Exam Questions SY0-501

CompTIA Security+ Certification Exam

https://www.2passeasy.com/dumps/SY0-501/

NEW QUESTION 1
- (Exam Topic 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
- (Exam Topic 1)
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 3
- (Exam Topic 1)
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 4
- (Exam Topic 1)
Which of the following explains why vendors publish MD5 values when they provide software patches for their customers to download over the Internet?

A. The recipient can verify integrity of the software patch.
B. The recipient can verify the authenticity of the site used to download the patch.
C. The recipient can request future updates to the software using the published MD5 value.
D. The recipient can successfully activate the new software patch.

Answer: A

NEW QUESTION 5
- (Exam Topic 1)
Which of the following best describes routine in which semicolons, dashes, quotes, and commas are removed from a string?

A. Error handling to protect against program exploitation
B. Exception handling to protect against XSRF attacks.
C. Input validation to protect against SQL injection.
D. Padding to protect against string buffer overflows.

Answer: C

NEW QUESTION 6
- (Exam Topic 1)
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 7
- (Exam Topic 1)
Which of the following BEST describes an important security advantage yielded by implementing vendor diversity?

A. Sustainability
B. Homogeneity
C. Resiliency
D. Configurability

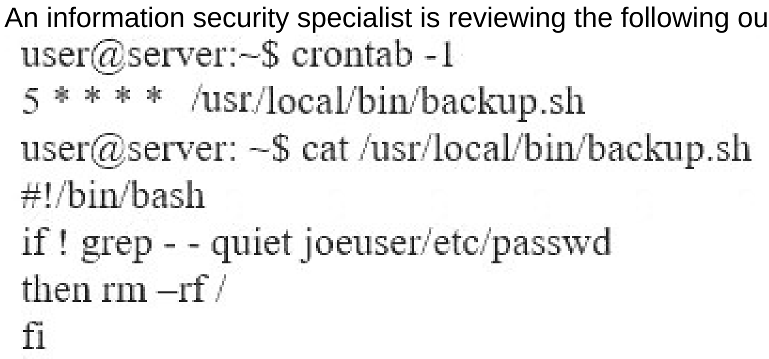
Answer: C

NEW QUESTION 8
- (Exam Topic 1)
When considering a third-party cloud service provider, which of the following criteria would be the BEST to include in the security assessment process? (Select two.)

A. Use of performance analytics
B. Adherence to regulatory compliance
C. Data retention policies
D. Size of the corporation
E. Breadth of applications support

Answer: BC

NEW QUESTION 9
- (Exam Topic 1)
An information security specialist is reviewing the following output from a Linux server.



```
user@server:~$ crontab -1
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
- (Exam Topic 1)
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 10
- (Exam Topic 1)
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 12
- (Exam Topic 1)
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 14
- (Exam Topic 1)
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

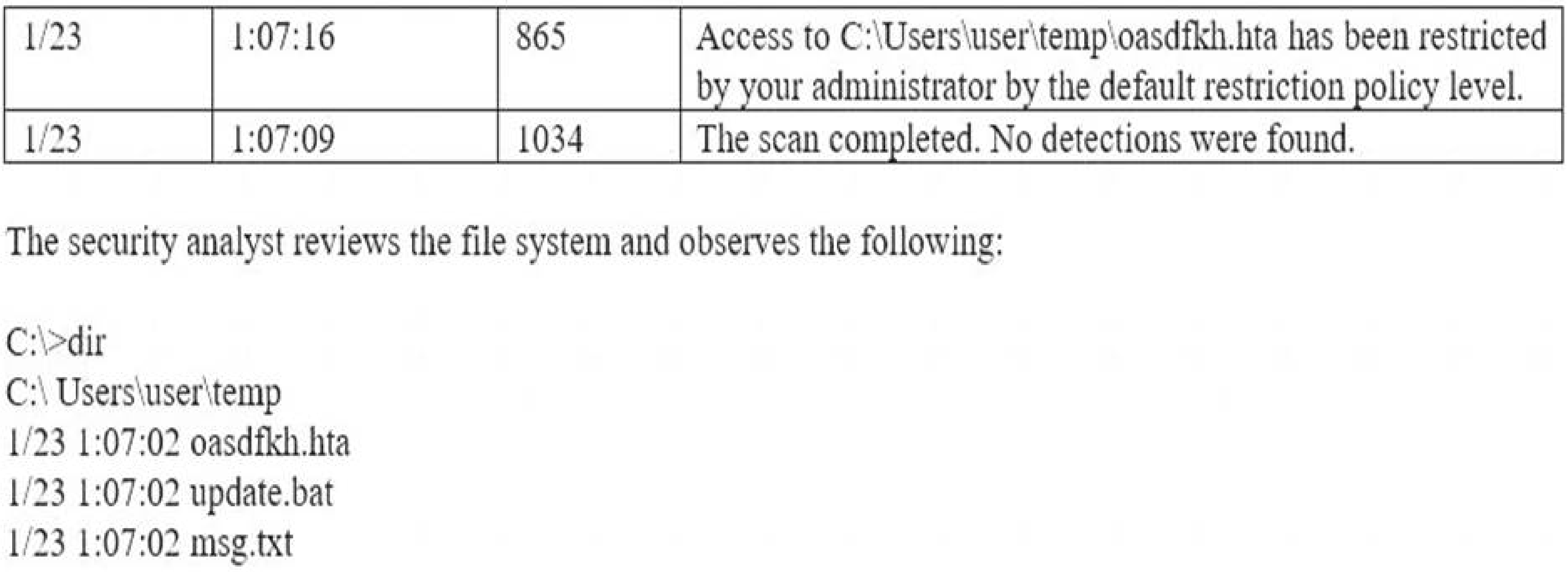
Answer: A

NEW QUESTION 15
- (Exam Topic 1)
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 20
- (Exam Topic 1)
A security analyst observes the following events in the logs of an employee workstation:



1/23	1:07:16	865	Access to C:\Users\user\temp\oasdfkh.hta has been restricted by your administrator by the default restriction policy level.
1/23	1:07:09	1034	The scan completed. No detections were found.

The security analyst reviews the file system and observes the following:

```
C:\>dir
C:\ Users\user\temp
1/23 1:07:02 oasdfkh.hta
1/23 1:07:02 update.bat
1/23 1:07:02 msg.txt
```

Given the information provided, which of the following MOST likely occurred on the workstation?

A. Application whitelisting controls blocked an exploit payload from executing.
B. Antivirus software found and quarantined three malware files.
C. Automatic updates were initiated but failed because they had not been approved.
D. The SIEM log agent was not tuned properly and reported a false positive.

Answer: A

NEW QUESTION 21
- (Exam Topic 1)
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 25
- (Exam Topic 1)
Which of the following cryptographic attacks would salting of passwords render ineffective?

A. Brute force
B. Dictionary
C. Rainbow tables
D. Birthday

Answer: C

NEW QUESTION 28
- (Exam Topic 1)
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.

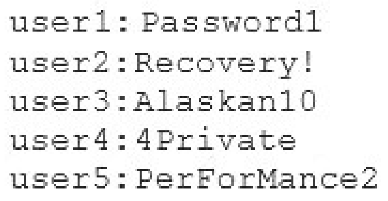
Answer: B

NEW QUESTION 30
- (Exam Topic 1)
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 35
- (Exam Topic 1)
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 39
- (Exam Topic 1)
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. tracert
B. netstat
C. ping
D. nslookup

Answer: B

NEW QUESTION 40
- (Exam Topic 1)
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 41
- (Exam Topic 1)
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

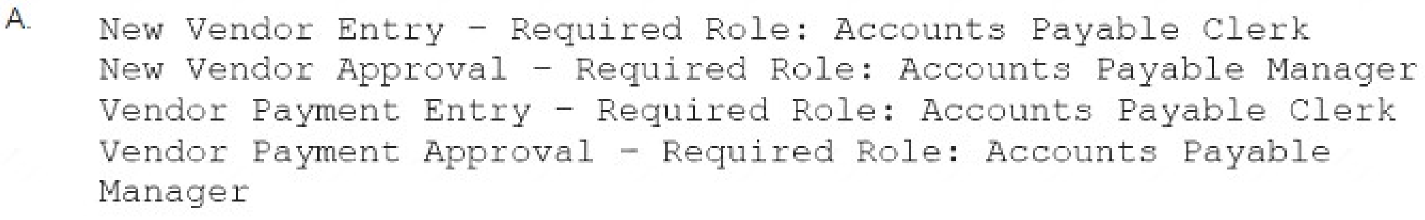
Answer: B

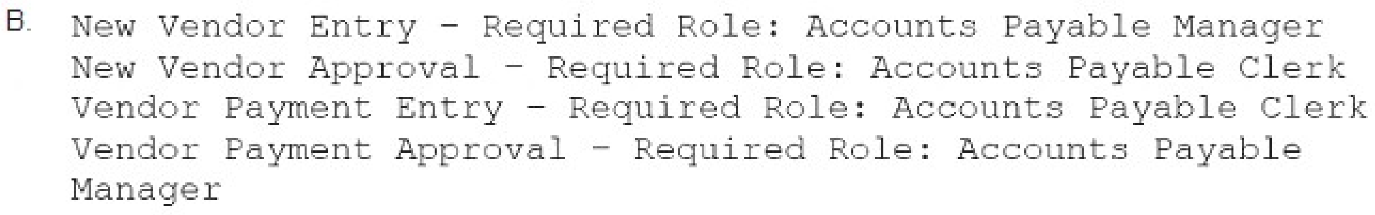
Explanation:
http://archive.oreilly.com/pub/a/wireless/2005/01/01/authentication.html

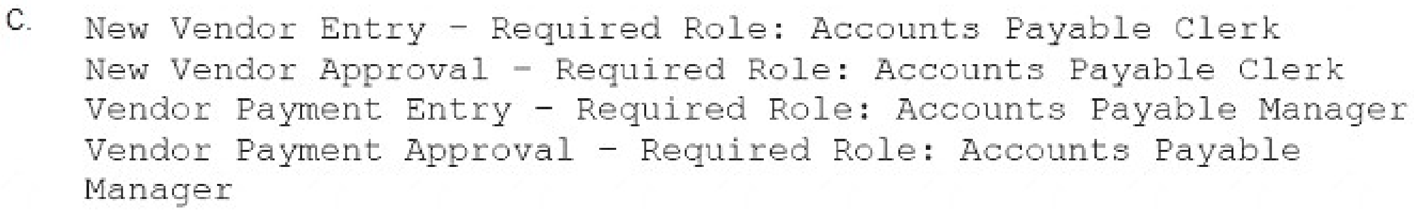
NEW QUESTION 46
- (Exam Topic 1)
An organization’s internal auditor discovers that large sums of money have recently been paid to a vendor that management does not recognize. The IT security department is asked to investigate the organizations the organization’s ERP system to determine how the accounts payable module has been used to make these vendor payments.
The IT security department finds the following security configuration for the accounts payable module:

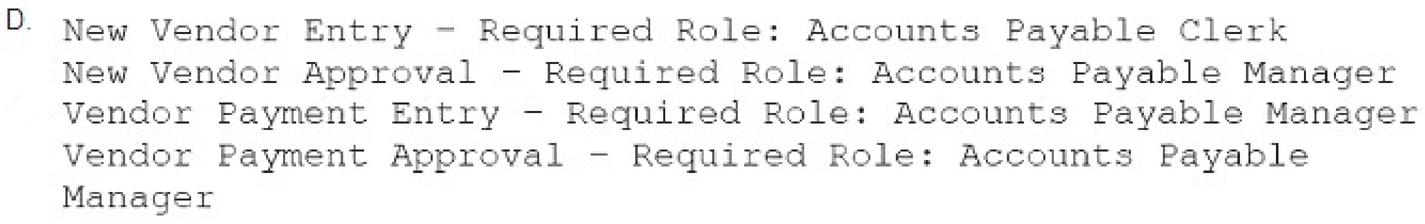
- New Vendor Entry – Required Role: Accounts Payable Clerk
- New Vendor Approval – Required Role: Accounts Payable Clerk
- Vendor Payment Entry – Required Role: Accounts Payable Clerk
- Vendor Payment Approval – Required Role: Accounts Payable Manager

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

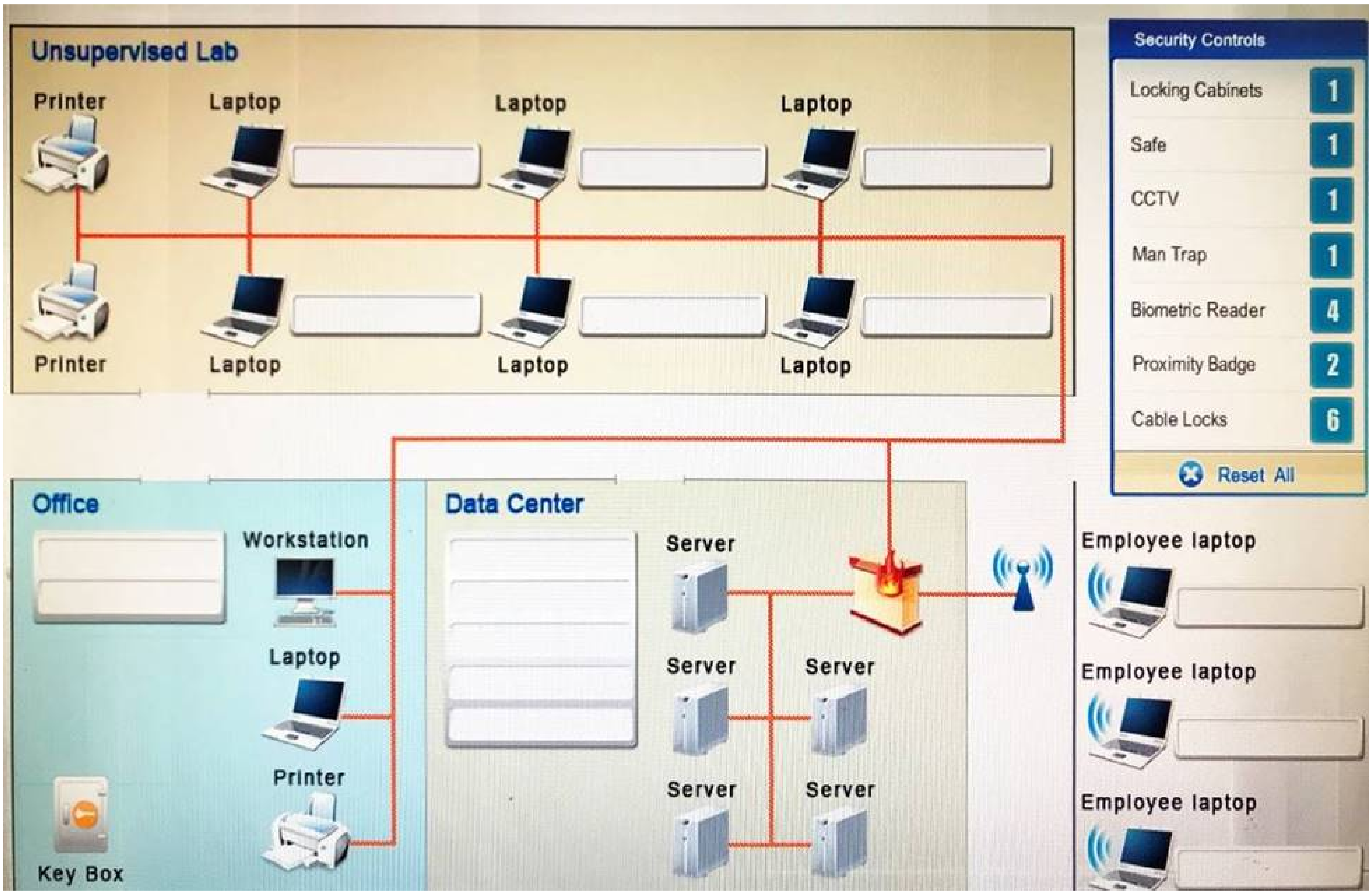

C.
New Vendor Entry - Required Role: Accounts Payable Clerk
New Vendor Approval - Required Role: Accounts Payable Clerk
Vendor Payment Entry - Required Role: Accounts Payable Manager
Vendor Payment Approval - Required Role: Accounts Payable Manager


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 48
- (Exam Topic 1)
You have been tasked with designing a security plan for your company. Drag and drop the appropriate security controls on the floor plan.
Instructions: All objects must be used and all place holders must be filled. Order does not matter. When you have completed the simulation, please select the Done button to submit.

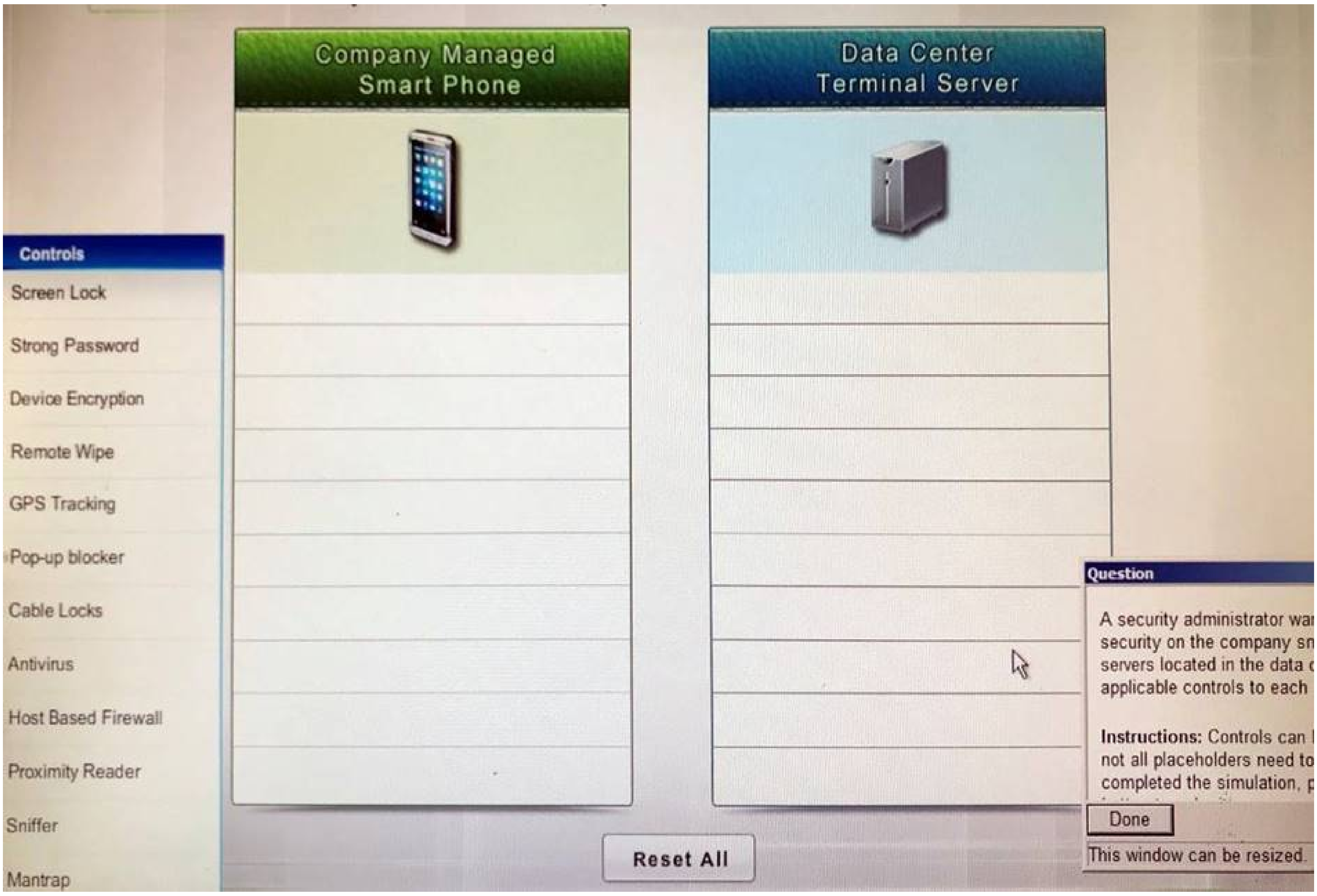


A. Mastered
B. Not Mastered

Answer: A

Explanation:
Cable locks - Adding a cable lock between a laptop and a desk prevents someone from picking it up and walking away
Proximity badge + reader
Safe is a hardware/physical security measure
Mantrap can be used to control access to sensitive areas. CCTV can be used as video surveillance. Biometric reader can be used to control and prevent unauthorized access. Locking cabinets can be used to
protect backup media, documentation and other physical artefacts.

NEW QUESTION 52
- (Exam Topic 1)
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.



A security administrator wa
security on the company sn
servers located in the data c
applicable controls to each

Instructions: Controls can l
not all placeholders need to
completed the simulation, p

A. Mastered
B. Not Mastered

Answer: A

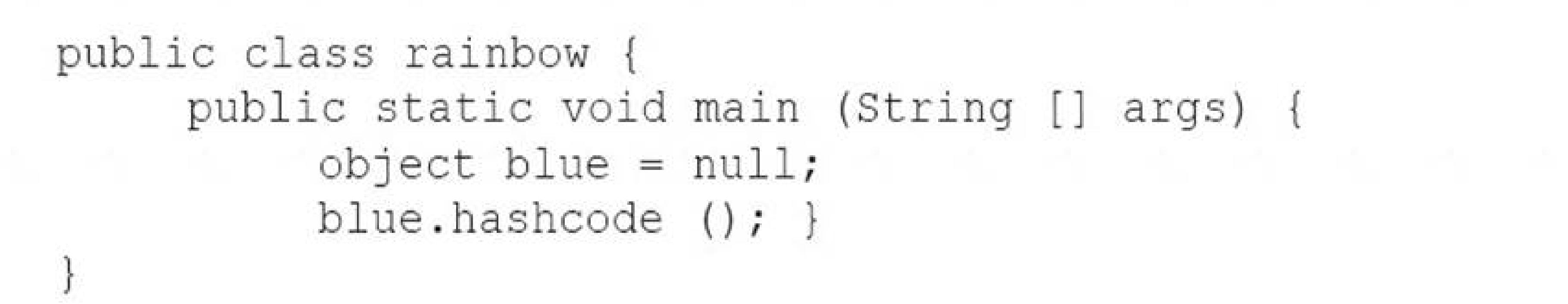
Explanation:
Company Manages Smart Phone Screen Lock
Strong Password Device Encryption Remote Wipe GPS Tracking
Pop-up blocker
Data Center Terminal Server Cable Locks
Antivirus
Host Based Firewall Proximity Reader Sniffer
Mantrap

NEW QUESTION 53
- (Exam Topic 1)
When trying to log onto a company’s new ticketing system, some employees receive the following message: Access denied: too many concurrent sessions. The ticketing system was recently installed on a small VM with only the recommended hardware specifications. Which of the following is the MOST likely cause for this error message?

A. Network resources have been exceeded.
B. The software is out of licenses.
C. The VM does not have enough processing power.
D. The firewall is misconfigured.

Answer: C

NEW QUESTION 58
- (Exam Topic 1)
Refer to the following code:



```
public class rainbow {
     public static void main (String [] args) {
          object blue = null;
          blue.hashcode (); }
}
```

Which of the following vulnerabilities would occur if this is executed?

A. Page exception
B. Pointer deference
C. NullPointerException
D. Missing null check

Answer: D

NEW QUESTION 59
- (Exam Topic 1)
An organization is using a tool to perform a source code review. Which of the following describes the case in which the tool incorrectly identifies the vulnerability?

A. False negative
B. True negative
C. False positive
D. True positive

Answer: C

NEW QUESTION 62
- (Exam Topic 1)
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 65
- (Exam Topic 1)
Which of the following types of cloud infrastructures would allow several organizations with similar structures and interests to realize the benefits of shared storage and resources?

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

Answer: D

NEW QUESTION 67
- (Exam Topic 1)
A systems administrator is attempting to recover from a catastrophic failure in the datacenter. To recover the domain controller, the systems administrator needs to provide the domain administrator credentials. Which of the following account types is the systems administrator using?

A. Shared account
B. Guest account
C. Service account
D. User account

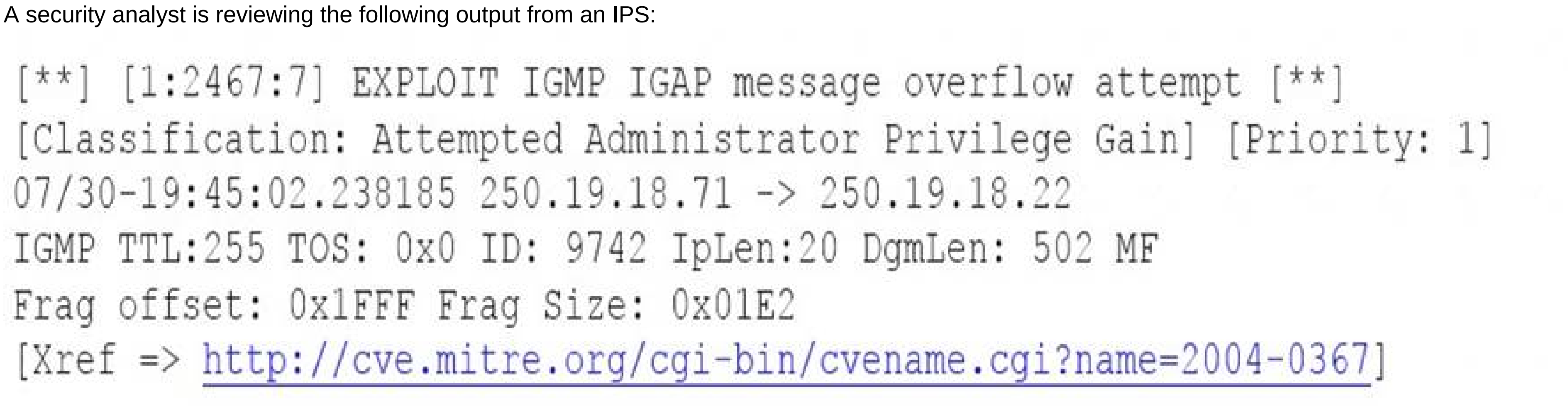
Answer: C

NEW QUESTION 70
- (Exam Topic 1)
Which of the following technologies employ the use of SAML? (Select two.)

A. Single sign-on
B. Federation
C. LDAP
D. Secure token
E. RADIUS

Answer: AB

NEW QUESTION 75
- (Exam Topic 1)
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 78
- (Exam Topic 1)
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 82
- (Exam Topic 1)
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 83
- (Exam Topic 1)
Which of the following implements two-factor authentication?

A. A phone system requiring a PIN to make a call
B. At ATM requiring a credit card and PIN
C. A computer requiring username and password
D. A datacenter mantrap requiring fingerprint and iris scan

Answer: B

NEW QUESTION 86
- (Exam Topic 1)
Which of the following threat actors is MOST likely to steal a company's proprietary information to gain a market edge and reduce time to market?

A. Competitor
B. Hacktivist
C. Insider
D. Organized crime.

Answer: A

NEW QUESTION 90
- (Exam Topic 1)
A security analyst is hardening a server with the directory services role installed. The analyst must ensure LDAP traffic cannot be monitored or sniffed and

maintains compatibility with LDAP clients. Which of the following should the analyst implement to meet these requirements? (Select two.)

A. Generate an X.509-compliant certificate that is signed by a trusted CA.
B. Install and configure an SSH tunnel on the LDAP server.
C. Ensure port 389 is open between the clients and the servers using the communication.
D. Ensure port 636 is open between the clients and the servers using the communication.
E. Remote the LDAP directory service role from the server.

Answer: AD

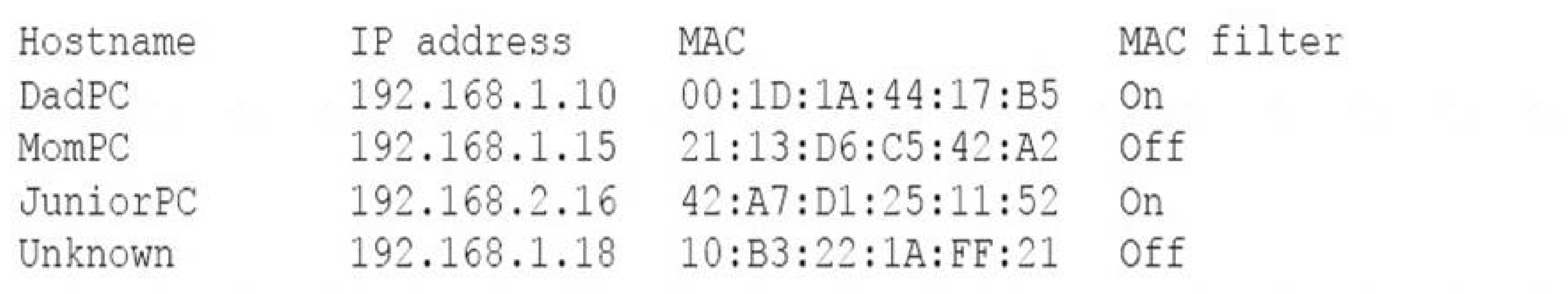
NEW QUESTION 95
- (Exam Topic 1)
Which of the following attacks specifically impact data availability?

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

Answer: A

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

NEW QUESTION 99
- (Exam Topic 1)
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 100
- (Exam Topic 1)
When configuring settings in a mandatory access control environment, which of the following specifies the subjects that can access specific data objects?

A. Owner
B. System
C. Administrator
D. User

Answer: C

NEW QUESTION 105
- (Exam Topic 1)
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 109
- (Exam Topic 1)
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 114
- (Exam Topic 2)
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 115
- (Exam Topic 2)
A company has a security policy that specifies all endpoint computing devices should be assigned a unique identifier that can be tracked via an inventory management system. Recent changes to airline security regulations have cause many executives in the company to travel with mini tablet devices instead of laptops.
These tablet devices are difficult to tag and track. An RDP application is used from the tablet to connect into the company network.
Which of the following should be implemented in order to meet the security policy requirements?

A. Virtual desktop infrastructure (IDI)
B. WS-security and geo-fencing
C. A hardware security module (HSM)
D. RFID tagging system
E. MDM software
F. Security Requirements Traceability Matrix (SRTM)

Answer: E

NEW QUESTION 116
- (Exam Topic 2)
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 118
- (Exam Topic 2)
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 ono 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

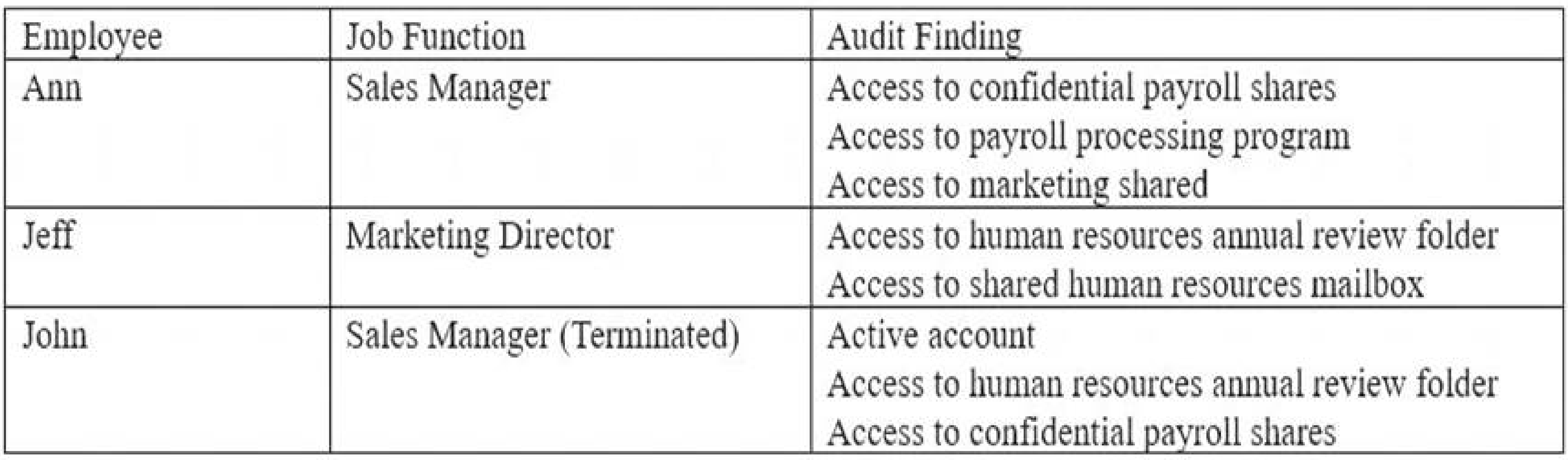
NEW QUESTION 120
- (Exam Topic 2)
Which of the following AES modes of operation provide authentication? (Select two.)

A. CCM
B. CBC
C. GCM
D. DSA

E. CFB

Answer: AC

NEW QUESTION 125
- (Exam Topic 2)
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 126
- (Exam Topic 2)
An in-house penetration tester is using a packet capture device to listen in on network communications. This is an example of:

A. Passive reconnaissance
B. Persistence
C. Escalation of privileges
D. Exploiting the switch

Answer: D

NEW QUESTION 127
- (Exam Topic 2)
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 130
- (Exam Topic 2)
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 135
- (Exam Topic 2)
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 136
- (Exam Topic 2)
The security administrator receives an email on a non-company account from a coworker stating that some reports are not exporting correctly. Attached to the email was an example report file with several customers' names and credit card numbers with the PIN.
Which of the following is the BEST technical controls that will help mitigate this risk of disclosing sensitive data?

A. Configure the mail server to require TLS connections for every email to ensure all transport data is encrypted
B. Create a user training program to identify the correct use of email and perform regular audits to ensure compliance
C. Implement a DLP solution on the email gateway to scan email and remove sensitive data or files
D. Classify all data according to its sensitivity and inform the users of data that is prohibited to share

Answer: C

NEW QUESTION 139
- (Exam Topic 2)
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 143
- (Exam Topic 2)
A manager suspects that an IT employee with elevated database access may be knowingly modifying financial transactions for the benefit of a competitor. Which of the following practices should the manager implement to validate the concern?

A. Separation of duties
B. Mandatory vacations
C. Background checks
D. Security awareness training

Answer: A

NEW QUESTION 148
- (Exam Topic 2)
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 150
- (Exam Topic 2)
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 153
- (Exam Topic 2)
A copy of a highly confidential salary report was recently found on a printer in the IT department. The human resources department does not have this specific printer mapped to its devices, and it is suspected that an employee in the IT department browsed to the share where the report was located and printed it without authorization. Which of the following technical controls would be the BEST choice to immediately prevent this from happening again?

A. Implement a DLP solution and classify the report as confidential, restricting access only to human resources staff
B. Restrict access to the share where the report resides to only human resources employees and enable auditing
C. Have all members of the IT department review and sign the AUP and disciplinary policies
D. Place the human resources computers on a restricted VLAN and configure the ACL to prevent access from the IT department

Answer: B

NEW QUESTION 154
- (Exam Topic 2)
Which of the following types of attacks precedes the installation of a rootkit on a server?

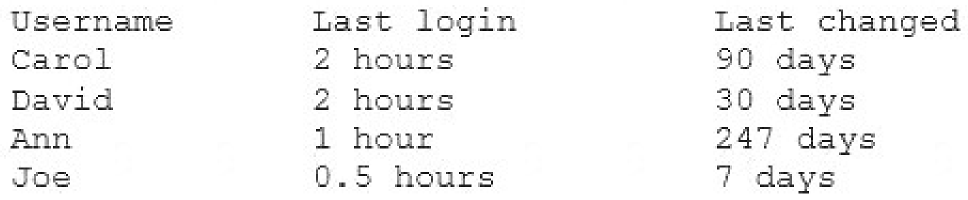
A. Pharming
B. DDoS
C. Privilege escalation
D. DoS

Answer: C

NEW QUESTION 156
- (Exam Topic 2)
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:



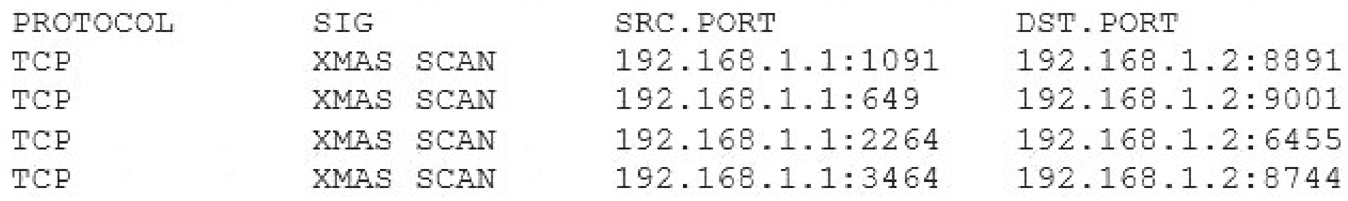
```
Username       Last login          Last changed
Carol          2 hours             90 days
David          2 hours             30 days
Ann            1 hour              247 days
Joe            0.5 hours           7 days
```

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 157
- (Exam Topic 2)
A security analyst has received the following alert snippet from the HIDS appliance:



```
PROTOCOL     SIG          SRC.PORT              DST.PORT
TCP          XMAS SCAN    192.168.1.1:1091      192.168.1.2:8891
TCP          XMAS SCAN    192.168.1.1:649       192.168.1.2:9001
TCP          XMAS SCAN    192.168.1.1:2264      192.168.1.2:6455
TCP          XMAS SCAN    192.168.1.1:3464      192.168.1.2:8744
```

Given the above logs, which of the following is the cause of the attack?

A. The TCP ports on destination are all open
B. FIN, URG, and PSH flags are set in the packet header
C. TCP MSS is configured improperly
D. There is improper Layer 2 segmentation

Answer: B

NEW QUESTION 161
- (Exam Topic 2)
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

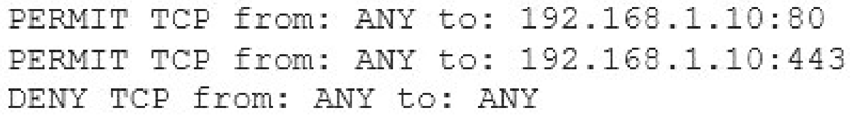
Answer: C

NEW QUESTION 165
- (Exam Topic 2)
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

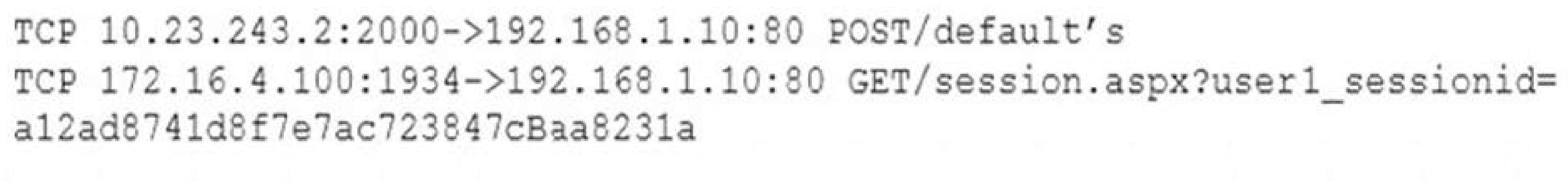
Answer: B

NEW QUESTION 168
- (Exam Topic 2)
A system's administrator has finished configuring firewall ACL to allow access to a new web server.



```
PERMIT TCP from: ANY to: 192.168.1.10:80
PERMIT TCP from: ANY to: 192.168.1.10:443
DENY TCP from: ANY to: ANY
```

The security administrator confirms form the following packet capture that there is network traffic from the internet to the web server:



```
TCP 10.23.243.2:2000->192.168.1.10:80 POST/default's
TCP 172.16.4.100:1934->192.168.1.10:80 GET/session.aspx?user1_sessionid=
a12ad8741d8f7e7ac723847cBaa8231a
```

The company's internal auditor issues a security finding and requests that immediate action be taken. With which of the following is the auditor MOST concerned?

A. Misconfigured firewall
B. Clear text credentials
C. Implicit deny
D. Default configuration

Answer: B

NEW QUESTION 172
- (Exam Topic 2)
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 176
- (Exam Topic 2)
A technician is configuring a wireless guest network. After applying the most recent changes the technician finds the new devices can no longer find the wireless network by name but existing devices are still able to use the wireless network.
Which of the following security measures did the technician MOST likely implement to cause this Scenario?

A. Deactivation of SSID broadcast
B. Reduction of WAP signal output power
C. Activation of 802.1X with RADIUS
D. Implementation of MAC filtering
E. Beacon interval was decreased

Answer: A

NEW QUESTION 179
- (Exam Topic 2)
A new firewall has been places into service at an organization. However, a configuration has not been entered on the firewall. Employees on the network segment covered by the new firewall report they are unable to access the network. Which of the following steps should be completed to BEST resolve the issue?

A. The firewall should be configured to prevent user traffic form matching the implicit deny rule.
B. The firewall should be configured with access lists to allow inbound and outbound traffic.
C. The firewall should be configured with port security to allow traffic.
D. The firewall should be configured to include an explicit deny rule.

Answer: A

NEW QUESTION 181
- (Exam Topic 2)
A network technician is setting up a segmented network that will utilize a separate ISP to provide wireless access to the public area for a company. Which of the following wireless security methods should the technician implement to provide basic accountability for access to the public network?

A. Pre-shared key
B. Enterprise
C. Wi-Fi Protected setup
D. Captive portal

Answer: D

NEW QUESTION 183
- (Exam Topic 2)

Company policy requires the use if passphrases instead if 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 187
- (Exam Topic 2)
A security administrator suspects a MITM attack aimed at impersonating the default gateway is underway. Which of the following tools should the administrator use to detect this attack? (Select two.)

A. Ping
B. Ipconfig
C. Tracert
D. Netstat
E. Dig
F. Nslookup

Answer: BC

NEW QUESTION 191
- (Exam Topic 2)
Which of the following must be intact for evidence to be admissible in court?

A. Chain of custody
B. Order of volatility
C. Legal hold
D. Preservation

Answer: A

NEW QUESTION 196
- (Exam Topic 2)
Although a web enabled application appears to only allow letters in the comment field of a web form, malicious user was able to carry a SQL injection attack by sending special characters through the web comment field.
Which of the following has the application programmer failed to implement?

A. Revision control system
B. Client side exception handling
C. Server side validation
D. Server hardening

Answer: C

NEW QUESTION 201
- (Exam Topic 2)
As part of the SDLC, a third party is hired to perform a penetration test. The third party will have access to the source code, integration tests, and network diagrams. Which of the following BEST describes the assessment being performed?

A. Black box
B. Regression
C. White box
D. Fuzzing

Answer: C

NEW QUESTION 206
- (Exam Topic 2)
An organization has hired a penetration tester to test the security of its ten web servers. The penetration tester is able to gain root/administrative access in several servers by exploiting vulnerabilities associated with the implementation of SMTP, POP, DNS, FTP, Telnet, and IMAP. Which of the following recommendations should the penetration tester provide to the organization to better protect their web servers in the future?

A. Use a honeypot
B. Disable unnecessary services
C. Implement transport layer security
D. Increase application event logging

Answer: B

NEW QUESTION 211
- (Exam Topic 3)
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

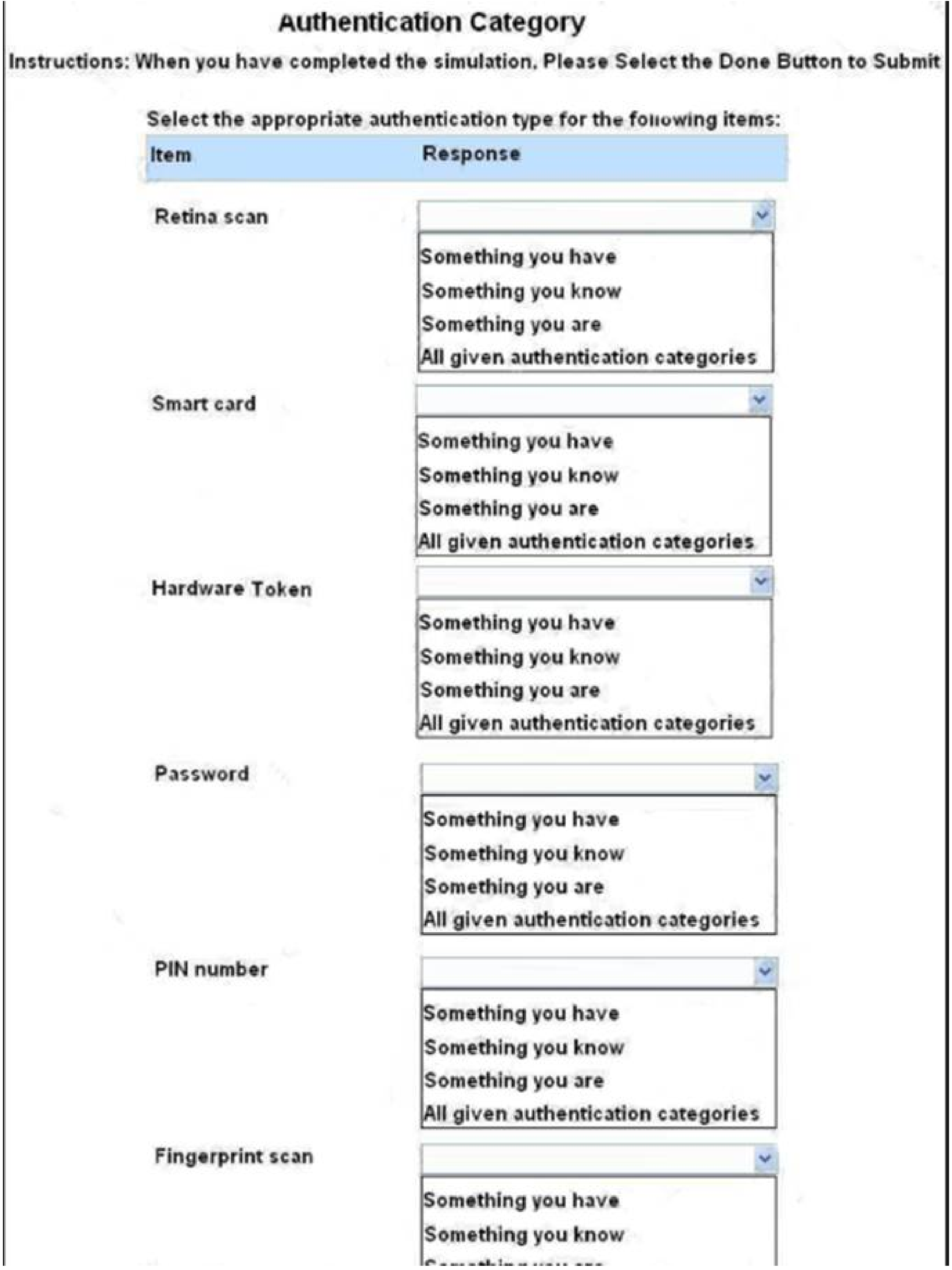
Answer: B

NEW QUESTION 214
- (Exam Topic 3)
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 217
- (Exam Topic 3)
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	Something you have Something you know Something you are All given authentication categories
Smart card	Something you have Something you know Something you are All given authentication categories
Hardware Token	Something you have Something you know Something you are All given authentication categories
Password	Something you have Something you know Something you are All given authentication categories
PIN number	Something you have Something you know Something you are All given authentication categories
Fingerprint scan	Something you have Something you know

A. Mastered
B. Not Mastered

Answer: A

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 220
- (Exam Topic 3)
An organization is moving its human resources system to a cloud services provider.
The company plans to continue using internal usernames and passwords with the service provider, but the security manager does not want the service provider to have a company of the passwords. Which of the following options meets all of these requirements?

A. Two-factor authentication
B. Account and password synchronization
C. Smartcards with PINS
D. Federated authentication

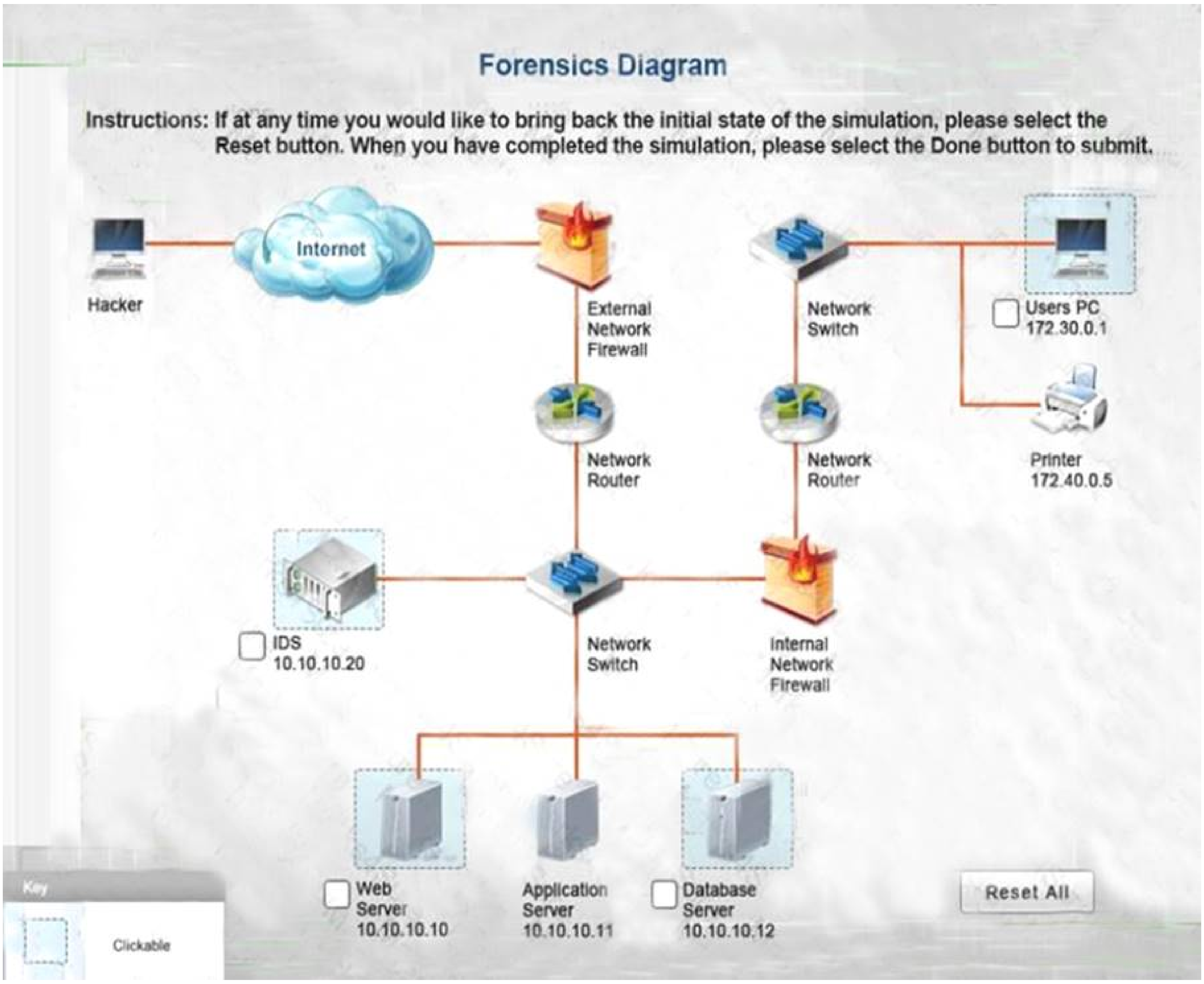
Answer: D

NEW QUESTION 224
- (Exam Topic 3)
A system administrator wants to implement an internal communication system that will allow employees to send encrypted messages to each other. The system must also support non- repudiation. Which of the following implements all these requirements?

A. Bcrypt
B. Blowfish
C. PGP
D. SHA

Answer: C

NEW QUESTION 228
- (Exam Topic 3)
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 incid3nt 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.



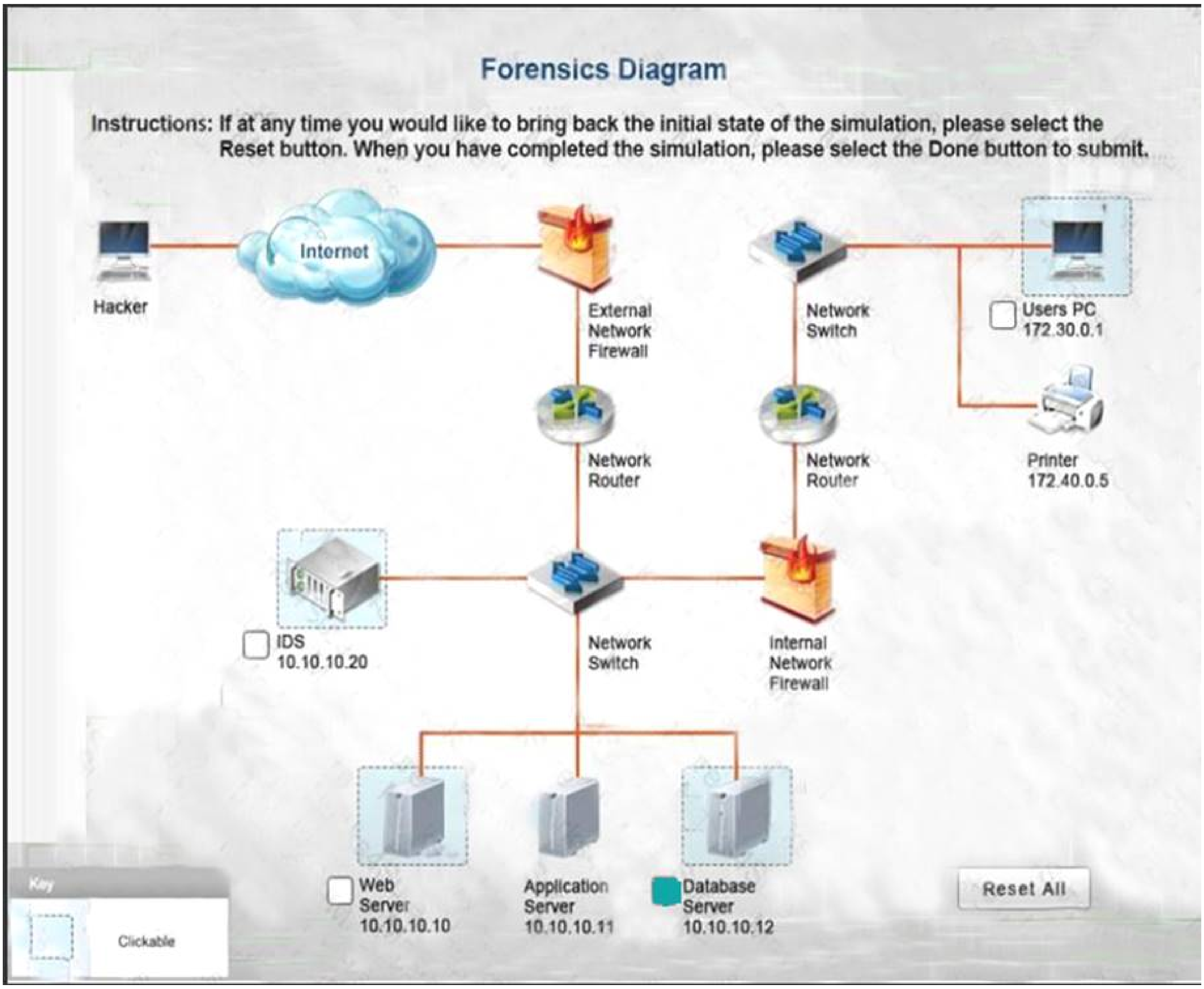
Forensics Diagram

Instructions: 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.

A. Mastered
B. Not Mastered

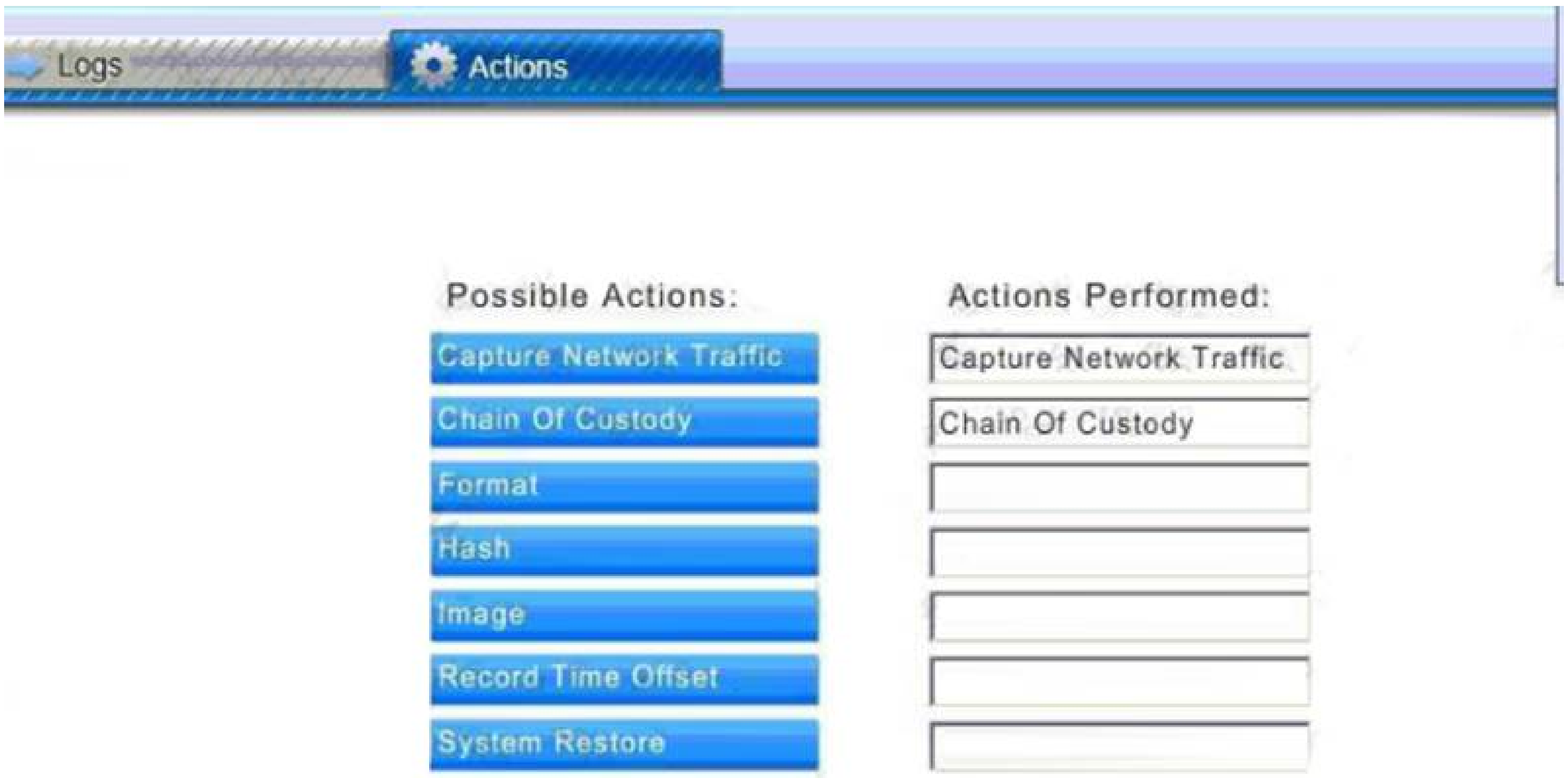
Answer: A

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



Forensics Diagram

Instructions: 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.



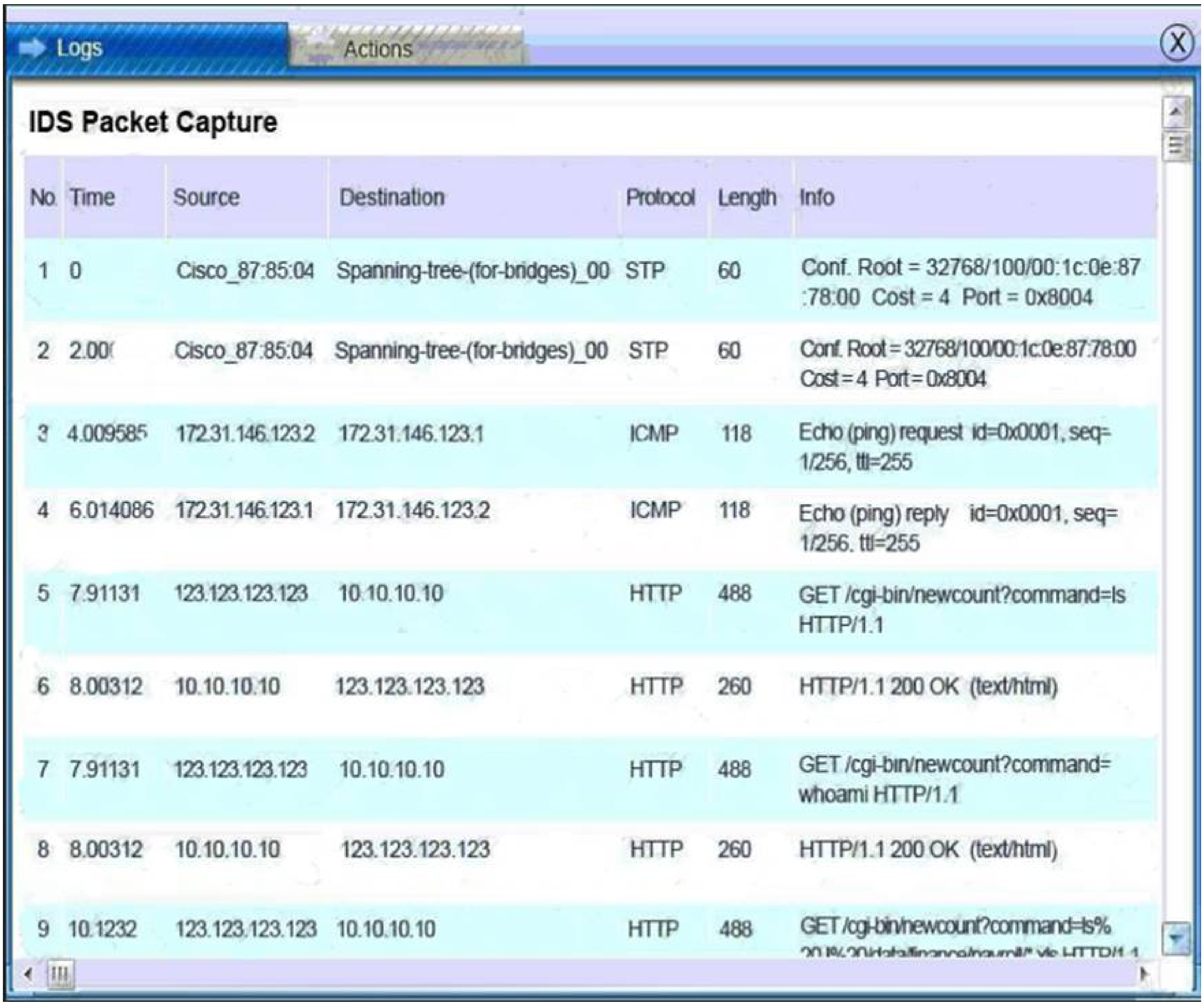
Possible Actions:

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

Actions Performed:

- Capture Network Traffic
- Chain Of Custody

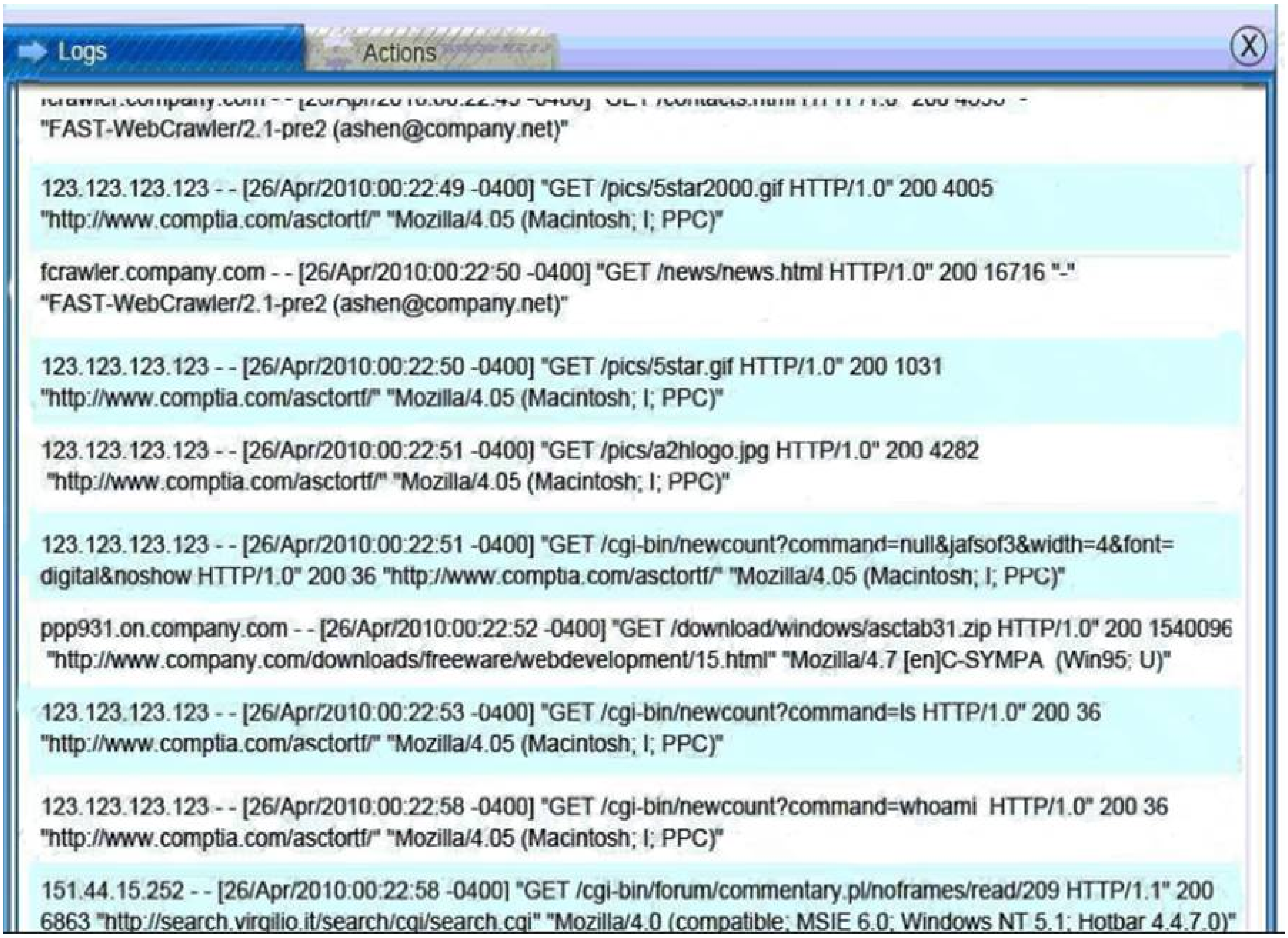
IDS Server Log:



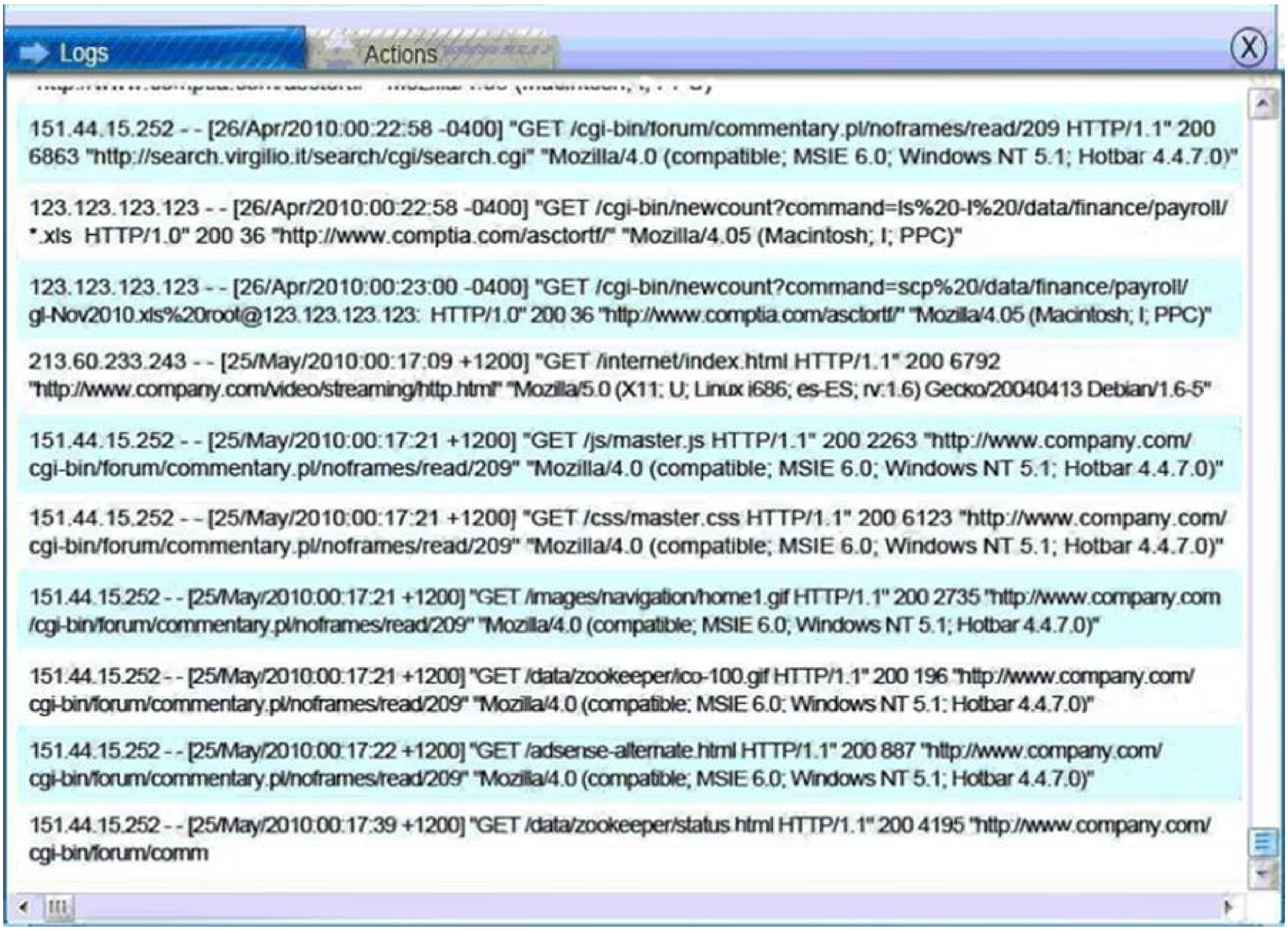
IDS Packet Capture

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	2.00(	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 l%20/data/finance/payroll/* xls HTTP/1.1

Web Server Log:

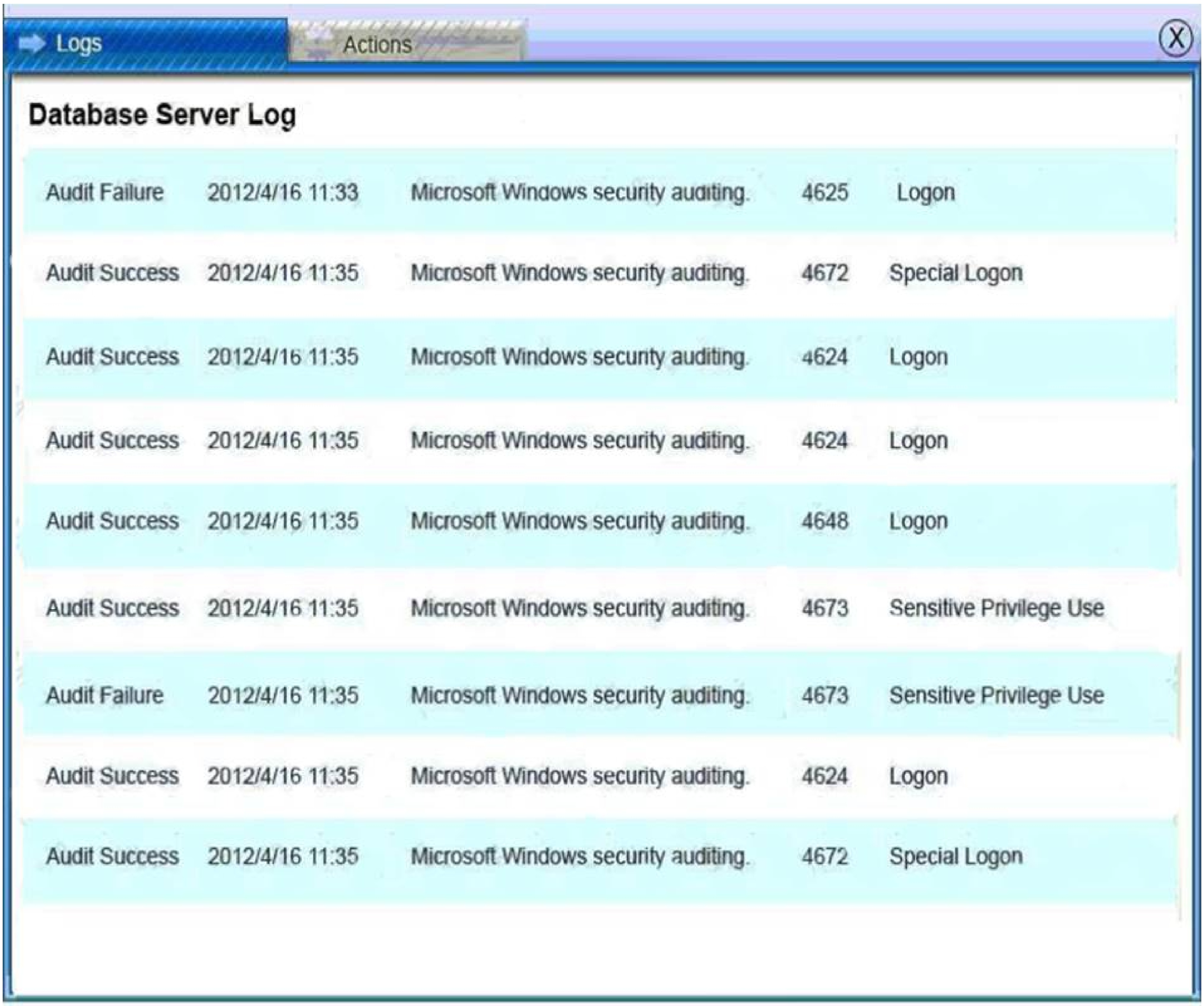


