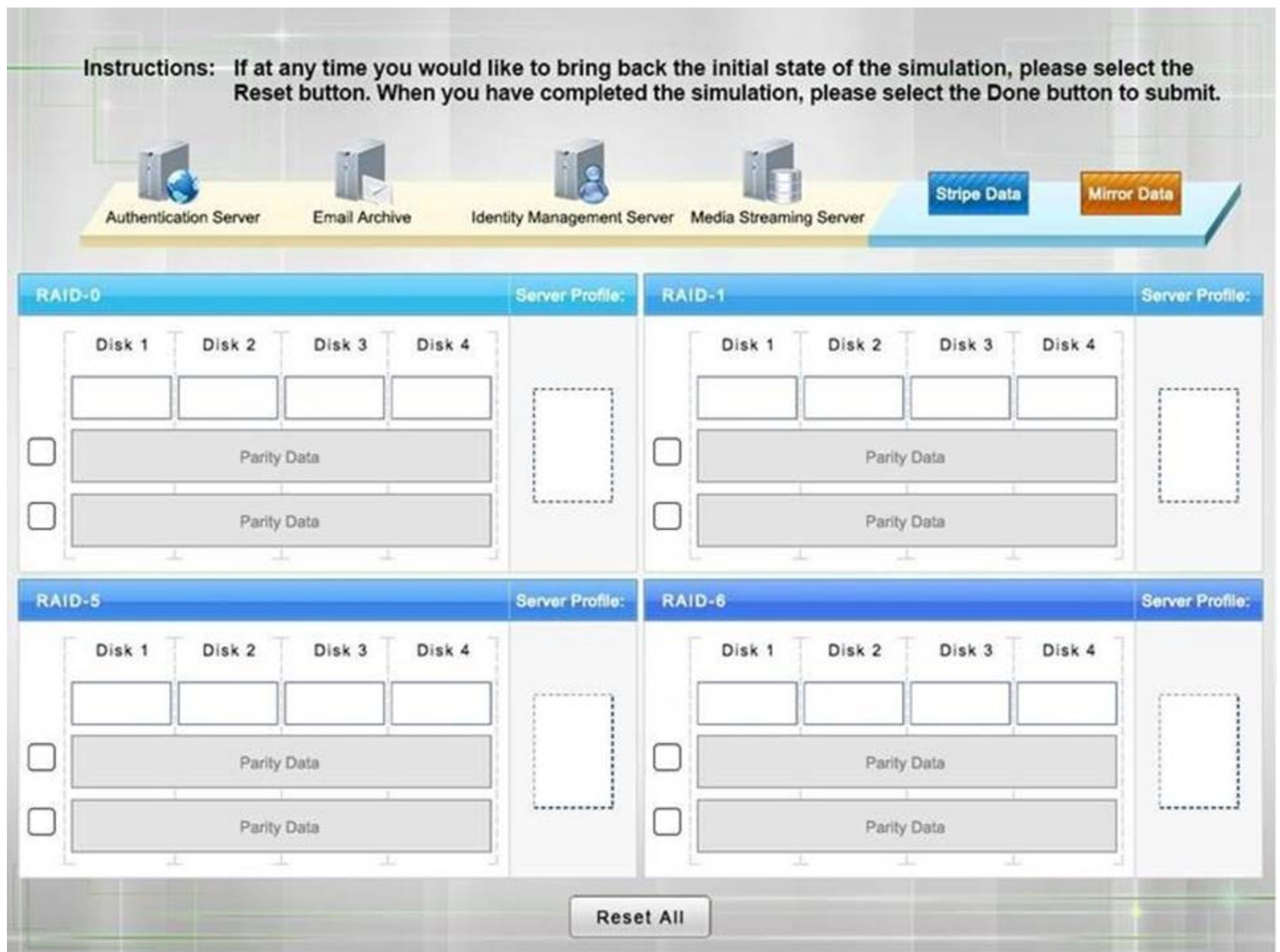
Answer: D

NEW QUESTION 181

A security administrator is given the security and availability profiles for servers that are being deployed.

- ▶ Match each RAID type with the correct configuration and MINIMUM number of drives.
- ▶ Review the server profiles and match them with the appropriate RAID type based on integrity, availability, I/O, storage requirements. Instructions:
- ▶ All drive definitions can be dragged as many times as necessary
- ▶ Not all placeholders may be filled in the RAID configuration boxes
- ▶ If parity is required, please select the appropriate number of parity checkboxes
- ▶ Server profiles may be dragged only once

If at any time you would like to bring back the initial state of the simulation, please select the Reset button. When you have completed the simulation, please select the Done button to submit. Once the simulation is submitted, please select the Next button to continue.



Answer:

Explanation: RAID-0 is known as striping. It is not a fault tolerant solution but does improve disk performance for read/write operations. Striping requires a minimum of two disks and does not use parity. RAID-0 can be used where performance is required over fault tolerance, such as a media streaming server. RAID-1 is known as mirroring because the same data is written to two disks so that the two disks have identical data. This is a fault tolerant solution that halves the storage space. A minimum of two disks are used in mirroring and does not use parity. RAID-1 can be used where fault tolerance is required over performance, such as on an authentication server. RAID-5 is a fault tolerant solution that uses parity and striping. A minimum of three disks are required for RAID-5 with one disk's worth of space being used for parity information. However, the parity information is distributed across all the disks. RAID-5 can recover from a single disk failure. RAID-6 is a fault tolerant solution that uses dual parity and striping. A minimum of four disks are required for RAID-6. Dual parity allows RAID-6 to recover from the simultaneous failure of up to two disks. Critical data should be stored on a RAID-6 system.
http://www.adaptec.com/en-us/solutions/raid_levels.html

NEW QUESTION 185

A new mobile application is being developed in-house. Security reviews did not pick up any major flaws, however vulnerability scanning results show fundamental issues at the very end of the project cycle. Which of the following security activities should also have been performed to discover vulnerabilities earlier in the lifecycle?

- A. Architecture review
- B. Risk assessment
- C. Protocol analysis
- D. Code review

Answer: D

NEW QUESTION 190

Before an infection was detected, several of the infected devices attempted to access a URL that was similar to the company name but with two letters transposed. Which of the following BEST describes the attack vector used to infect the devices?

- A. Cross-site scripting
- B. DNS poisoning
- C. Typo squatting

D. URL hijacking

Answer: C

NEW QUESTION 193

A director of IR is reviewing a report regarding several recent breaches. The director compiles the following statistic's

- Initial IR engagement time frame
- Length of time before an executive management notice went out
- Average IR phase completion

The director wants to use the data to shorten the response time. Which of the following would accomplish this?

- A. CSIRT
- B. Containment phase
- C. Escalation notifications
- D. Tabletop exercise

Answer: D

NEW QUESTION 195

A security administrator has been tasked with improving the overall security posture related to desktop machines on the network. An auditor has recently that several machines with confidential customer information displayed in the screens are left unattended during the course of the day.

Which of the following could the security administrator implement to reduce the risk associated with the finding?

- A. Implement a clean desk policy
- B. Security training to prevent shoulder surfing
- C. Enable group policy based screensaver timeouts
- D. Install privacy screens on monitors

Answer: C

NEW QUESTION 196

A web application is configured to target browsers and allow access to bank accounts to siphon money to a foreign account. This is an example of which of the following attacks?

- A. SQL injection
- B. Header manipulation
- C. Cross-site scripting
- D. Flash cookie exploitation

Answer: C

NEW QUESTION 199

To reduce disk consumption, an organization's legal department has recently approved a new policy setting the data retention period for sent email at six months. Which of the following is the BEST way to ensure this goal is met?

- A. Create a daily encrypted backup of the relevant emails.
- B. Configure the email server to delete the relevant emails.
- C. Migrate the relevant emails into an "Archived" folder.
- D. Implement automatic disk compression on email servers.

Answer: A

NEW QUESTION 200

While reviewing the monthly internet usage it is noted that there is a large spike in traffic classified as "unknown" and does not appear to be within the bounds of the organizations Acceptable Use Policy.

Which of the following tool or technology would work BEST for obtaining more information on this traffic?

- A. Firewall logs
- B. IDS logs
- C. Increased spam filtering
- D. Protocol analyzer

Answer: B

NEW QUESTION 205

A bank requires tellers to get manager approval when a customer wants to open a new account. A recent audit shows that there have been four cases in the previous year where tellers opened accounts without management approval. The bank president thought separation of duties would prevent this from happening. In order to implement a true separation of duties approach the bank could:

- A. Require the use of two different passwords held by two different individuals to open an account
- B. Administer account creation on a role based access control approach
- C. Require all new accounts to be handled by someone else other than a teller since they have different duties
- D. Administer account creation on a rule based access control approach

Answer: C

NEW QUESTION 210

A security analyst is investigating a suspected security breach and discovers the following in the logs of the potentially compromised server:

Time	Source	Destination	Account Name	Action
11:01:31	18.12.98.145	10.15.21.100	Joe	Logon Failed
11:01:32	18.12.98.145	10.15.21.100	Joe	Logon Failed
11:01:33	18.12.98.145	10.15.21.100	Joe	Logon Failed
11:01:34	18.12.98.145	10.15.21.100	Joe	Logon Failed
11:01:35	18.12.98.145	10.15.21.100	Joe	Logon Failed
11:01:36	18.12.98.145	10.15.21.100	Joe	Logon Failed
11:01:37	18.12.98.145	10.15.21.100	Joe	Logon Failed
11:01:38	18.12.98.145	10.15.21.100	Joe	Logon Successful

Which of the following would be the BEST method for preventing this type of suspected attack in the future?

- A. Implement password expirations
- B. Implement restrictions on shared credentials
- C. Implement account lockout settings
- D. Implement time-of-day restrictions on this server

Answer: C

NEW QUESTION 215

An organization requires users to provide their fingerprints to access an application. To improve security, the application developers intend to implement multifactor authentication. Which of the following should be implemented?

- A. Use a camera for facial recognition
- B. Have users sign their name naturally
- C. Require a palm geometry scan
- D. Implement iris recognition

Answer: B

NEW QUESTION 216

A security engineer is faced with competing requirements from the networking group and database administrators. The database administrators would like ten application servers on the same subnet for ease of administration, whereas the networking group would like to segment all applications from one another. Which of the following should the security administrator do to rectify this issue?

- A. Recommend performing a security assessment on each application, and only segment the applications with the most vulnerability
- B. Recommend classifying each application into like security groups and segmenting the groups from one another
- C. Recommend segmenting each application, as it is the most secure approach
- D. Recommend that only applications with minimal security features should be segmented to protect them

Answer: B

NEW QUESTION 217

Which of the following works by implanting software on systems but delays execution until a specific set of conditions is met?

- A. Logic bomb
- B. Trojan
- C. Scareware
- D. Ransomware

Answer: A

NEW QUESTION 218

An employee receives an email, which appears to be from the Chief Executive Officer (CEO), asking for a report of security credentials for all users. Which of the following types of attack is MOST likely occurring?

- A. Policy violation
- B. Social engineering
- C. Whaling
- D. Spear phishing

Answer: D

NEW QUESTION 223

A member of a digital forensics team, Joe arrives at a crime scene and is preparing to collect system data. Before powering the system off, Joe knows that he must collect the most volatile data first. Which of the following is the correct order in which Joe should collect the data?

- A. CPU cache, paging/swap files, RAM, remote logging data
- B. RAM, CPU cache
- C. Remote logging data, paging/swap files
- D. Paging/swap files, CPU cache, RAM, remote logging data
- E. CPU cache, RAM, paging/swap files, remote logging data

Answer: D

NEW QUESTION 228

A development team has adopted a new approach to projects in which feedback is iterative and multiple iterations of deployments are provided within an application's full life cycle. Which of the following software development methodologies is the development team using?

- A. Waterfall
- B. Agile
- C. Rapid
- D. Extreme

Answer: B

NEW QUESTION 231

A Chief Executive Officer (CEO) suspects someone in the lab testing environment is stealing confidential information after working hours when no one else is around. Which of the following actions can help to prevent this specific threat?

- A. Implement time-of-day restrictions.
- B. Audit file access times.
- C. Secretly install a hidden surveillance camera.
- D. Require swipe-card access to enter the lab.

Answer: D

NEW QUESTION 234

A company hires a third-party firm to conduct an assessment of vulnerabilities exposed to the Internet. The firm informs the company that an exploit exists for an FTP server that had a version installed from eight years ago. The company has decided to keep the system online anyway, as no upgrade exists from the vendor. Which of the following BEST describes the reason why the vulnerability exists?

- A. Default configuration
- B. End-of-life system
- C. Weak cipher suite
- D. Zero-day threats

Answer: B

NEW QUESTION 235

A security administrator must implement a system to ensure that invalid certificates are not used by a custom developed application. The system must be able to check the validity of certificates even when internet access is unavailable. Which of the following MUST be implemented to support this requirement?

- A. CSR
- B. OCSP
- C. CRL
- D. SSH

Answer: C

NEW QUESTION 240

Joe, a security administrator, needs to extend the organization's remote access functionality to be used by staff while travelling. Joe needs to maintain separate access control functionalities for internal, external, and VOIP services. Which of the following represents the BEST access technology for Joe to use?

- A. RADIUS
- B. TACACS+
- C. Diameter
- D. Kerberos

Answer: B

NEW QUESTION 241

Which of the following are the MAIN reasons why a systems administrator would install security patches in a staging environment before the patches are applied to the production server? (Select two.)

- A. To prevent server availability issues
- B. To verify the appropriate patch is being installed
- C. To generate a new baseline hash after patching
- D. To allow users to test functionality
- E. To ensure users are trained on new functionality

Answer: AD

NEW QUESTION 245

A security administrator is creating a subnet on one of the corporate firewall interfaces to use as a DMZ which is expected to accommodate at most 14 physical hosts.

Which of the following subnets would BEST meet the requirements?

- A. 192.168.0.16 255.25.255.248
- B. 192.168.0.16/28
- C. 192.168.1.50 255.255.25.240
- D. 192.168.2.32/27

Answer: B

NEW QUESTION 247

A Chief Information Officer (CIO) drafts an agreement between the organization and its employees. The agreement outlines ramifications for releasing information without consent and/or approvals. Which of the following BEST describes this type of agreement?

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

Answer: B

NEW QUESTION 249

A mobile device user is concerned about geographic positioning information being included in messages sent between users on a popular social network platform. The user turns off the functionality in the application, but wants to ensure the application cannot re-enable the setting without the knowledge of the user. Which of the following mobile device capabilities should the user disable to achieve the stated goal?

- A. Device access control
- B. Location based services
- C. Application control
- D. GEO-Tagging

Answer: D

NEW QUESTION 251

Which of the following would meet the requirements for multifactor authentication?

- A. Username, PIN, and employee ID number
- B. Fingerprint and password
- C. Smart card and hardware token
- D. Voice recognition and retina scan

Answer: B

NEW QUESTION 255

Which of the following should identify critical systems and components?

- A. MOU
- B. BPA
- C. ITCP
- D. BCP

Answer: D

NEW QUESTION 260

Which of the following types of attacks precedes the installation of a rootkit on a server?

- A. Pharming
- B. DDoS
- C. Privilege escalation
- D. DoS

Answer: C

NEW QUESTION 262

A security analyst reviews the following output:

```
File name: somefile.pdf
File MD5: E289F21CD33E4F57890DDEA5CF267ED2
File size: 1.9 Mb
Created by: Jan Smith
Deleted by: Jan Smith
Date deleted: October 01, 2015 8:43:21 EST
```

The analyst loads the hash into the SIEM to discover if this hash is seen in other parts of the network. After inspecting a large number of files, the security analyst reports the following:

```
File hash: E289F21CD33E4F57890DDEA5CF267ED2
Files found: somestuff.xls, somefile.pdf, nofile.doc
```

Which of the following is the MOST likely cause of the hash being found in other areas?

- A. Jan Smith is an insider threat
- B. There are MD5 hash collisions
- C. The file is encrypted
- D. Shadow copies are present

Answer: B

NEW QUESTION 266

A company's AUP requires:

- ☒ Passwords must meet complexity requirements.
- ☒ Passwords are changed at least once every six months.
- ☒ Passwords must be at least eight characters long.

An auditor is reviewing the following report:

Username	Last login	Last changed
Carol	2 hours	90 days
David	2 hours	30 days
Ann	1 hour	247 days
Joe	0.5 hours	7 days

Which of the following controls should the auditor recommend to enforce the AUP?

- A. Account lockout thresholds
- B. Account recovery
- C. Password expiration
- D. Prohibit password reuse

Answer: C

NEW QUESTION 268

The availability of a system has been labeled as the highest priority. Which of the following should be focused on the MOST to ensure the objective?

- A. Authentication
- B. HVAC
- C. Full-disk encryption
- D. File integrity checking

Answer: B

NEW QUESTION 269

An application developer is designing an application involving secure transports from one service to another that will pass over port 80 for a request. Which of the following secure protocols is the developer MOST likely to use?

- A. FTPS
- B. SFTP
- C. SSL
- D. LDAPS
- E. SSH

Answer: C

NEW QUESTION 273

After an identified security breach, an analyst is tasked to initiate the IR process. Which of the following is the NEXT step the analyst should take?

- A. Recovery
- B. Identification
- C. Preparation
- D. Documentation
- E. Escalation

Answer: B

NEW QUESTION 278

A workstation puts out a network request to locate another system. Joe, a hacker on the network, responds before the real system does, and he tricks the workstation into communicating with him. Which of the following BEST describes what occurred?

- A. The hacker used a race condition.
- B. The hacker used a pass-the-hash attack.
- C. The hacker-exploited improper key management.
- D. The hacker exploited weak switch configuration.

Answer: D

NEW QUESTION 283

A penetration tester finds that a company's login credentials for the email client were being sent in clear text. Which of the following should be done to provide

encrypted logins to the email server?

- A. Enable IPSec and configure SMTP.
- B. Enable SSH and LDAP credentials.
- C. Enable MIME services and POP3.
- D. Enable an SSL certificate for IMAP services.

Answer: D

NEW QUESTION 288

The Chief Security Officer (CISO) at a multinational banking corporation is reviewing a plan to upgrade the entire corporate IT infrastructure. The architecture consists of a centralized cloud environment hosting the majority of data, small server clusters at each corporate location to handle the majority of customer transaction processing, ATMs, and a new mobile banking application accessible from smartphones, tablets, and the Internet via HTTP. The corporation does business having varying data retention and privacy laws.

Which of the following technical modifications to the architecture and corresponding security controls should be implemented to provide the MOST complete protection of data?

- A. Revoke exiting root certificates, re-issue new customer certificates, and ensure all transactions are digitally signed to minimize fraud, implement encryption for data in-transit between data centers
- B. Ensure all data is encryption according to the most stringent regulatory guidance applicable, implement encryption for data in-transit between data centers, increase data availability by replicating all data, transaction data, logs between each corporate location
- C. Store customer data based on national borders, ensure end-to end encryption between ATMs, end users, and servers, test redundancy and COOP plans to ensure data is not inadvertently shifted from one legal jurisdiction to another with more stringent regulations
- D. Install redundant servers to handle corporate customer processing, encrypt all customer data to ease the transfer from one country to another, implement end-to-end encryption between mobile applications and the cloud.

Answer: C

NEW QUESTION 292

After a routine audit, a company discovers that engineering documents have been leaving the network on a particular port. The company must allow outbound traffic on this port, as it has a legitimate business use. Blocking the port would cause an outage. Which of the following technology controls should the company implement?

- A. NAC
- B. Web proxy
- C. DLP
- D. ACL

Answer: C

NEW QUESTION 297

A user of the wireless network is unable to gain access to the network. The symptoms are:

- 1.) Unable to connect to both internal and Internet resources
- 2.) The wireless icon shows connectivity but has no network access

The wireless network is WPA2 Enterprise and users must be a member of the wireless security group to authenticate.

Which of the following is the MOST likely cause of the connectivity issues?

- A. The wireless signal is not strong enough
- B. A remote DDoS attack against the RADIUS server is taking place
- C. The user's laptop only supports WPA and WEP
- D. The DHCP scope is full
- E. The dynamic encryption key did not update while the user was offline

Answer: A

NEW QUESTION 299

A group of non-profit agencies wants to implement a cloud service to share resources with each other and minimize costs. Which of the following cloud deployment models BEST describes this type of effort?