```
fcrawler.company.com - - [26/Apr/2010:00:22:45 -0400] "GET /contacts.html HTTP/1.0" 200 4595 "-"
"FAST-WebCrawler/2.1-pre2 (ashen@company.net)"

123.123.123.123 - - [26/Apr/2010:00:22:49 -0400] "GET /pics/5star2000.gif HTTP/1.0" 200 4005
"http://www.comptia.com/asctortf/" "Mozilla/4.05 (Macintosh; I; PPC)"

fcrawler.company.com - - [26/Apr/2010:00:22:50 -0400] "GET /news/news.html HTTP/1.0" 200 16716 "-"
"FAST-WebCrawler/2.1-pre2 (ashen@company.net)"

123.123.123.123 - - [26/Apr/2010:00:22:50 -0400] "GET /pics/5star.gif HTTP/1.0" 200 1031
"http://www.comptia.com/asctortf/" "Mozilla/4.05 (Macintosh; I; PPC)"

123.123.123.123 - - [26/Apr/2010:00:22:51 -0400] "GET /pics/a2hlogo.jpg HTTP/1.0" 200 4282
 "http://www.comptia.com/asctortf/" "Mozilla/4.05 (Macintosh; I; PPC)"

123.123.123.123 - - [26/Apr/2010:00:22:51 -0400] "GET /cgi-bin/newcount?command=null&jafsof3&width=4&font=
digital&noshow HTTP/1.0" 200 36 "http://www.comptia.com/asctortf/" "Mozilla/4.05 (Macintosh; I; PPC)"

ppp931.on.company.com - - [26/Apr/2010:00:22:52 -0400] "GET /download/windows/asctab31.zip HTTP/1.0" 200 1540096
 "http://www.company.com/downloads/freeware/webdevelopment/15.html" "Mozilla/4.7 [en]C-SYMPA  (Win95; U)"

123.123.123.123 - - [26/Apr/2010:00:22:53 -0400] "GET /cgi-bin/newcount?command=ls HTTP/1.0" 200 36
"http://www.comptia.com/asctortf/" "Mozilla/4.05 (Macintosh; I; PPC)"