- A. Public
- B. Hybrid
- C. Community
- D. Private

Answer: C

NEW QUESTION 302

An administrator has concerns regarding the traveling sales team who works primarily from smart phones. Given the sensitive nature of their work, which of the following would BEST prevent access to the data in case of loss or theft?

- A. Enable screensaver locks when the phones are not in use to prevent unauthorized access
- B. Configure the smart phones so that the stored data can be destroyed from a centralized location
- C. Configure the smart phones so that all data is saved to removable media and kept separate from the device
- D. Enable GPS tracking on all smart phones so that they can be quickly located and recovered

Answer: B

NEW QUESTION 305

A vulnerability scanner that uses its running service's access level to better assess vulnerabilities across multiple assets within an organization is performing a:

- A. Credentialed scan.
- B. Non-intrusive scan.
- C. Privilege escalation test.
- D. Passive scan.

Answer: A

NEW QUESTION 307

A systems administrator wants to protect data stored on mobile devices that are used to scan and record assets in a warehouse. The control must automatically destroy the secure container of mobile devices if they leave the warehouse. Which of the following should the administrator implement? (Select two.)

- A. Geofencing
- B. Remote wipe
- C. Near-field communication
- D. Push notification services
- E. Containerization

Answer: AE

NEW QUESTION 309

Company policy requires the use of passphrases instead of passwords.

Which of the following technical controls MUST be in place in order to promote the use of passphrases?

- A. Reuse
- B. Length
- C. History
- D. Complexity

Answer: D

NEW QUESTION 312

A security analyst receives an alert from a WAF with the following payload: var data= "<test test test>" ++ <../../../../../../etc/passwd>"

Which of the following types of attacks is this?

- A. Cross-site request forgery
- B. Buffer overflow
- C. SQL injection
- D. JavaScript data insertion
- E. Firewall evasion script

Answer: D

NEW QUESTION 315

Which of the following vulnerability types would the type of hacker known as a script kiddie be MOST dangerous against?

- A. Passwords written on the bottom of a keyboard
- B. Unpatched exploitable Internet-facing services
- C. Unencrypted backup tapes
- D. Misplaced hardware token

Answer: B

NEW QUESTION 316

An organization is working with a cloud services provider to transition critical business applications to a hybrid cloud environment. The organization retains sensitive customer data and wants to ensure the provider has sufficient administrative and logical controls in place to protect its data. In which of the following documents would this concern MOST likely be addressed?

- A. Service level agreement
- B. Interconnection security agreement
- C. Non-disclosure agreement
- D. Business process analysis

Answer: A

NEW QUESTION 319

The Chief Executive Officer (CEO) of a major defense contracting company is traveling overseas for a conference. The CEO will be taking a laptop. Which of the following should the security administrator implement to ensure confidentiality of the data if the laptop were to be stolen or lost during the trip?

- A. Remote wipe
- B. Full device encryption
- C. BIOS password
- D. GPS tracking

Answer: B

NEW QUESTION 321

A company is planning to encrypt the files in several sensitive directories of a file server with a symmetric key. Which of the following could be used?

- A. RSA
- B. TwoFish
- C. Diffie-Helman
- D. NTLMv2
- E. RIPEMD

Answer: B

NEW QUESTION 325

A system administrator is configuring a site-to-site VPN tunnel. Which of the following should be configured on the VPN concentrator during the IKE phase?

- A. RIPEMD
- B. ECDHE
- C. Diffie-Hellman
- D. HTTPS

Answer: C

NEW QUESTION 329

A new security policy in an organization requires that all file transfers within the organization be completed using applications that provide secure transfer. Currently, the organization uses FTP and HTTP to transfer files. Which of the following should the organization implement in order to be compliant with the new policy?

- A. Replace FTP with SFTP and replace HTTP with TLS
- B. Replace FTP with FTPS and replaces HTTP with TFTP
- C. Replace FTP with SFTP and replace HTTP with Telnet
- D. Replace FTP with FTPS and replaces HTTP with IPSec

Answer: A

NEW QUESTION 332

For each of the given items, select the appropriate authentication category from the dropdown choices. Instructions: When you have completed the simulation, please select the Done button to submit.

Authentication Category

Instructions: When you have completed the simulation, Please Select the Done Button to Submit

Select the appropriate authentication type for the following items:

Item	Response
Retina scan	<div> <div>▼</div> <div> Something you have Something you know Something you are All given authentication categories </div> </div>
Smart card	<div> <div>▼</div> <div> Something you have Something you know Something you are All given authentication categories </div> </div>
Hardware Token	<div> <div>▼</div> <div> Something you have Something you know Something you are All given authentication categories </div> </div>
Password	<div> <div>▼</div> <div> Something you have Something you know Something you are All given authentication categories </div> </div>
PIN number	<div> <div>▼</div> <div> Something you have Something you know Something you are All given authentication categories </div> </div>
Fingerprint scan	<div> <div>▼</div> <div> Something you have Something you know Something you are All given authentication categories </div> </div>

Answer:

Explanation: Something you are includes fingerprints, retina scans, or voice recognition. Something you have includes smart cards, token devices, or keys. Something you know includes a password, codes, PINs, combinations, or secret phrases. Somewhere you are including a physical location s or logical addresses, such as domain name, an IP address, or a MAC address. Something you do includes your typing rhythm, a secret handshake, or a private knock
http://en.wikipedia.org/wiki/Password_authentication_protocol#Working_cycle http://en.wikipedia.org/wiki/Smart_card#Security

NEW QUESTION 334

A security administrator wants to implement a company-wide policy to empower data owners to manage and enforce access control rules on various resources. Which of the following should be implemented?

- A. Mandatory access control
- B. Discretionary access control
- C. Role based access control
- D. Rule-based access control

Answer: B

NEW QUESTION 336

In an effort to reduce data storage requirements, some company devices to hash every file and eliminate duplicates. The data processing routines are time

sensitive so the hashing algorithm is fast and supported on a wide range of systems. Which of the following algorithms is BEST suited for this purpose?

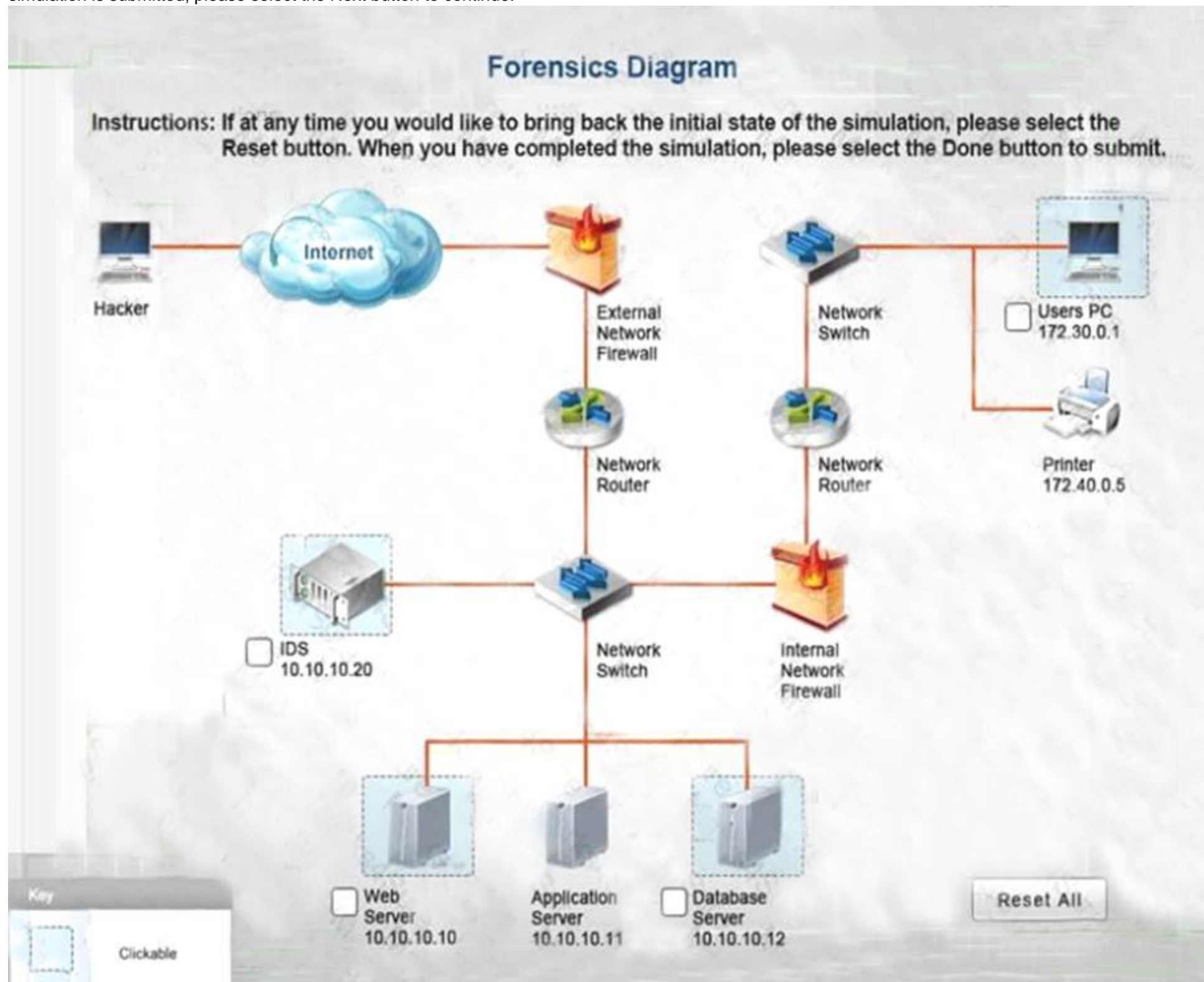
- A. MD5
- B. SHA
- C. RIPEMD
- D. AES

Answer: B

NEW QUESTION 340

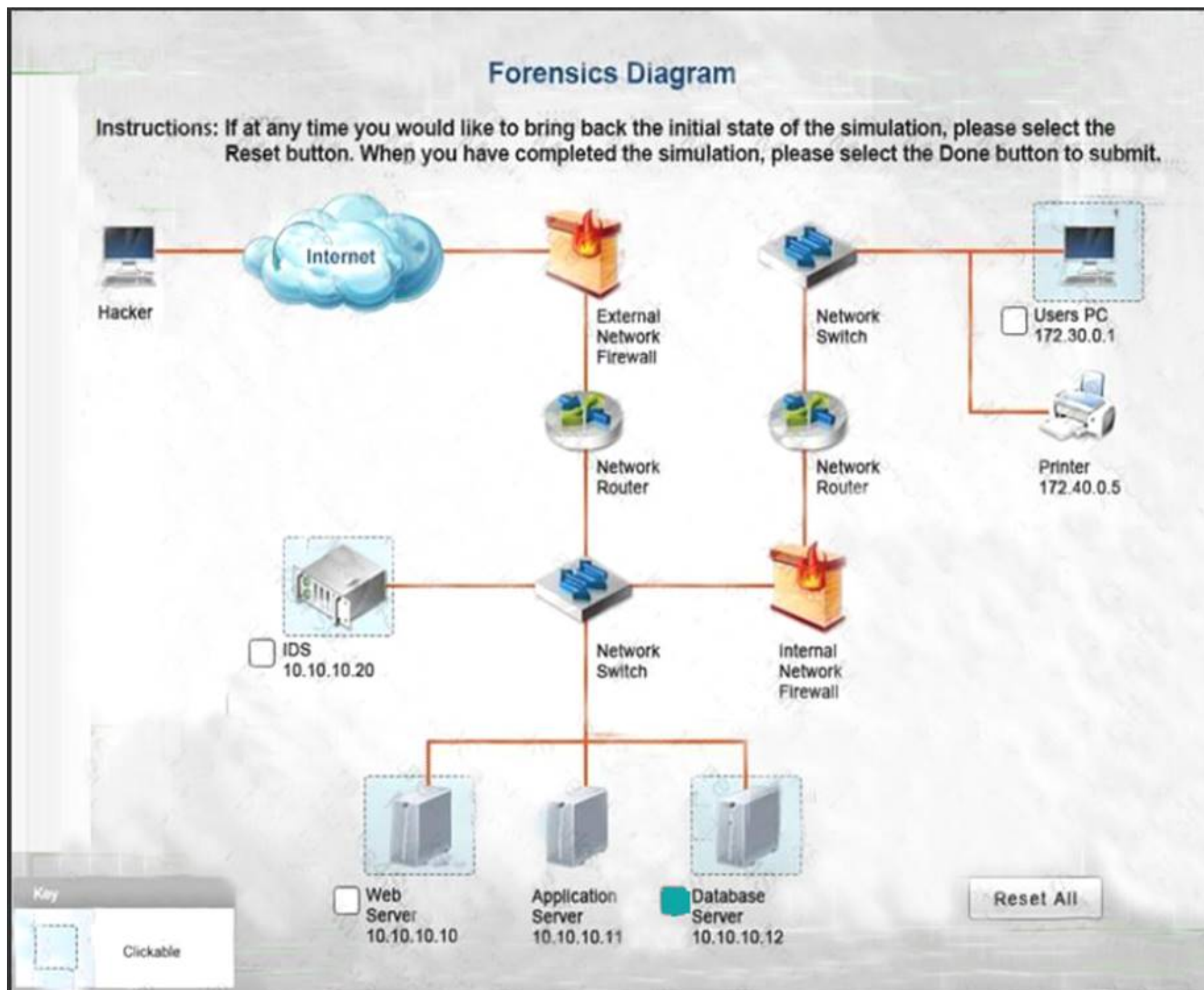
A security administrator discovers that an attack has been completed against a node on the corporate network. All available logs were collected and stored. You must review all network logs to discover the scope of the attack, check the box of the node(s) that have been compromised and drag and drop the appropriate actions to complete the incident response on the network. The environment is a critical production environment; perform the LEAST disruptive actions on the network, while still performing the appropriate incident responses.

Instructions: The web server, database server, IDS, and User PC are clickable. Check the box of the node(s) that have been compromised and drag and drop the appropriate actions to complete the incident response on the network. Not all actions may be used, and order is not important. If at any time you would like to bring back the initial state of the simulation, please select the Reset button. When you have completed the simulation, please select the Done button to submit. Once the simulation is submitted, please select the Next button to continue.



Answer:

Explanation: Database server was attacked, actions should be to capture network traffic and Chain of Custody.



Logs

Actions

Possible Actions:

- Capture Network Traffic
- Chain Of Custody
- Format
- Hash
- Image
- Record Time Offset
- System Restore

Actions Performed:

- Capture Network Traffic
- Chain Of Custody
-
-
-
-
-

IDS Server Log:

No.	Time	Source	Destination	Protocol	Length	Info
1	0	Cisco_87:85:04	Spanning-tree-(for-bridges)_00	STP	60	Conf. Root = 32768/100/00:1c:0e:87:78:00 Cost = 4 Port = 0x8004
2	2.000	Cisco_87:85:04	Spanning-tree-(for-bridges)_00	STP	60	Conf. Root = 32768/100/00:1c:0e:87:78:00 Cost = 4 Port = 0x8004
3	4.009585	172.31.146.123.2	172.31.146.123.1	ICMP	118	Echo (ping) request id=0x0001, seq=1/256, ttl=255
4	6.014086	172.31.146.123.1	172.31.146.123.2	ICMP	118	Echo (ping) reply id=0x0001, seq=1/256, ttl=255
5	7.91131	123.123.123.123	10.10.10.10	HTTP	488	GET /cgi-bin/newcount?command=ls HTTP/1.1
6	8.00312	10.10.10.10	123.123.123.123	HTTP	260	HTTP/1.1 200 OK (text/html)
7	7.91131	123.123.123.123	10.10.10.10	HTTP	488	GET /cgi-bin/newcount?command=whoami HTTP/1.1
8	8.00312	10.10.10.10	123.123.123.123	HTTP	260	HTTP/1.1 200 OK (text/html)
9	10.1232	123.123.123.123	10.10.10.10	HTTP	488	GET /cgi-bin/newcount?command=ls%20%2Fetc%2Fpasswd%2Fpasswd Via HTTP/1.1

Web Server Log:

Database Server Log:



NEW QUESTION 341

The chief security officer (CSO) has issued a new policy that requires that all internal websites be configured for HTTPS traffic only. The network administrator has been tasked to update all internal sites without incurring additional costs. Which of the following is the best solution for the network administrator to secure each internal website?

- A. Use certificates signed by the company CA
- B. Use a signing certificate as a wild card certificate
- C. Use certificates signed by a public ca
- D. Use a self-signed certificate on each internal server

Answer: D

Explanation: This is a way to update all internal sites without incurring additional costs?

To be a CA (Certificate Authority), you need an infrastructure that consists of considerable operational elements, hardware, software, policy frameworks and practice statements, auditing, security infrastructure and personnel.

NEW QUESTION 343

Which of the following should be used to implement voice encryption?

- A. SSLv3
- B. VDSL
- C. SRTP
- D. VoIP

Answer: C

NEW QUESTION 346

Joe a computer forensic technician responds to an active compromise of a database server. Joe first collects information in memory, then collects network traffic and finally conducts an image of the hard drive. Which of the following procedures did Joe follow?

- A. Order of volatility
- B. Chain of custody
- C. Recovery procedure
- D. Incident isolation

Answer: A

NEW QUESTION 347

A business has recently deployed laptops to all sales employees. The laptops will be used primarily from home offices and while traveling, and a high amount of wireless mobile use is expected. To protect the laptops while connected to untrusted wireless networks, which of the following would be the BEST method for reducing the risk of having the laptops compromised?

- A. MAC filtering
- B. Virtualization
- C. OS hardening
- D. Application white-listing

Answer: C

NEW QUESTION 348

An organization relies heavily on an application that has a high frequency of security updates. At present, the security team only updates the application on the first Monday of each month, even though the security updates are released as often as twice a week. Which of the following would be the BEST method of updating this application?

- A. Configure testing and automate patch management for the application.
- B. Configure security control testing for the application.
- C. Manually apply updates for the application when they are released.
- D. Configure a sandbox for testing patches before the scheduled monthly update.

Answer: A

NEW QUESTION 350

Which of the following is the LEAST secure hashing algorithm?

- A. SHA1
- B. RIPEMD
- C. MD5
- D. DES

Answer: C

NEW QUESTION 353

A security administrator has been asked to implement a VPN that will support remote access over IPSEC. Which of the following is an encryption algorithm that would meet this requirement?

- A. MD5
- B. AES
- C. UDP
- D. PKI

Answer: B

NEW QUESTION 357

An attacker uses a network sniffer to capture the packets of a transaction that adds \$20 to a gift card. The attacker then user a function of the sniffer to push those packets back onto the network again, adding another \$20 to the gift card. This can be done many times. Which of the following describes this type of attack?

- A. Integer overflow attack
- B. Smurf attack
- C. Replay attack
- D. Buffer overflow attack
- E. Cross-site scripting attack

Answer: C

NEW QUESTION 359

The Chief Technology Officer (CTO) of a company, Ann, is putting together a hardware budget for the next 10 years. She is asking for the average lifespan of each hardware device so that she is able to calculate when she will have to replace each device. Which of the following categories BEST describes what she is looking for?

- A. ALE
- B. MTTR
- C. MTBF
- D. MTTF

Answer: D

NEW QUESTION 363

A software developer wants to ensure that the application is verifying that a key is valid before establishing SSL connections with random remote hosts on the Internet. Which of the following should be used in the code? (Select TWO.)

- A. Escrowed keys
- B. SSL symmetric encryption key
- C. Software code private key
- D. Remote server public key

E. OCSP

Answer: CE

NEW QUESTION 364

A security administrator wishes to implement a secure a method of file transfer when communicating with outside organizations. Which of the following protocols would BEST facilitate secure file transfers? (Select TWO)

- A. SCP
- B. TFTP
- C. SNMP
- D. FTP
- E. SMTP
- F. FTPS

Answer: AF

NEW QUESTION 367

A security guard has informed the Chief Information Security Officer that a person with a tablet has been walking around the building. The guard also noticed strange white markings in different areas of the parking lot. The person is attempting which of the following types of attacks?

- A. Jamming
- B. War chalking
- C. Packet sniffing
- D. Near field communication

Answer: B

NEW QUESTION 368

Which of the following BEST describes an attack where communications between two parties are intercepted and forwarded to each party with neither party being aware of the interception and potential modification to the communications?

- A. Spear phishing
- B. Man-in-the-middle
- C. URL hijacking
- D. Transitive access

Answer: B

NEW QUESTION 373

Which of the following is the summary of loss for a given year?

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

Answer: B

NEW QUESTION 375

Joe is exchanging encrypted email with another party. Joe encrypts the initial email with a key. When Joe receives a response, he is unable to decrypt the response with the same key he used initially. Which of the following would explain the situation?

- A. An ephemeral key was used for one of the messages
- B. A stream cipher was used for the initial email; a block cipher was used for the reply
- C. Out-of-band key exchange has taken place
- D. Asymmetric encryption is being used

Answer: D

Explanation: Asymmetric algorithms use two keys to encrypt and decrypt data. These asymmetric keys are referred to as the public key and the private key. The sender uses the public key to encrypt a message, and the receiver uses the private key to decrypt the message; what one key does, the other one undoes.

NEW QUESTION 376

Which of the following can affect electrostatic discharge in a network operations center?

- A. Fire suppression
- B. Environmental monitoring
- C. Proximity card access
- D. Humidity controls

Answer: D

NEW QUESTION 377

Which of the following is a document that contains detailed information about actions that include how something will be done, when the actions will be performed, and penalties for failure?

- A. MOU
- B. ISA
- C. BPA
- D. SLA

Answer: D

NEW QUESTION 379

While performing surveillance activities, an attacker determines that an organization is using 802.1X to secure LAN access. Which of the following attack mechanisms can the attacker utilize to bypass the identified network security?

- A. MAC spoofing
- B. Pharming
- C. Xmas attack
- D. ARP poisoning

Answer: A

NEW QUESTION 382

A computer on a company network was infected with a zero-day exploit after an employee accidentally opened an email that contained malicious content. The employee recognized the email as malicious and was attempting to delete it, but accidentally opened it. Which of the following should be done to prevent this scenario from occurring again in the future?

- A. Install host-based firewalls on all computers that have an email client installed
- B. Set the email program default to open messages in plain text
- C. Install end-point protection on all computers that access web email
- D. Create new email spam filters to delete all messages from that sender

Answer: C

NEW QUESTION 383

Which of the following best describes the initial processing phase used in mobile device forensics?

- A. The phone should be powered down and the battery removed to preserve the state of data on any internal or removable storage utilized by the mobile device
- B. The removable data storage cards should be processed first to prevent data alteration when examining the mobile device
- C. The mobile device should be examined first, then removable storage and lastly the phone without removable storage should be examined again
- D. The phone and storage cards should be examined as a complete unit after examining the removable storage cards separately.

Answer: D

NEW QUESTION 387

During a recent audit, it was discovered that several user accounts belonging to former employees were still active and had valid VPN permissions. Which of the following would help reduce the amount of risk the organization incurs in this situation in the future?

- A. Time-of-day restrictions
- B. User access reviews
- C. Group-based privileges
- D. Change management policies

Answer: B

NEW QUESTION 392

A penetration testing is preparing for a client engagement in which the tester must provide data that proves and validates the scanning tools' results. Which of the following is the best method for collecting this information?

- A. Set up the scanning system's firewall to permit and log all outbound connections
- B. Use a protocol analyzer to log all pertinent network traffic
- C. Configure network flow data logging on all scanning system
- D. Enable debug level logging on the scanning system and all scanning tools used.

Answer: A

NEW QUESTION 397

Which of the following attack types is being carried out where a target is being sent unsolicited messages via Bluetooth?

- A. War chalking
- B. Bluejacking
- C. Bluesnarfing
- D. Rogue tethering

Answer: B

Explanation:

Bluejacking is the sending of unsolicited messages over Bluetooth to Bluetooth-enabled devices such as mobile phones, PDAs or laptop computers, sending a vCard which typically contains a message in the name field (i.e., for bluedating or bluechat) to another Bluetooth-enabled device via the OBEX protocol.

NEW QUESTION 398

A company wants to host a publicly available server that performs the following functions:

- ▶ Evaluates MX record lookup
- ▶ Can perform authenticated requests for A and AAA records
- ▶ Uses RRSIG

Which of the following should the company use to fulfill the above requirements?

- A. DNSSEC
- B. SFTP
- C. nslookup
- D. dig
- E. LDAPS

Answer: A

Explanation: DNS Security Extensions (DNSSEC) provides, among other things, cryptographic authenticity of responses using Resource Record Signatures (RRSIG) and authenticated denial of existence using Next-Secure (NSEC) and Hashed-NSEC records (NSEC3).

NEW QUESTION 400

A Security Officer on a military base needs to encrypt several smart phones that will be going into the field. Which of the following encryption solutions should be deployed in this situation?

- A. Elliptic curve
- B. One-time pad
- C. 3DES
- D. AES-256

Answer: D

NEW QUESTION 404

Which of the following is commonly used for federated identity management across multiple organizations?

- A. SAML
- B. Active Directory
- C. Kerberos
- D. LDAP

Answer: A

NEW QUESTION 407

A technician must configure a firewall to block external DNS traffic from entering a network. Which of the following ports should they block on the firewall?

- A. 53
- B. 110
- C. 143
- D. 443

Answer: A

NEW QUESTION 408

Joe a website administrator believes he owns the intellectual property for a company invention and has been replacing image files on the company's public facing website in the DMZ. Joe is using steganography to hide stolen data. Which of the following controls can be implemented to mitigate this type of inside threat?

- A. Digital signatures
- B. File integrity monitoring
- C. Access controls
- D. Change management
- E. Stateful inspection firewall

Answer: B

NEW QUESTION 409

Which of the following use the SSH protocol?

- A. Stelnet
- B. SCP
- C. SNMP
- D. FTPS
- E. SSL
- F. SFTP

Answer: BF

NEW QUESTION 414

A supervisor in your organization was demoted on Friday afternoon. The supervisor had the ability to modify the contents of a confidential database, as well as other managerial permissions. On Monday morning, the database administrator reported that log files indicated that several records were missing from the database. Which of the following risk mitigation strategies should have been implemented when the supervisor was demoted?

- A. Incident management
- B. Routine auditing
- C. IT governance
- D. Monthly user rights reviews

Answer: D

NEW QUESTION 416

A technician needs to implement a system which will properly authenticate users by their username and password only when the users are logging in from a computer in the office building. Any attempt to authenticate from a location other than the office building should be rejected. Which of the following **MUST** the technician implement?

- A. Dual factor authentication
- B. Transitive authentication
- C. Single factor authentication
- D. Biometric authentication

Answer: B

NEW QUESTION 419

During an application design, the development team specifies a LDAP module for single sign-on communication with the company's access control database. This is an example of which of the following?

- A. Application control
- B. Data in-transit
- C. Identification
- D. Authentication

Answer: D

NEW QUESTION 422

The chief Security Officer (CSO) has reported a rise in data loss but no break ins have occurred. By doing which of the following is the CSO most likely to reduce the number of incidents?

- A. Implement protected distribution
- B. Empty additional firewalls
- C. Conduct security awareness training
- D. Install perimeter barricades

Answer: C

NEW QUESTION 423

An attacker wearing a building maintenance uniform approached a company's receptionist asking for access to a secure area. The receptionist asks for identification, a building access badge and checks the company's list approved maintenance personnel prior to granting physical access to the secure area. The controls used by the receptionist are in place to prevent which of the following types of attacks?

- A. Tailgating
- B. Shoulder surfing
- C. Impersonation
- D. Hoax

Answer: C

NEW QUESTION 424

An auditor has identified an access control system that can incorrectly accept an access attempt from an unauthorized user. Which of the following authentication systems has the auditor reviewed?

- A. Password-based
- B. Biometric-based
- C. Location-based
- D. Certificate-based

Answer: B

NEW QUESTION 428

A system administrator needs to implement 802.1x whereby when a user logs into the network, the authentication server communicates to the network switch and assigns the user to the proper VLAN. Which of the following protocols should be used?

- A. RADIUS
- B. Kerberos
- C. LDAP
- D. MSCHAP

Answer: A

NEW QUESTION 433

An administrator intends to configure an IPSec solution that provides ESP with integrity protection, but not confidentiality protection. Which of the following AES modes of operation would meet this integrity-only requirement?

- A. HMAC
- B. PCBC
- C. CBC
- D. GCM
- E. CFB

Answer: A

NEW QUESTION 437

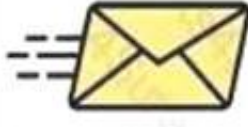









The data backup window has expanded into the morning hours and has begun to affect production users. The main bottleneck in the process is the time it takes to replicate the backups to separate servers at the offsite data center. Which of the following uses of deduplication could be implemented to reduce the backup window?

- A. Implement deduplication at the network level between the two locations
- B. Implement deduplication on the storage array to reduce the amount of drive space needed
- C. Implement deduplication on the server storage to reduce the data backed up
- D. Implement deduplication on both the local and remote servers

Answer: B

NEW QUESTION 439

Task: Determine the types of attacks below by selecting an option from the dropdown list.

 <p>Email sent to multiple users to a link to verify username/password on external site</p> 	Choose Attack Type	Phishing
 <p>Phone calls made to CEO of organization asking for various financial data</p> 	Choose Attack Type	Pharming
 <p>Phone call is made to individual stating there was an IT issue, and asked for the user's password over the phone</p> 	Choose Attack Type	Vishing
 <p>You're on a social media site and an instant message pops up from a friend with a link to a new breakthrough diet</p> 	Choose Attack Type	Whaling
 <p>A friend/colleague asks you questions of a personal nature, which could be considered typical password reset questions.</p> 	Choose Attack Type	X-Mas

Spoofting

Hoax

Spam

Spim

Social Engineering

Answer:

Explanation: A: Phishing is the act of sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

Phishing email will direct the user to visit a website where they are asked to update personal information, such as a password, credit card, social security, or bank account numbers, that the legitimate organization already has. The website, however, is bogus and set up only to steal the information the user enters on the page.

B: Whaling is a specific kind of malicious hacking within the more general category of phishing, which involves hunting for data that can be used by the hacker. In general, phishing efforts are focused on collecting personal data about users. In whaling, the targets are high-ranking bankers, executives or others in powerful positions or job titles. Hackers who engage in whaling often describe these efforts as "reeling in a big fish," applying a familiar metaphor to the process of scouring technologies for loopholes and opportunities for data theft. Those who are engaged in whaling may, for example, hack into specific networks where these powerful individuals work or store sensitive data. They may also set up keylogging or other malware on a work station associated with one of these executives. There are many ways that hackers can pursue whaling, leading C- level or top-level executives in business and government to stay vigilant about the possibility of cyber threats.

C: Vishing is the act of using the telephone in an attempt to scam the user into surrendering private information that will be used for identity theft. The scammer usually pretends to be a legitimate business, and fools the victim into thinking he or she will profit.

D: SPIM is a term sometimes used to refer to spam over IM (Instant Messaging). It's also called just spam, instant spam, or IM marketing. No matter what the name, it consists of unwanted messages transmitted through some form of instant messaging service, which can include Short Message Service (SMS)

E: Social engineering is a non-technical method of intrusion hackers use that relies heavily on human interaction and often involves tricking people into breaking normal security procedures. It is one of the greatest threats that organizations today encounter. A social engineer runs what used to be called a "con game." For example, a person using social engineering to break into a computer network might try to gain the confidence of an authorized user and get them to reveal information that compromises the network's security. Social engineers often rely on the natural helpfulness of people as well as on their weaknesses. They might, for example, call the authorized employee with some kind of urgent problem that requires immediate network access. Appealing to vanity, appealing to authority, appealing to greed, and old-fashioned eavesdropping are other typical social engineering techniques.

<http://www.webopedia.com/TERM/P/phishing.html> <http://www.techopedia.com/definition/28643/whaling> <http://www.webopedia.com/TERM/V/vishing.html>

<http://searchsecurity.techtarget.com/definition/social-engineering>

NEW QUESTION 442

New magnetic locks were ordered for an entire building. In accordance with company policy, employee safety is the top priority. In case of a fire where electricity is cut, which of the following should be taken into consideration when installing the new locks?

- A. Fail safe
- B. Fault tolerance
- C. Fail secure
- D. Redundancy

Answer: A

NEW QUESTION 447

The SSID broadcast for a wireless router has been disabled but a network administrator notices that unauthorized users are accessing the wireless network. The administrator has determined that attackers are still able to detect the presence of the wireless network despite the fact the SSID has been disabled. Which of the following would further obscure the presence of the wireless network?

- A. Upgrade the encryption to WPA or WPA2
- B. Create a non-zero length SSID for the wireless router
- C. Reroute wireless users to a honeypot
- D. Disable responses to a broadcast probe request

Answer: D

NEW QUESTION 450

Which of the following technologies would be MOST appropriate to utilize when testing a new software patch before a company-wide deployment?

- A. Cloud computing
- B. Virtualization
- C. Redundancy
- D. Application control

Answer: B

Explanation: Virtualization is used to host one or more operating systems in the memory of a single host computer and allows multiple operating systems to run simultaneously on the same hardware, reducing costs. Virtualization offers the flexibility of quickly and easily making backups of entire virtual systems, and quickly recovering the virtual system when errors occur. Furthermore, malicious code compromises of virtual systems rarely affect the host system, which allows for safer testing and experimentation.

NEW QUESTION 452

A network operations manager has added a second row of server racks in the datacenter. These racks face the opposite direction of the first row of racks. Which of the following is the reason the manager installed the racks this way?

- A. To lower energy consumption by sharing power outlets
- B. To create environmental hot and cold aisles
- C. To eliminate the potential for electromagnetic interference
- D. To maximize fire suppression capabilities

Answer: B

NEW QUESTION 453

A security administrator is evaluating three different services: radius, diameter, and Kerberos. Which of the following is a feature that is UNIQUE to Kerberos?

- A. It provides authentication services
- B. It uses tickets to identify authenticated users
- C. It provides single sign-on capability
- D. It uses XML for cross-platform interoperability

Answer: B

NEW QUESTION 456

A software development company needs to share information between two remote servers, using encryption to protect it. A programmer suggests developing a new encryption protocol, arguing that using an unknown protocol with secure, existing cryptographic algorithm libraries will provide strong encryption without being susceptible to attacks on other known protocols. Which of the following summarizes the BEST response to the programmer's proposal?

- A. The newly developed protocol will only be as secure as the underlying cryptographic algorithms used.
- B. New protocols often introduce unexpected vulnerabilities, even when developed with otherwise secure and tested algorithm libraries.
- C. A programmer should have specialized training in protocol development before attempting to design a new encryption protocol.
- D. The obscurity value of unproven protocols against attacks often outweighs the potential for introducing new vulnerabilities.

Answer: B

NEW QUESTION 457

An administrator discovers the following log entry on a server: Nov 12 2013 00:23:45 httpd[2342]: GET/app2/prod/proc/process.php?input=change;cd%20../../etc;cat%20shadow
Which of the following attacks is being attempted?

- A. Command injection
- B. Password attack
- C. Buffer overflow
- D. Cross-site scripting

Answer: B

NEW QUESTION 458

A security administrator receives notice that a third-party certificate authority has been compromised, and new certificates will need to be issued. Which of the following should the administrator submit to receive a new certificate?

- A. CRL
- B. OSCP
- C. PFX
- D. CSR
- E. CA

Answer: D

NEW QUESTION 462

Drag and drop the correct protocol to its default port.

FTP		161
Telnet		22
SMTP		21
SNMP		69
SCP		25
TFTP		23

Answer:

Explanation: FTP uses TCP port 21. Telnet uses port 23. SSH uses TCP port 22.

All protocols encrypted by SSH, including SFTP, SHTTP, SCP, SExec, and slogin, also use TCP port 22. Secure Copy Protocol (SCP) is a secure file-transfer facility based on SSH and Remote Copy Protocol (RCP).

Secure FTP (SFTP) is a secured alternative to standard File Transfer Protocol (FTP). SMTP uses TCP port 25. Port 69 is used by TFTP.

SNMP makes use of UDP ports 161 and 162. http://en.wikipedia.org/wiki/List_of_TCP_and_UDP_port_numbers

NEW QUESTION 467

Which of the following is the proper way to quantify the total monetary damage resulting from an exploited vulnerability?

- A. Calculate the ALE
- B. Calculate the ARO
- C. Calculate the MTBF
- D. Calculate the TCO

Answer: A

NEW QUESTION 471

Which of the following are MOST susceptible to birthday attacks?

- A. Hashed passwords
- B. Digital certificates
- C. Encryption passwords
- D. One time passwords

Answer: A

NEW QUESTION 474

Having adequate lighting on the outside of a building is an example of which of the following security controls?

- A. Deterrent
- B. Compensating
- C. Detective
- D. Preventative

Answer: A

NEW QUESTION 479

A security technician would like to obscure sensitive data within a file so that it can be transferred without causing suspicion. Which of the following technologies would BEST be suited to accomplish this?

- A. Transport Encryption
- B. Stream Encryption
- C. Digital Signature
- D. Steganography

Answer: D

Explanation: Steganography is the process of hiding a message in another message so as to obfuscate its importance. It is also the process of hiding a message in a medium such as a digital image, audio file, or other file. In theory, doing this prevents analysts from detecting the real message. You could encode your message in another file or message and use that file to hide your message.

NEW QUESTION 480

An incident involving a workstation that is potentially infected with a virus has occurred. The workstation may have sent confidential data to an unknown internet server. Which of the following should a security analyst do FIRST?

- A. Make a copy of everything in memory on the workstation.
- B. Turn off the workstation.
- C. Consult information security policy.
- D. Run a virus scan.

Answer: A

NEW QUESTION 485

In determining when it may be necessary to perform a credentialed scan against a system instead of a noncredentialed scan, which of the following requirements is MOST likely to influence this decision?

- A. The scanner must be able to enumerate the host OS of devices scanned.
- B. The scanner must be able to footprint the network.
- C. The scanner must be able to check for open ports with listening services.
- D. The scanner must be able to audit file system permissions

Answer: D

NEW QUESTION 489

A datacenter manager has been asked to prioritize critical system recovery priorities. Which of the following is the MOST critical for immediate recovery?

- A. Communications software
- B. Operating system software
- C. Weekly summary reports to management
- D. Financial and production software

Answer: B

NEW QUESTION 494

A security administrator wants to implement a logon script that will prevent MITM attacks on the local LAN. Which of the following commands should the security administrator implement within the script to accomplish this task?

- A. arp - s 192.168.1.1 00-3a-d1-fa-b1-06
- B. dig - x@192.168.1.1 mypc.comptia.com
- C. nmap - A - T4 192.168.1.1
- D. tcpdump - Inv host 192.168.1.1 or either 00:3a:d1:fa:b1:06

Answer: A

NEW QUESTION 495

To determine the ALE of a particular risk, which of the following must be calculated? (Select two.)

- A. ARO
- B. ROI
- C. RPO
- D. SLE
- E. RTO

Answer: AD

NEW QUESTION 498

A security administrator determined that users within the company are installing unapproved software. Company policy dictates that only certain applications may be installed or ran on the user's computers without exception. Which of the following should the administrator do to prevent all unapproved software from running on the user's computer?

- A. Deploy antivirus software and configure it to detect and remove pirated software
- B. Configure the firewall to prevent the downloading of executable files
- C. Create an application whitelist and use OS controls to enforce it
- D. Prevent users from running as administrator so they cannot install software.

Answer: C

NEW QUESTION 500

A security administrator suspects that data on a server has been exfiltrated as a result of unauthorized remote access. Which of the following would assist the administrator in confirming the suspicions? (Select TWO)

- A. Networking access control
- B. DLP alerts
- C. Log analysis
- D. File integrity monitoring
- E. Host firewall rules

Answer: BC

NEW QUESTION 503

A vulnerability scan is being conducted against a desktop system. The scan is looking for files, versions, and registry values known to be associated with system vulnerabilities. Which of the following BEST describes the type of scan being performed?

- A. Non-intrusive
- B. Authenticated
- C. Credentialed
- D. Active

Answer: C

NEW QUESTION 507

A company is investigating a data compromise where data exfiltration occurred. Prior to the investigation, the supervisor terminates an employee as a result of the suspected data loss. During the investigation, the supervisor is absent for the interview, and little evidence can be provided from the role-based authentication system in use by the company. The situation can be identified for future mitigation as which of the following?

- A. Job rotation
- B. Log failure
- C. Lack of training
- D. Insider threat

Answer: B

NEW QUESTION 508

A security analyst has set up a network tap to monitor network traffic for vulnerabilities. Which of the following techniques would BEST describe the approach the analyst has taken?

- A. Compliance scanning
- B. Credentialed scanning
- C. Passive vulnerability scanning
- D. Port scanning

Answer: D

NEW QUESTION 509

Ann, a security administrator, wants to ensure credentials are encrypted in transit when implementing a RADIUS server for SSO. Which of the following are needed given these requirements? (Select TWO)

- A. Public key
- B. Shared key
- C. Elliptic curve
- D. MD5
- E. Private key
- F. DES

Answer: AE

NEW QUESTION 514

A penetration tester harvests potential usernames from a social networking site. The penetration tester then uses social engineering to attempt to obtain associated passwords to gain unauthorized access to shares on a network server. Which of the following methods is the penetration tester MOST likely using?

- A. Escalation of privilege
- B. SQL injection
- C. Active reconnaissance
- D. Proxy server

Answer: C

NEW QUESTION 518

A network technician is trying to determine the source of an ongoing network based attack. Which of the following should the technician use to view IPv4 packet data on a particular internal network segment?

- A. Proxy
- B. Protocol analyzer
- C. Switch
- D. Firewall

Answer: B

NEW QUESTION 523

A global gaming console manufacturer is launching a new gaming platform to its customers. Which of the following controls reduces the risk created by malicious gaming customers attempting to circumvent control by way of modifying consoles?

- A. Firmware version control
- B. Manual software upgrades
- C. Vulnerability scanning
- D. Automatic updates
- E. Network segmentation
- F. Application firewalls

Answer: AD

NEW QUESTION 524

An organization is trying to decide which type of access control is most appropriate for the network. The current access control approach is too complex and requires significant overhead. Management would like to simplify the access control and provide user with the ability to determine what permissions should be applied to files, document, and directories. The access control method that BEST satisfies these objectives is:

- A. Rule-based access control
- B. Role-based access control
- C. Mandatory access control
- D. Discretionary access control

Answer: D

NEW QUESTION 526

A company is evaluating cloud providers to reduce the cost of its internal IT operations. The company's aging systems are unable to keep up with customer demand. Which of the following cloud models will the company MOST likely select?

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

Answer: C

NEW QUESTION 527

A security analyst is updating a BIA document. The security analyst notices the support vendor's time to replace a server hard drive went from eight hours to two hours. Given these new metrics, which of the following can be concluded? (Select TWO)

- A. The MTTR is faster.
- B. The MTTR is slower.
- C. The RTO has increased.
- D. The RTO has decreased.
- E. The MTTF has increased.
- F. The MTTF has decreased.

Answer: AD

NEW QUESTION 530

Which of the following techniques can be bypass a user or computer's web browser privacy settings? (Select Two)

- A. SQL injection
- B. Session hijacking
- C. Cross-site scripting
- D. Locally shared objects
- E. LDAP injection

Answer: BC

NEW QUESTION 534

Company XYZ has decided to make use of a cloud-based service that requires mutual, certificate- based authentication with its users. The company uses SSL-inspecting IDS at its network boundary and is concerned about the confidentiality of the mutual authentication. Which of the following model prevents the IDS from capturing credentials used to authenticate users to the new service or keys to decrypt that communication?

- A. Use of OATH between the user and the service and attestation from the company domain
- B. Use of active directory federation between the company and the cloud-based service
- C. Use of smartcards that store x.509 keys, signed by a global CA
- D. Use of a third-party, SAML-based authentication service for attestation

Answer: B

NEW QUESTION 539

Which of the following allows an auditor to test proprietary-software compiled code for security flaws?

- A. Fuzzing
- B. Static review
- C. Code signing
- D. Regression testing

Answer: A

NEW QUESTION 541

A company recently replaced its unsecure email server with a cloud-based email and collaboration solution that is managed and insured by a third party. Which of the following actions did the company take regarding risks related to its email and collaboration services?

- A. Transference
- B. Acceptance
- C. Mitigation
- D. Deterrence

Answer: A

NEW QUESTION 542

An audit has revealed that database administrators are also responsible for auditing database changes and backup logs. Which of the following access control methodologies would BEST mitigate this concern?

- A. Time of day restrictions
- B. Principle of least privilege
- C. Role-based access control
- D. Separation of duties

Answer: D

NEW QUESTION 543

While reviewing the security controls in place for a web-based application, a security controls assessor notices that there are no password strength requirements in place. Because of this vulnerability, passwords might be easily discovered using a brute force attack. Which of the following password requirements will MOST effectively improve the security posture of the application against these attacks? (Select two)

- A. Minimum complexity
- B. Maximum age limit
- C. Maximum length
- D. Minimum length
- E. Minimum age limit
- F. Minimum re-use limit

Answer: AD

NEW QUESTION 544

After a security incident, management is meeting with involved employees to document the incident and its aftermath. Which of the following BEST describes this phase of the incident response process?

- A. Lessons learned
- B. Recovery
- C. Identification
- D. Preparation

Answer: A

NEW QUESTION 546

An organization wants to utilize a common, Internet-based third-party provider for authorization and authentication. The provider uses a technology based on OAuth 2.0 to provide required services. To which of the following technologies is the provider referring?

- A. Open ID Connect
- B. SAML
- C. XACML
- D. LDAP

Answer: A

NEW QUESTION 547

The computer resource center issued smartphones to all first-level and above managers. The managers have the ability to install mobile tools. Which of the following tools should be implemented to control the types of tools the managers install?

- A. Download manager
- B. Content manager
- C. Segmentation manager
- D. Application manager

Answer: D

NEW QUESTION 551

An attack that is using interference as its main attack to impede network traffic is which of the following?

- A. Introducing too much data to a targets memory allocation
- B. Utilizing a previously unknown security flaw against the target
- C. Using a similar wireless configuration of a nearby network
- D. Inundating a target system with SYN requests

Answer: C

NEW QUESTION 555

A remote user (User1) is unable to reach a newly provisioned corporate windows workstation. The system administrator has been given the following log files from the VPN, corporate firewall and workstation host.

```
VPN log:
[2015-03-25 08:00.23 CST-6: VPN-Server-1: User1 5.5.5.5 authentication failed. Wrong password.]
[2015-03-25 08:00.29 CST-6: VPN-Server-1: User1 5.5.5.5 authentication failed. Wrong password.]
[2015-03-25 08:00.40 CST-6: VPN-Server-1: User1 5.5.5.5 authentication failed. Wrong password.]
[2015-03-25 08:01.11 CST-6: VPN-Server-1: User1 5.5.5.5 authentication succeeded.]
[2015-03-25 09:01.35 CST-6: VPN-Server-1: User1 5.5.5.5 disconnected. Idle timeout.]

Corporate firewall log:
[2015-03-25 14:01.12 CST: denied 5.5.5.5(icmp) -> 10.1.1.5(icmp)]
[2015-03-25 14:01.13 CST: denied 5.5.5.5(icmp) -> 10.1.1.5(icmp)]
[2015-03-25 14:01.14 CST: denied 5.5.5.5(icmp) -> 10.1.1.5(icmp)]
[2015-03-25 14:01.15 CST: denied 5.5.5.5(icmp) -> 10.1.1.5(icmp)]
[2015-03-25 14:01.16 CST: d administrator has been given the following
[2015-03-25 14:01.16 CST: accepted 5.5.5.5(1025) -> 10.1.1.5(3389)]
[2015-03-25 14:01.17 CST: denied 5.5.5.5(icmp) -> 10.1.1.5(icmp)]
[2015-03-25 14:01.18 CST: denied 5.5.5.5(icmp) -> 10.1.1.5(icmp)]

Workstation host firewall log:
[2015-03-25 08:00.00 CST-5: 10.1.1.5 -> www.hackersite11111.com(https) (action=allow)]
[2015-03-25 08:00.00 CST-5: 10.1.1.5 -> www.hackersite11111.com(https) (action=allow)]
[2015-03-25 08:00.00 CST-5: 10.1.1.5 -> www.hackersite11111.com(https) (action=allow)]
[2015-03-25 08:00.00 CST-5: 10.1.1.5 -> www.hackersite11111.com(https) (action=allow)]
[2015-03-25 08:00.00 CST-5: 10.1.1.5 -> www.hackersite11111.com(https) (action=allow)]
[2015-03-25 09:01.17 CST-5: 5.5.5.5 -> 10.1.1.5(mssdp) (action=drop)]
[2015-03-26 08:00.00 CST-5: 10.1.1.5 -> www.hackersite11111.com(https) (action=allow)]
```

Which of the following is preventing the remote user from being able to access the workstation?

- A. Network latency is causing remote desktop service request to time out
- B. User1 has been locked out due to too many failed passwords
- C. Lack of network time synchronization is causing authentication mismatches
- D. The workstation has been compromised and is accessing known malware sites
- E. The workstation host firewall is not allowing remote desktop connections

Answer: B

NEW QUESTION 559

After surfing the Internet, Joe, a user, woke up to find all his files were corrupted. His wallpaper was replaced by a message stating the files were encrypted and he needed to transfer money to a foreign country to recover them. Joe is a victim of:

- A. a keylogger
- B. spyware
- C. ransomware
- D. a logic bomb

Answer: C

NEW QUESTION 564

During a recent audit, it was discovered that many services and desktops were missing security patches. Which of the following BEST describes the assessment that was performed to discover this issue?

- A. Network mapping
- B. Vulnerability scan
- C. Port Scan
- D. Protocol analysis

Answer: B

NEW QUESTION 569

Ann, a user, states that her machine has been behaving erratically over the past week. She has experienced slowness and input lag and found text files that appear to contain pieces of her emails or online conversations with coworkers. The technician runs a standard virus scan but detects nothing. Which of the following types of malware has infected the machine?

- A. Ransomware

- B. Rootkit
- C. Backdoor
- D. Keylogger

Answer: D

NEW QUESTION 574

A security administrator needs an external vendor to correct an urgent issue with an organization's physical access control system (PACS). The PACS does not currently have internet access because it is running a legacy operation system.

Which of the following methods should the security administrator select the best balances security and efficiency?

- A. Temporarily permit outbound internet access for the pacs so desktop sharing can be set up
- B. Have the external vendor come onsite and provide access to the PACS directly
- C. Set up VPN concentrator for the vendor and restrict access to the PACS using desktop sharing
- D. Set up a web conference on the administrator's pc; then remotely connect to the pacs

Answer: C

NEW QUESTION 579

An administrator thinks the UNIX systems may be compromised, but a review of system log files provides no useful information. After discussing the situation with the security team, the administrator suspects that the attacker may be altering the log files and removing evidence of intrusion activity. Which of the following actions will help detect attacker attempts to further alter log files?

- A. Enable verbose system logging
- B. Change the permissions on the user's home directory
- C. Implement remote syslog
- D. Set the bash_history log file to "read only"

Answer: C

NEW QUESTION 582

Which of the following could occur when both strong and weak ciphers are configured on a VPN concentrator? (Select TWO)

- A. An attacker could potentially perform a downgrade attack.
- B. The connection is vulnerable to resource exhaustion.
- C. The integrity of the data could be at risk.
- D. The VPN concentrator could revert to L2TP.
- E. The IPSec payload reverted to 16-bit sequence numbers.

Answer: AE

NEW QUESTION 583

An actor downloads and runs a program against a corporate login page. The program imports a list of usernames and passwords, looking for a successful attempt. Which of the following terms BEST describes the actor in this situation?

- A. Script kiddie
- B. Hacktivist
- C. Cryptologist
- D. Security auditor

Answer: A

NEW QUESTION 585

A wireless network has the following design requirements:

- ☒ Authentication must not be dependent on enterprise directory service
- ☒ It must allow background reconnection for mobile users
- ☒ It must not depend on user certificates

Which of the following should be used in the design to meet the requirements? (Choose two.)

- A. PEAP
- B. PSK
- C. Open systems authentication
- D. EAP-TLS
- E. Captive portals

Answer: BE

NEW QUESTION 586

A web server, which is configured to use TLS with AES-GCM-256, SHA-384, and ECDSA, recently suffered an information loss breach. Which of the following is MOST likely the cause?

- A. Insufficient key bit length
- B. Weak cipher suite
- C. Unauthenticated encryption method
- D. Poor implementation

Answer: D

NEW QUESTION 589

Which of the following could help detect trespassers in a secure facility? (Select TWO)

- A. Faraday cages
- B. Motion-detection sensors
- C. Tall, chain-link fencing
- D. Security guards
- E. Smart cards

Answer: BD

NEW QUESTION 594

Which of the following can be used to control specific commands that can be executed on a network infrastructure device?

- A. LDAP
- B. Kerberos
- C. SAML
- D. TACACS+

Answer: D

NEW QUESTION 596

An organization wants to conduct secure transactions of large data files. Before encrypting and exchanging the data files, the organization wants to ensure a secure exchange of keys. Which of the following algorithms is appropriate for securing the key exchange?

- A. DES
- B. Blowfish
- C. DSA
- D. Diffie-Hellman
- E. 3DES

Answer: D

NEW QUESTION 600

A new hire wants to use a personally owned phone to access company resources. The new hire expresses concern about what happens to the data on the phone when they leave the company. Which of the following portions of the company's mobile device management configuration would allow the company data to be removed from the device without touching the new hire's data?

- A. Asset control
- B. Device access control
- C. Storage lock out
- D. Storage segmentation

Answer: B

NEW QUESTION 603

The administrator installs database software to encrypt each field as it is written to disk. Which of the following describes the encrypted data?

- A. In-transit
- B. In-use
- C. Embedded
- D. At-rest

Answer: B

NEW QUESTION 606

Which of the following would enhance the security of accessing data stored in the cloud? (Select TWO)

- A. Block level encryption
- B. SAML authentication
- C. Transport encryption
- D. Multifactor authentication
- E. Predefined challenge QUESTION NO:s
- F. Hashing

Answer: BD

NEW QUESTION 610

When designing a web based client server application with single application server and database cluster backend, input validation should be performed:

- A. On the client
- B. Using database stored procedures

- C. On the application server
- D. Using HTTPS

Answer: C

NEW QUESTION 615

A security engineer wants to implement a site-to-site VPN that will require SSL certificates for mutual authentication. Which of the following should the engineer implement if the design requires client MAC address to be visible across the tunnel?

- A. Tunnel mode IPSec
- B. Transport mode VPN IPSec
- C. L2TP
- D. SSL VPN

Answer: D

NEW QUESTION 619

Which of the following penetration testing concepts is being used when an attacker uses public Internet databases to enumerate and learn more about a target?

- A. Reconnaissance
- B. Initial exploitation
- C. Pivoting
- D. Vulnerability scanning
- E. White box testing

Answer: A

NEW QUESTION 620

Which of the following delineates why it is important to perform egress filtering and monitoring on Internet connected security zones of interfaces on a firewall?

- A. Egress traffic is more important than ingress traffic for malware prevention
- B. To rebalance the amount of outbound traffic and inbound traffic
- C. Outbound traffic could be communicating to known botnet sources
- D. To prevent DDoS attacks originating from external network

Answer: B

NEW QUESTION 624

A network administrator adds an ACL to allow only HTTPS connections form host 192.168.2.3 to web server 192.168.5.2. After applying the rule, the host is unable to access the server. The network administrator runs the output and notices the configuration below:

```
accesslist 102 permit tcp host 192.168.2.6 eq 3389 host 192.168.5.2
accesslist 102 deny ip any any log
accesslist 102 permit tcp host 192.1682.3 eq 443 host 192.168.5.2
```

Which of the following rules would be BEST to resolve the issue?

A

```
accesslist 102 permit tcp host 192.168.2.3 host 192.168.5.2 eq 443
accesslist 102 permit tcp host 192.168.2.6 host 192.168.5.2 eq 3389
accesslist 102 deny ip any any log
```

B

```
accesslist 102 permit tcp host 192.168.2.6 host 192.168.5.2 eq 3389
accesslist 102 deny ip any any log
accesslist 102 permit tcp host 192.168.2.3 host 192.168.5.2 eq 443
```

C

```
accesslist 102 permit tcp host 192.168.2.3 eq 443 host 192.168.5.2
accesslist 102 deny ip any any log
accesslist 102 permit tcp host 192.168.2.6 eq 3389 host 192.168.5.2
```

D

```
accesslist 102 permit tcp host 192.168.2.3 host 192.168.5.2
accesslist 102 permit tcp host 192.168.2.6 eq 3389 host 192.168.5.2
accesslist 102 deny ip any any log
```

- A. Option A
- B. Option B

- C. Option C
- D. Option D

Answer: A

NEW QUESTION 627

An administrator has configured a new Linux server with the FTP service. Upon verifying that the service was configured correctly, the administrator has several users test the FTP service. Users report that they are able to connect to the FTP service and download their personal files, however, they cannot transfer new files to the server. Which of the following will most likely fix the uploading issue for the users?

- A. Create an ACL to allow the FTP service write access to user directories
- B. Set the Boolean selinux value to allow FTP home directory uploads
- C. Reconfigure the ftp daemon to operate without utilizing the PSAV mode
- D. Configure the FTP daemon to utilize PAM authentication pass through user permissions

Answer: A

NEW QUESTION 632

A security analyst captures forensic evidence from a potentially compromised system for further investigation. The evidence is documented and securely stored to FIRST:

- A. maintain the chain of custody.
- B. preserve the data.
- C. obtain a legal hold.
- D. recover data at a later time.

Answer: B

NEW QUESTION 633

Which of the following metrics are used to calculate the SLE? (Select TWO)

- A. ROI
- B. ARO
- C. ALE
- D. MTBF
- E. MTTF
- F. TCO

Answer: BC

NEW QUESTION 637

An office manager found a folder that included documents with various types of data relating to corporate clients. The office manager notified the data included dates of birth, addresses, and phone numbers for the clients. The office manager then reported this finding to the security compliance officer. Which of the following portions of the policy would the security officer need to consult to determine if a breach has occurred?

- A. Public
- B. Private
- C. PHI
- D. PII

Answer: D

NEW QUESTION 640

An organization's employees currently use three different sets of credentials to access multiple internal resources. Management wants to make this process less complex. Which of the following would be the BEST option to meet this goal?

- A. Transitive trust
- B. Single sign-on
- C. Federation
- D. Secure token

Answer: B

NEW QUESTION 642

Which of the following refers to the term used to restore a system to its operational state?

- A. MTBF
- B. MTTR
- C. RTO
- D. RPO

Answer: B

NEW QUESTION 643

When sending messages using symmetric encryption, which of the following must happen FIRST?

- A. Exchange encryption key
- B. Establish digital signatures
- C. Agree on an encryption method
- D. Install digital certificates

Answer: C

NEW QUESTION 647

AChief Information Officer (CIO) asks the company's security specialist if the company should spend any funds on malware protection for a specific server. Based on a risk assessment, the ARO value of a malware infection for a server is 5 and the annual cost for the malware protection is \$2500. Which of the following SLE values warrants a recommendation against purchasing the malware protection?

- A. \$500
- B. \$1000
- C. \$2000
- D. \$2500

Answer: A

NEW QUESTION 650

Which of the following uses precomputed hashes to guess passwords?

- A. Iptables
- B. NAT tables
- C. Rainbow tables
- D. ARP tables

Answer: C

NEW QUESTION 652

A software development manager is taking over an existing software development project. The team currently suffers from poor communication due to a long delay between requirements documentation and feature delivery. This gap is resulting in an above average number of security-related bugs making it into production. Which of the following development methodologies is the team MOST likely using now?

- A. Agile
- B. Waterfall
- C. Scrum
- D. Spiral

Answer: B

NEW QUESTION 654

A malicious system continuously sends an extremely large number of SYN packets to a server. Which of the following BEST describes the resulting effect?

- A. The server will be unable to server clients due to lack of bandwidth
- B. The server's firewall will be unable to effectively filter traffic due to the amount of data transmitted
- C. The server will crash when trying to reassemble all the fragmented packets
- D. The server will exhaust its memory maintaining half-open connections

Answer: D

NEW QUESTION 656

A security administrator is reviewing the following PowerShell script referenced in the Task Scheduler on a database server:

```
$members = GetADGroupMemeber -Identity "Domain Admins" -Recursive | Select - ExpandProperty  
name  
if ($members -notcontains "JohnDoe"){  
Remove-Item -path C:\Database -recurse -force  
}
```

Which of the following did the security administrator discover?

- A. Ransomware
- B. Backdoor
- C. Logic bomb
- D. Trojan

Answer: C

NEW QUESTION 657

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