123.123.123.123 - - [26/Apr/2010:00:22:58 -0400] "GET /cgi-bin/newcount?command=whoami  HTTP/1.0" 200 36
"http://www.comptia.com/asctortf/" "Mozilla/4.05 (Macintosh; I; PPC)"

151.44.15.252 - - [26/Apr/2010:00:22:58 -0400] "GET /cgi-bin/forum/commentary.pl/noframes/read/209 HTTP/1.1" 200
6863 "http://search.virgilio.it/search/cgi/search.cgi" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; Hotbar 4.4.7.0)"
```



```
"http://www.comptia.com/asctortf/" "Mozilla/4.05 (Macintosh; I; PPC)"

151.44.15.252 - - [26/Apr/2010:00:22:58 -0400] "GET /cgi-bin/forum/commentary.pl/noframes/read/209 HTTP/1.1" 200
6863 "http://search.virgilio.it/search/cgi/search.cgi" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; Hotbar 4.4.7.0)"

123.123.123.123 - - [26/Apr/2010:00:22:58 -0400] "GET /cgi-bin/newcount?command=ls%20-l%20/data/finance/payroll/
*.xls  HTTP/1.0" 200 36 "http://www.comptia.com/asctortf/" "Mozilla/4.05 (Macintosh; I; PPC)"

123.123.123.123 - - [26/Apr/2010:00:23:00 -0400] "GET /cgi-bin/newcount?command=scp%20/data/finance/payroll/
gl-Nov2010.xls%20root@123.123.123.123:  HTTP/1.0" 200 36 "http://www.comptia.com/asctortf/" "Mozilla/4.05 (Macintosh; I; PPC)"

213.60.233.243 - - [25/May/2010:00:17:09 +1200] "GET /internet/index.html HTTP/1.1" 200 6792
"http://www.company.com/video/streaming/http.html" "Mozilla/5.0 (X11; U; Linux i686; es-ES; rv:1.6) Gecko/20040413 Debian/1.6-5"

151.44.15.252 - - [25/May/2010:00:17:21 +1200] "GET /js/master.js HTTP/1.1" 200 2263 "http://www.company.com/
cgi-bin/forum/commentary.pl/noframes/read/209" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; Hotbar 4.4.7.0)"

151.44.15.252 - - [25/May/2010:00:17:21 +1200] "GET /css/master.css HTTP/1.1" 200 6123 "http://www.company.com/
cgi-bin/forum/commentary.pl/noframes/read/209" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; Hotbar 4.4.7.0)"

151.44.15.252 - - [25/May/2010:00:17:21 +1200] "GET /images/navigation/home1.gif HTTP/1.1" 200 2735 "http://www.company.com
/cgi-bin/forum/commentary.pl/noframes/read/209" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; Hotbar 4.4.7.0)"

151.44.15.252 - - [25/May/2010:00:17:21 +1200] "GET /data/zookeeper/ico-100.gif HTTP/1.1" 200 196 "http://www.company.com/
cgi-bin/forum/commentary.pl/noframes/read/209" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; Hotbar 4.4.7.0)"

151.44.15.252 - - [25/May/2010:00:17:22 +1200] "GET /adsense-alternate.html HTTP/1.1" 200 887 "http://www.company.com/
cgi-bin/forum/commentary.pl/noframes/read/209" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; Hotbar 4.4.7.0)"

151.44.15.252 - - [25/May/2010:00:17:39 +1200] "GET /data/zookeeper/status.html HTTP/1.1" 200 4195 "http://www.company.com/
cgi-bin/forum/comm
```

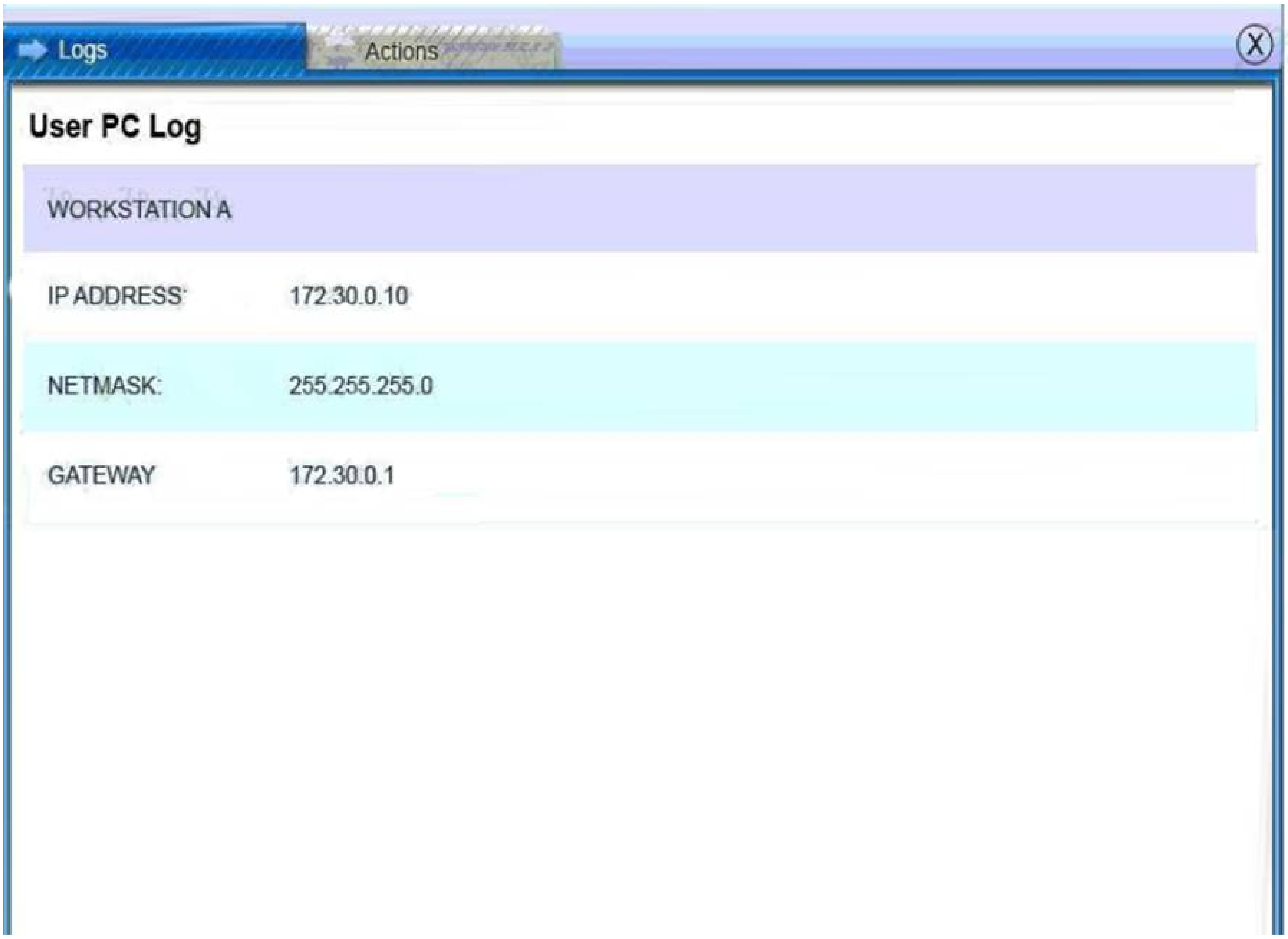
Database Server Log:



Database Server Log

```
Audit Failure    2012/4/16 11:33    Microsoft Windows security auditing.    4625    Logon
Audit Success    2012/4/16 11:35    Microsoft Windows security auditing.    4672    Special Logon
Audit Success    2012/4/16 11:35    Microsoft Windows security auditing.    4624    Logon
Audit Success    2012/4/16 11:35    Microsoft Windows security auditing.    4624    Logon
Audit Success    2012/4/16 11:35    Microsoft Windows security auditing.    4648    Logon
Audit Success    2012/4/16 11:35    Microsoft Windows security auditing.    4673    Sensitive Privilege Use
Audit Failure    2012/4/16 11:35    Microsoft Windows security auditing.    4673    Sensitive Privilege Use
Audit Success    2012/4/16 11:35    Microsoft Windows security auditing.    4624    Logon
Audit Success    2012/4/16 11:35    Microsoft Windows security auditing.    4672    Special Logon
```

Users PC Log:



User PC Log

WORKSTATION A	
IP ADDRESS:	172.30.0.10
NETMASK:	255.255.255.0
GATEWAY	172.30.0.1

NEW QUESTION 229
- (Exam Topic 3)
After correctly configuring a new wireless enabled thermostat to control the temperature of the company's meeting room, Joe, a network administrator determines that the thermostat is not connecting to the internetbased control system. Joe verifies that the thermostat received the expected network parameters and it is associated with the AP. Additionally, the other wireless mobile devices connected to the same wireless network are functioning properly. The network administrator verified that the thermostat works when tested at his residence. Which of the following is the MOST likely reason the thermostat is not connecting to the internet?

A. The company implements a captive portal
B. The thermostat is using the incorrect encryption algorithm
C. the WPA2 shared likely is incorrect
D. The company's DHCP server scope is full

Answer: C

NEW QUESTION 234
- (Exam Topic 3)
Which of the following should be used to implement voice encryption?

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

Answer: C

NEW QUESTION 235
- (Exam Topic 3)
Which of the following is the LEAST secure hashing algorithm?

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

Answer: C

NEW QUESTION 236

- (Exam Topic 3)
During a data breach cleanup, it is discovered that not all of the sites involved have the necessary data wiping tools. The necessary tools are quickly distributed to the required technicians, but when should this problem BEST be revisited?

A. Reporting
B. Preparation
C. Mitigation
D. Lessons Learned

Answer: D

NEW QUESTION 238
- (Exam Topic 3)
Given the log output:
Max 15 00:15:23.431 CRT: #SEC_LOGIN-5-LOGIN_SUCCESS:
Login Success [user: msmith] [Source: 10.0.12.45] [localport: 23] at 00:15:23:431 CET Sun Mar 15 2015
Which of the following should the network administrator do to protect data security?

A. Configure port security for logons
B. Disable telnet and enable SSH
C. Configure an AAA server
D. Disable password and enable RSA authentication

Answer: B

NEW QUESTION 243
- (Exam Topic 3)
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. Main-in-the-middle
C. URL hijacking
D. Transitive access

Answer: B

NEW QUESTION 245
- (Exam Topic 3)
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 246
- (Exam Topic 3)
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 249
- (Exam Topic 3)
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 253
- (Exam Topic 3)
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 258
- (Exam Topic 3)
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 259
- (Exam Topic 3)
A security program manager wants to actively test the security posture of a system. The system is not yet in production and has no uptime requirement or active user base.
Which of the following methods will produce a report which shows vulnerabilities that were actually exploited?

A. Peer review
B. Component testing
C. Penetration testing
D. Vulnerability testing

Answer: C

Explanation:
A penetration test, or pen test, is an attempt to evaluate the security of an IT infrastructure by safely trying to exploit vulnerabilities.

NEW QUESTION 264
- (Exam Topic 3)
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 267
- (Exam Topic 3)
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 271
- (Exam Topic 3)
An information system owner has supplied a new requirement to the development team that calls for increased non-repudiation within the application. After undergoing several audits, the owner determined that current levels of non-repudiation were insufficient.
Which of the following capabilities would be MOST appropriate to consider implementing is response to the new requirement?

A. Transitive trust
B. Symmetric encryption
C. Two-factor authentication
D. Digital signatures
E. One-time passwords

Answer: D

NEW QUESTION 273

- (Exam Topic 3)
A security administrator is developing training for corporate users on basic security principles for personal email accounts. Which of the following should be mentioned as the MOST secure way for password recovery?

A. Utilizing a single Qfor password recovery
B. Sending a PIN to a smartphone through text message
C. Utilizing CAPTCHA to avoid brute force attacks
D. Use a different e-mail address to recover password

Answer: B

NEW QUESTION 276
- (Exam Topic 3)
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 279
- (Exam Topic 3)
The firewall administrator is adding a new certificate for the company's remote access solution. The solution requires that the uploaded file contain the entire certificate chain for the certificate to load properly. The administrator loads the company certificate and the root CA certificate into the file. The file upload is rejected. Which of the following is required to complete the certificate chain?

A. Certificate revocation list
B. Intermediate authority
C. Recovery agent
D. Root of trust

Answer: B

NEW QUESTION 280
- (Exam Topic 3)
Joe, the security administrator, sees this in a vulnerability scan report:
"The server 10.1.2.232 is running Apache 2.2.20 which may be vulnerable to a mod_cgi exploit."
Joe verifies that the mod_cgi module is not enabled on 10.1.2.232. This message is an example of:

A. a threat.
B. a risk.
C. a false negative.
D. a false positive.

Answer: D

NEW QUESTION 284
- (Exam Topic 3)
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 287
- (Exam Topic 3)
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 292
- (Exam Topic 3)
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

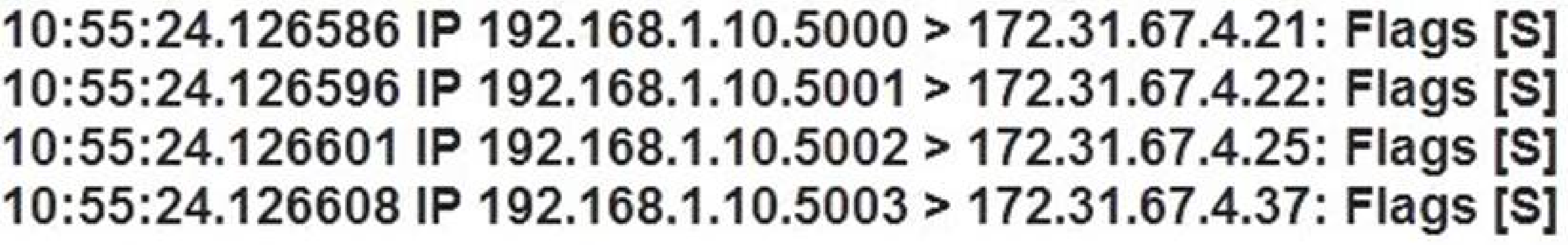
Explanation:
Steganography is the process of hiding a message in another message so as to obfuscate its importance. It is also the process of hiding a message in a medium such as a digital image, audio file, or other file. In theory, doing this prevents analysts from detecting the real message. You could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

NEW QUESTION 293
- (Exam Topic 4)
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 295
- (Exam Topic 4)
A security analyst is reviewing the following packet capture of an attack directed at a company's server located in the DMZ:



```
10:55:24.126586 IP 192.168.1.10.5000 > 172.31.67.4.21: Flags [S]
10:55:24.126596 IP 192.168.1.10.5001 > 172.31.67.4.22: Flags [S]
10:55:24.126601 IP 192.168.1.10.5002 > 172.31.67.4.25: Flags [S]
10:55:24.126608 IP 192.168.1.10.5003 > 172.31.67.4.37: Flags [S]
```

Which of the following ACLs provides the BEST protection against the above attack and any further attacks from the same IP, while minimizing service interruption?

A. DENY TCO From ANY to 172.31.64.4
B. Deny UDP from 192.168.1.0/24 to 172.31.67.0/24
C. Deny IP from 192.168.1.10/32 to 0.0.0.0/0
D. Deny TCP from 192.168.1.10 to 172.31.67.4

Answer: D

NEW QUESTION 299
- (Exam Topic 4)
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 302
- (Exam Topic 4)
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 form 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 303
- (Exam Topic 4)
Which of the following is commonly done as part of a vulnerability scan?

A. Exploiting misconfigured applications
B. Cracking employee passwords
C. Sending phishing emails to employees
D. Identifying unpatched workstations

Answer: D

NEW QUESTION 305
- (Exam Topic 4)
A security analyst is working on a project that requires the implementation of a stream cipher. Which of the following should the analyst use?

A. Hash function
B. Elliptic curve
C. Symmetric algorithm
D. Public key cryptography

Answer: C

NEW QUESTION 310
- (Exam Topic 4)
A consultant has been tasked to assess a client's network. The client reports frequent network outages. Upon viewing the spanning tree configuration, the consultant notices that an old and law performing edge switch on the network has been elected to be the root bridge. Which of the following explains this scenario?

A. The switch also serves as the DHCP server
B. The switch has the lowest MAC address
C. The switch has spanning tree loop protection enabled
D. The switch has the fastest uplink port

Answer: C

NEW QUESTION 314
- (Exam Topic 4)
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 318
- (Exam Topic 4)
A security auditor is putting together a report for the Chief Executive Officer (CEO) on personnel security and its impact on the security posture of the whole organization. Which of the following would be the MOST important factor to consider when it comes to personnel security?

A. Insider threats
B. Privilege escalation
C. Hacktivist
D. Phishing through social media
E. Corporate espionage

Answer: A

NEW QUESTION 320
- (Exam Topic 4)
When generating a request for a new x.509 certificate for securing a website, which of the following is the MOST appropriate hashing algorithm?

A. RC4
B. MD5
C. HMAC
D. SHA

Answer: B

NEW QUESTION 323
- (Exam Topic 4)
A security administrator needs to address the following audit recommendations for a public-facing SFTP server:
Users should be restricted to upload and download files to their own home directories only. Users should not be allowed to use interactive shell login.
Which of the following configuration parameters should be implemented? (Select TWO).

A. PermitTunnel
B. ChrootDirectory
C. PermitTTY
D. AllowTcpForwarding
E. IgnoreRhosts

Answer: BC

NEW QUESTION 328
- (Exam Topic 4)
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 333
- (Exam Topic 4)
Which of the following BEST describes a network-based attack that can allow an attacker to take full control of a vulnerable host?

A. Remote exploit
B. Amplification
C. Sniffing
D. Man-in-the-middle

Answer: A

NEW QUESTION 337
- (Exam Topic 4)
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 340
- (Exam Topic 4)
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 341
- (Exam Topic 4)
A server administrator needs to administer a server remotely using RDP, but the specified port is closed on the outbound firewall on the network. The access the server using RDP on a port other than the typical registered port for the RDP protocol?

A. TLS
B. MPLS
C. SCP
D. SSH

Answer: A

NEW QUESTION 346
- (Exam Topic 4)
A member of the admins group reports being unable to modify the "changes" file on a server. The permissions on the file are as follows:
Permissions User Group File
-rwxrw-r--+ Admins Admins changes
Based on the output above, which of the following BEST explains why the user is unable to modify the "changes" file?

A. The SELinux mode on the server is set to "enforcing."
B. The SELinux mode on the server is set to "permissive."
C. An FACL has been added to the permissions for the file.
D. The admins group does not have adequate permissions to access the file.

Answer: C

NEW QUESTION 350

- (Exam Topic 4)
The POODLE attack is an MITM exploit that affects:

A. TLS1.0 with CBC mode cipher
B. SSLv2.0 with CBC mode cipher
C. SSLv3.0 with CBC mode cipher
D. SSLv3.0 with ECB mode cipher

Answer: C

Explanation:
A flaw was found in the way SSL 3.0 handled padding bytes when decrypting messages encrypted using block ciphers in cipher block chaining (CBC) mode.
How To Protect your Server Against the POODLE SSLv3 Vulnerability On October 14th, 2014, a vulnerability in version 3 of the SSL encryption protocol was disclosed. This vulnerability, dubbed POODLE (Padding Oracle On Downgraded Legacy Encryption), allows an attacker to read information encrypted with this version of the protocol in plain text using a man-in-the-middle attack.
Although SSLv3 is an older version of the protocol which is mainly obsolete, many pieces of software still fall back on SSLv3 if better encryption options are not available. More importantly, it is possible for an attacker to force SSLv3 connections if it is an available alternative for both participants attempting a connection.
The POODLE vulnerability affects any services or clients that make it possible to communicate using SSLv3. Because this is a flaw with the protocol design, and not an implementation issue, every piece of software that uses SSLv3 is vulnerable.
To find out more information about the vulnerability, consult the CVE information found at CVE-2014-3566. What is the POODLE Vulnerability?
The POODLE vulnerability is a weakness in version 3 of the SSL protocol that allows an attacker in a man-inthe-middle context to decipher the plain text content of an SSLv3 encrypted message.
Who is Affected by this Vulnerability?
This vulnerability affects every piece of software that can be coerced into communicating with SSLv3. This means that any software that implements a fallback mechanism that includes SSLv3 support is vulnerable and can be exploited.
Some common pieces of software that may be affected are web browsers, web servers, VPN servers, mail servers, etc.
How Does It Work?
In short, the POODLE vulnerability exists because the SSLv3 protocol does not adequately check the padding bytes that are sent with encrypted messages. Since these cannot be verified by the receiving party, an attacker can replace these and pass them on to the intended destination. When done in a specific way, the modified payload will potentially be accepted by the recipient without complaint.
An average of once out of every 256 requests will accepted at the destination, allowing the attacker to decrypt a single byte. This can be repeated easily in order to progressively decrypt additional bytes. Any attacker able to repeatedly force a participant to resend data using this protocol can break the encryption in a very short amount of time.
How Can I Protect Myself?
Actions should be taken to ensure that you are not vulnerable in your roles as both a client and a server. Since encryption is usually negotiated between clients and servers, it is an issue that involves both parties.
Servers and clients should should take steps to disable SSLv3 support completely. Many applications use better encryption by default, but implement SSLv3 support as a fallback option.
This should be disabled, as a malicious user can force SSLv3 communication if both participants allow it as an acceptable method.

NEW QUESTION 352
- (Exam Topic 4)
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 353
- (Exam Topic 4)
The security administrator has noticed cars parking just outside of the building fence line. Which of the following security measures can the administrator use to help protect the company's WiFi network against war driving? (Select TWO)

A. Create a honeynet
B. Reduce beacon rate
C. Add false SSIDs
D. Change antenna placement
E. Adjust power level controls
F. Implement a warning banner

Answer: DE

NEW QUESTION 358
- (Exam Topic 4)
Which of the following would allow for the QUICKEST restoration of a server into a warm recovery site in a case in which server data mirroring is not enabled?

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

Answer: C

NEW QUESTION 363
- (Exam Topic 4)
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 366
- (Exam Topic 4)
A security administrator is tasked with implementing centralized management of all network devices. Network administrators will be required to logon to network devices using their LDAP credentials. All command executed by network administrators on network devices must fall within a preset list of authorized commands and must be logged to a central facility. Which of the following configuration commands should be implemented to enforce this requirement?

A. LDAP server 10.55.199.3
B. CN=company, CN=com, OU=netadmin, DC=192.32.10.233
C. SYSLOG SERVER 172.16.23.50
D. TACAS server 192.168.1.100

Answer: B

NEW QUESTION 370
- (Exam Topic 4)
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 372
- (Exam Topic 4)
The help desk is receiving numerous password change alerts from users in the accounting department. These alerts occur multiple times on the same day for each of the affected users' accounts. Which of the following controls should be implemented to curtail this activity?

A. Password Reuse
B. Password complexity
C. Password History
D. Password Minimum age

Answer: D

NEW QUESTION 377
- (Exam Topic 4)
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 378
- (Exam Topic 4)
Which of the following is the BEST reason for salting a password hash before it is stored in a database?

A. To prevent duplicate values from being stored
B. To make the password retrieval process very slow
C. To protect passwords from being saved in readable format
D. To prevent users from using simple passwords for their access credentials

Answer: A

NEW QUESTION 381
- (Exam Topic 4)
An attacker captures the encrypted communication between two parties for a week, but is unable to decrypt the messages. The attacker then compromises the session key during one exchange and successfully compromises a single message. The attacker plans to use this key to decrypt previously captured and future communications, but is unable to. This is because the encryption scheme in use adheres to:

A. Asymmetric encryption
B. Out-of-band key exchange
C. Perfect forward secrecy
D. Secure key escrow

Answer: C

NEW QUESTION 385
- (Exam Topic 4)
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 390
- (Exam Topic 4)
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 391
- (Exam Topic 4)
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 392
- (Exam Topic 4)
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 396
- (Exam Topic 4)
The IT department needs to prevent users from installing untested applications. Which of the following would provide the BEST solution?

A. Job rotation
B. Least privilege
C. Account lockout
D. Antivirus

Answer: B

NEW QUESTION 397
- (Exam Topic 4)
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 400
- (Exam Topic 4)
A vice president at a manufacturing organization is concerned about desktops being connected to the network. Employees need to log onto the desktops' local account to verify that a product is being created within specifications; otherwise, the desktops should be as isolated as possible. Which of the following is the BEST way to accomplish this?

A. Put the desktops in the DMZ.
B. Create a separate VLAN for the desktops.
C. Air gap the desktops.
D. Join the desktops to an ad-hoc network.

Answer: C

NEW QUESTION 402
- (Exam Topic 4)
During a third-party audit, it is determined that a member of the firewall team can request, approve, and implement a new rule-set on the firewall. Which of the following will the audit team most l likely recommend during the audit out brief?

A. Discretionary access control for the firewall team
B. Separation of duties policy for the firewall team
C. Least privilege for the firewall team
D. Mandatory access control for the firewall team

Answer: B

NEW QUESTION 405
- (Exam Topic 5)
The help desk received a call after hours from an employee who was attempting to log into the payroll server remotely. When the help desk returned the call the next morning, the employee was able to log into the server remotely without incident. However, the incident occurred again the next evening. Which of the following BEST describes the cause of the issue?

A. The password expired on the account and needed to be reset
B. The employee does not have the rights needed to access the database remotely
C. Time-of-day restrictions prevented the account from logging in
D. The employee's account was locked out and needed to be unlocked

Answer: C

NEW QUESTION 408
- (Exam Topic 5)
A security engineer is configuring a wireless network with EAP-TLS. Which of the following activities is a requirement for this configuration?

A. Setting up a TACACS+ server
B. Configuring federation between authentication servers
C. Enabling TOTP
D. Deploying certificates to endpoint devices

Answer: D

NEW QUESTION 412
- (Exam Topic 5)
A security analyst is reviewing an assessment report that includes software versions, running services, supported encryption algorithms, and permission settings. Which of the following produced the report?

A. Vulnerability scanner
B. Protocol analyzer
C. Network mapper
D. Web inspector

Answer: A

NEW QUESTION 415
- (Exam Topic 5)
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 419

- (Exam Topic 5)
A security administrator is diagnosing a server where the CPU utilization is at 100% for 24 hours. The main culprit of CPU utilization is the antivirus program. Which of the following issue could occur if left unresolved? (Select TWO)

A. MITM attack
B. DoS attack
C. DLL injection
D. Buffer overflow
E. Resource exhaustion

Answer: BE

NEW QUESTION 421
- (Exam Topic 5)
Which of the following locations contain the MOST volatile data?

A. SSD
B. Paging file
C. RAM
D. Cache memory

Answer: D

NEW QUESTION 425
- (Exam Topic 5)
Company A has acquired Company B. Company A has different domains spread globally, and typically migrates its acquisitions infrastructure under its own domain infrastructure. Company B, however, cannot be merged into Company A's domain infrastructure. Which of the following methods would allow the two companies to access one another's resources?

A. Attestation
B. Federation
C. Single sign-on
D. Kerberos

Answer: B

NEW QUESTION 427
- (Exam Topic 5)
A technician is configuring a load balancer for the application team to accelerate the network performance of their applications. The applications are hosted on multiple servers and must be redundant. Given this scenario, which of the following would be the BEST method of configuring the load balancer?

A. Round-robin
B. Weighted
C. Least connection
D. Locality-based

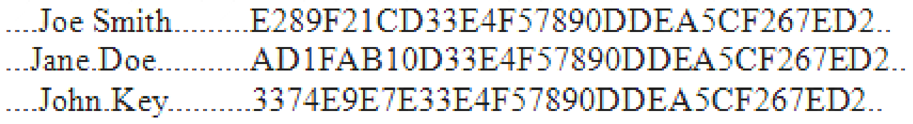
Answer: D

NEW QUESTION 430
- (Exam Topic 5)
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 435
- (Exam Topic 5)
A hacker has a packet capture that contains:



```
....Joe Smith.........E289F21CD33E4F57890DDEA5CF267ED2..
...Jane.Doe...........AD1FAB10D33E4F57890DDEA5CF267ED2..
....John.Key..........3374E9E7E33E4F57890DDEA5CF267ED2..
```

Which of the following tools will the hacker use against this type of capture?

A. Password cracker
B. Vulnerability scanner
C. DLP scanner
D. Fuzzer

Answer: A

NEW QUESTION 436
- (Exam Topic 5)

Which of the following is the BEST reason to run an untested application is a sandbox?

A. To allow the application to take full advantage of the host system's resources and storage
B. To utilize the host systems antivirus and firewall applications instead of running it own protection
C. To prevent the application from acquiring escalated privileges and accessing its host system
D. To increase application processing speed so the host system can perform real-time logging

Answer: C

NEW QUESTION 439
- (Exam Topic 5)
An organization is expanding its network team. Currently, it has local accounts on all network devices, but with growth, it wants to move to centrally managed authentication. Which of the following are the BEST solutions for the organization? (Select TWO)

A. TACACS+
B. CHAP
C. LDAP
D. RADIUS
E. MSCHAPv2

Answer: AD

NEW QUESTION 444
- (Exam Topic 5)
A security analyst is reviewing patches on servers. One of the servers is reporting the following error message in the WSUS management console:
The computer has not reported status in 30 days.
Given this scenario, which of the following statements BEST represents the issue with the output above?

A. The computer in QUESTION NO: has not pulled the latest ACL policies for the firewall.
B. The computer in QUESTION NO: has not pulled the latest GPO policies from the management server.
C. The computer in QUESTION NO: has not pulled the latest antivirus definitions from the antivirus program.
D. The computer in QUESTION NO: has not pulled the latest application software updates.

Answer: D

NEW QUESTION 449
- (Exam Topic 5)
Which of the following authentication concepts is a gait analysis MOST closely associated?

A. Somewhere you are
B. Something you are
C. Something you do
D. Something you know

Answer: C

NEW QUESTION 453
- (Exam Topic 5)
Which of the following would be considered multifactor authentication?

A. Hardware token and smart card
B. Voice recognition and retina scan
C. Strong password and fingerprint
D. PIN and security QUESTION NO:s

Answer: C

NEW QUESTION 457
- (Exam Topic 5)
A security architect has convened a meeting to discuss an organization's key management policy. The organization has a reliable internal key management system, and some argue that it would be best to manage the cryptographic keys internally as opposed to using a solution from a third party. The company should use:

A. the current internal key management system.
B. a third-party key management system that will reduce operating costs.
C. risk benefits analysis results to make a determination.
D. a software solution including secure key escrow capabilities.

Answer: C

NEW QUESTION 462
- (Exam Topic 5)
A penetration tester is conducting an assessment on Comptia.org and runs the following command from a coffee shop while connected to the public Internet:
c:\nslookup - querytype=MX comptia.org
Server: Unknown Address: 198.51.100.45
comptia.org MX preference=10, mail exchanger = 92.68.102.33 comptia.org MX preference=20, mail exchanger = exchg1.comptia.org exchg1.comptia.org internet address = 192.168.102.67

Which of the following should the penetration tester conclude about the command output?

A. The public/private views on the Comptia.org DNS servers are misconfigured.
B. Comptia.org is running an older mail server, which may be vulnerable to exploits.
C. The DNS SPF records have not been updated for Comptia.org.
D. 192.168.102.67 is a backup mail server that may be more vulnerable to attack.

Answer: D

NEW QUESTION 464
- (Exam Topic 5)
A security manager is creating an account management policy for a global organization with sales personnel who must access corporate network resources while traveling all over the world. Which of the following practices is the security manager MOST likely to enforce with the policy? (Select TWO)

A. Time-of-day restrictions
B. Password complexity
C. Location-based authentication
D. Group-based access control
E. Standard naming convention

Answer: BD

NEW QUESTION 469
- (Exam Topic 5)
User from two organizations, each with its own PKI, need to begin working together on a joint project. Which of the following would allow the users of the separate PKIs to work together without connection errors?

A. Trust model
B. Stapling
C. Intermediate CA
D. Key escrow

Answer: A

NEW QUESTION 474
- (Exam Topic 5)
A company has two wireless networks utilizing captive portals. Some employees report getting a trust error in their browsers when connecting to one of the networks. Both captive portals are using the same server certificate for authentication, but the analyst notices the following differences between the two certificate details:
Certificate 1
Certificate Path: Geotrust Global CA
*company.com Certificate 2 Certificate Path:
*company.com
Which of the following would resolve the problem?

A. Use a wildcard certificate.
B. Use certificate chaining.
C. Use a trust model.
D. Use an extended validation certificate.

Answer: B

NEW QUESTION 475
- (Exam Topic 5)
Which of the following types of penetration test will allow the tester to have access only to password hashes prior to the penetration test?

A. Black box
B. Gray box
C. Credentialed
D. White box

Answer: B

NEW QUESTION 478
- (Exam Topic 5)
A forensic investigator has run into difficulty recovering usable files from a SAN drive. Which of the following SAN features might have caused the problem?

A. Storage multipaths
B. Deduplication
C. iSCSI initiator encryption
D. Data snapshots

Answer: B

NEW QUESTION 482
- (Exam Topic 5)
A security analyst is attempting to identify vulnerabilities in a customer's web application without impacting the system or its data. Which of the following BEST

describes the vulnerability scanning concept performed?

A. Aggressive scan
B. Passive scan
C. Non-credentialed scan
D. Compliance scan

Answer: B

Explanation:
Passive scanning is a method of vulnerability detection that relies on information gleaned from network data that is captured from a target computer without direct interaction.
Packet sniffing applications can be used for passive scanning to reveal information such as operating system, known protocols running on non-standard ports and active network applications with known bugs. Passive scanning may be conducted by a network administrator scanning for security vulnerabilities or by an intruder as a preliminary to an active attack.
For an intruder, passive scanning's main advantage is that it does not leave a trail that could alert users or administrators to their activities. For an administrator, the main advantage is that it doesn't risk causing undesired behavior on the target computer, such as freezes. Because of these advantages, passive scanning need not be limited to a narrow time frame to minimize risk or disruption, which means that it is likely to return more information.
Passive scanning does have limitations. It is not as complete in detail as active vulnerability scanning and cannot detect any applications that are not currently sending out traffic; nor can it distinguish false information put out for obfuscation.

NEW QUESTION 485
- (Exam Topic 5)
A user typically works remotely over the holidays using a web-based VPN to access corporate resources. The user reports getting untrusted host errors and being unable to connect. Which of the following is MOST likely the case?

A. The certificate has expired
B. The browser does not support SSL
C. The user's account is locked out
D. The VPN software has reached the seat license maximum

Answer: A

NEW QUESTION 489
- (Exam Topic 5)
While working on an incident, Joe, a technician, finished restoring the OS and applications on a workstation from the original mediA. Joe is about to begin copying the user's files back onto the hard drive. Which of the following incident response steps is Joe working on now?

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

Answer: A

NEW QUESTION 491
- (Exam Topic 5)
A remote intruder wants to take inventory of a network so exploits can be researched. The intruder is looking for information about software versions on the network. Which of the following techniques is the intruder using?

A. Banner grabbing
B. Port scanning
C. Packet sniffing
D. Virus scanning

Answer: A

NEW QUESTION 493
- (Exam Topic 5)
A security auditor is testing perimeter security in a building that is protected by badge readers. Which of the following types of attacks would MOST likely gain access?

A. Phishing
B. Man-in-the-middle
C. Tailgating
D. Watering hole
E. Shoulder surfing

Answer: C

NEW QUESTION 498
- (Exam Topic 5)
A network administrator needs to allocate a new network for the R&D group. The network must not be accessible from the Internet regardless of the network firewall or other external misconfigurations. Which of the following settings should the network administrator implement to accomplish this?

A. Configure the OS default TTL to 1
B. Use NAT on the R&D network
C. Implement a router ACL

D. Enable protected ports on the switch

Answer: A

NEW QUESTION 501
- (Exam Topic 5)
An analyst is using a vulnerability scanner to look for common security misconfigurations on devices. Which of the following might be identified by the scanner? (Select TWO).

A. The firewall is disabled on workstations.
B. SSH is enabled on servers.
C. Browser homepages have not been customized.
D. Default administrator credentials exist on networking hardware.
E. The OS is only set to check for updates once a day.

Answer: AB

NEW QUESTION 505
- (Exam Topic 5)
A security administrator is trying to eradicate a worm, which is spreading throughout the organization, using an old remote vulnerability in the SMB protocol. The worm uses Nmap to identify target hosts within the company. The administrator wants to implement a solution that will eradicate the current worm and any future attacks that may be using zero-day vulnerabilities. Which of the following would BEST meet the requirements when implemented?

A. Host-based firewall
B. Enterprise patch management system
C. Network-based intrusion prevention system
D. Application blacklisting
E. File integrity checking

Answer: C

NEW QUESTION 509
- (Exam Topic 5)
A security administrator installed a new network scanner that identifies new host systems on the network. Which of the following did the security administrator install?

A. Vulnerability scanner
B. Network-based IDS
C. Rogue system detection
D. Configuration compliance scanner

Answer: C

NEW QUESTION 513
- (Exam Topic 5)
A security analyst is securing smartphones and laptops for a highly mobile workforce.
Priorities include:

▶ Remote wipe capabilities
▶ Geolocation services
▶ Patch management and reporting
▶ Mandatory screen locks
▶ Ability to require passcodes and pins
▶ Ability to require encryption

Which of the following would BEST meet these requirements?

A. Implementing MDM software
B. Deploying relevant group policies to the devices
C. Installing full device encryption
D. Removing administrative rights to the devices

Answer: A

NEW QUESTION 517
- (Exam Topic 5)
Several workstations on a network are found to be on OS versions that are vulnerable to a specific attack. Which of the following is considered to be a corrective action to combat this vulnerability?

A. Install an antivirus definition patch
B. Educate the workstation users
C. Leverage server isolation
D. Install a vendor-supplied patch
E. Install an intrusion detection system

Answer: D

NEW QUESTION 522
- (Exam Topic 5)
When attempting to secure a mobile workstation, which of the following authentication technologies rely on the user's physical characteristics? (Select TWO)

A. MAC address table
B. Retina scan
C. Fingerprint scan
D. Two-factor authentication
E. CAPTCHA
F. Password string

Answer: BC

NEW QUESTION 524
- (Exam Topic 5)
An organization has several production-critical SCADA supervisory systems that cannot follow the normal 30-day patching policy. Which of the following BEST maximizes the protection of these systems from malicious software?

A. Configure a firewall with deep packet inspection that restricts traffic to the systems.
B. Configure a separate zone for the systems and restrict access to known ports.
C. Configure the systems to ensure only necessary applications are able to run.
D. Configure the host firewall to ensure only the necessary applications have listening ports

Answer: A

NEW QUESTION 526
- (Exam Topic 5)
When it comes to cloud computing, if one of the requirements for a project is to have the most control over the systems in the cloud, which of the following is a service model that would be BEST suited for this goal?

A. Infrastructure
B. Platform
C. Software
D. Virtualization

Answer: A

NEW QUESTION 527
- (Exam Topic 5)
A penetration tester has written an application that performs a bit-by-bit XOR 0xFF operation on binaries prior to transmission over untrusted mediA. Which of the following BEST describes the action performed by this type of application?

A. Hashing
B. Key exchange
C. Encryption
D. Obfusication

Answer: D

NEW QUESTION 530
- (Exam Topic 5)
A stock trading company had the budget for enhancing its secondary datacenter approved. Since the main site is a hurricane-affected area and the disaster recovery site is 100 mi (161 km) away, the company wants to ensure its business is always operational with the least amount of man hours needed. Which of the following types of disaster recovery sites should the company implement?

A. Hot site
B. Warm site
C. Cold site
D. Cloud-based site

Answer: D

NEW QUESTION 534
- (Exam Topic 5)
When attackers use a compromised host as a platform for launching attacks deeper into a company's network, it is said that they are:

A. escalating privilege
B. becoming persistent
C. fingerprinting
D. pivoting

Answer: D

NEW QUESTION 535
- (Exam Topic 5)
An organization wants to upgrade its enterprise-wide desktop computer solution. The organization currently has 500 PCs active on the network. the Chief

Information Security Officer (CISO) suggests that the organization employ desktop imaging technology for such a large scale upgrade. Which of the following is a security benefit of implementing an imaging solution?

A. it allows for faster deployment
B. it provides a consistent baseline
C. It reduces the number of vulnerabilities
D. It decreases the boot time

Answer: B

NEW QUESTION 538
- (Exam Topic 5)
Company A agrees to provide perimeter protection, power, and environmental support with measurable goals for Company B, but will not be responsible for user authentication or patching of operating systems within the perimeter. Which of the following is being described?

A. Service level agreement
B. Memorandum of understanding
C. Business partner agreement
D. Interoperability agreement

Answer: A

NEW QUESTION 543
- (Exam Topic 5)
Ann, a customer, is reporting that several important files are missing from her workstation. She recently
received communication from an unknown party who is requesting funds to restore the files. Which of the following attacks has occurred?

A. Ransomware
B. Keylogger
C. Buffer overflow
D. Rootkit

Answer: A

NEW QUESTION 546
- (Exam Topic 5)
A company stores highly sensitive data files used by the accounting system on a server file share. The accounting system uses a service account named accounting-svc to access the file share. The data is protected will a full disk encryption, and the permissions are set as follows:
File system permissions: Users = Read Only Share permission: accounting-svc = Read Only
Given the listed protections are in place and unchanged, to which of the following risks is the data still subject?

A. Exploitation of local console access and removal of data
B. Theft of physical hard drives and a breach of confidentiality
C. Remote exfiltration of data using domain credentials
D. Disclosure of sensitive data to third parties due to excessive share permissions

Answer: A

NEW QUESTION 547
- (Exam Topic 5)
Attackers have been using revoked certificates for MITM attacks to steal credentials from employees of Company.com. Which of the following options should Company.com implement to mitigate these attacks?

A. Captive portal
B. OCSP stapling
C. Object identifiers
D. Key escrow
E. Extended validation certificate

Answer: B

NEW QUESTION 551
- (Exam Topic 5)
Confidential emails from an organization were posted to a website without the organization's knowledge. Upon investigation, it was determined that the emails were obtained from an internal actor who sniffed the emails in plain text. Which of the following protocols, if properly implemented, would have MOST likely prevented the emails from being sniffed? (Select TWO)

A. Secure IMAP
B. DNSSEC
C. S/MIME
D. SMTPS
E. HTTPS

Answer: CD

NEW QUESTION 554
- (Exam Topic 5)

A company wants to implement an access management solution that allows employees to use the same usernames and passwords for multiple applications without having to keep multiple credentials synchronized. Which of the following solutions would BEST meet these requirements?

A. Multifactor authentication
B. SSO
C. Biometrics
D. PKI
E. Federation

Answer: B

NEW QUESTION 555
- (Exam Topic 5)
Which of the following is used to validate the integrity of data?

A. CBC
B. Blowfish
C. MD5
D. RSA

Answer: C

NEW QUESTION 559
- (Exam Topic 5)
A forensic expert is given a hard drive from a crime scene and is asked to perform an investigation. Which of the following is the FIRST step the forensic expert needs to take the chain of custody?

A. Make a forensic copy
B. Create a hash of the hard rive
C. Recover the hard drive data
D. Update the evidence log

Answer: D

NEW QUESTION 560
- (Exam Topic 5)
Ann is the IS manager for several new systems in which the classification of the systems' data are being decided. She is trying to determine the sensitivity level of the data being processed. Which of the following people should she consult to determine the data classification?

A. Steward
B. Custodian
C. User
D. Owner

Answer: D

NEW QUESTION 565
- (Exam Topic 5)
Which of the following controls allows a security guard to perform a post-incident review?

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

Answer: C

NEW QUESTION 570
- (Exam Topic 5)
A systems administrator found a suspicious file in the root of the file system. The file contains URLs, usernames, passwords, and text from other documents being edited on the system. Which of the following types of malware would generate such a file?

A. Keylogger
B. Rootkit
C. Bot
D. RAT

Answer: A

NEW QUESTION 572
- (Exam Topic 5)
A systems administrator wants to implement a wireless protocol that will allow the organization to authenticate mobile devices prior to providing the user with a captive portal login. Which of the following should the systems administrator configure?

A. L2TP with MAC filtering
B. EAP-TTLS
C. WPA2-CCMP with PSK

D. RADIUS federation

Answer: D

Explanation:
RADIUS generally includes 802.1X that pre-authenticates devices.

NEW QUESTION 577
- (Exam Topic 5)
A home invasion occurred recently in which an intruder compromised a home network and accessed a WiFIenabled baby monitor while the baby's parents were sleeping.
Which of the following BEST describes how the intruder accessed the monitor?

A. Outdated antivirus
B. WiFi signal strength
C. Social engineering
D. Default configuration

Answer: D

NEW QUESTION 579
- (Exam Topic 5)
A company has noticed multiple instances of proprietary information on public websites. It has also observed an increase in the number of email messages sent to random employees containing malicious links and PDFs. Which of the following changes should the company make to reduce the risks associated with phishing attacks? (Select TWO)

A. Install an additional firewall
B. Implement a redundant email server
C. Block access to personal email on corporate systems
D. Update the X.509 certificates on the corporate email server
E. Update corporate policy to prohibit access to social media websites
F. Review access violation on the file server

Answer: CE

NEW QUESTION 582
- (Exam Topic 5)
A security administrator learns that PII, which was gathered by the organization, has been found in an open
forum. As a result, several C-level executives found their identities were compromised, and they were victims of a recent whaling attack.
Which of the following would prevent these problems in the future? (Select TWO).

A. Implement a reverse proxy.
B. Implement an email DLP.
C. Implement a spam filter.
D. Implement a host-based firewall.
E. Implement a HIDS.

Answer: BC

NEW QUESTION 584
- (Exam Topic 5)
A security analyst is acquiring data from a potential network incident. Which of the following evidence is the analyst MOST likely to obtain to determine the incident?

A. Volatile memory capture
B. Traffic and logs
C. Screenshots
D. System image capture

Answer: B

NEW QUESTION 586
- (Exam Topic 5)
A security technician has been receiving alerts from several servers that indicate load balancers have had a significant increase in traffic. The technician initiates a system scan. The scan results illustrate that the disk space on several servers has reached capacity. The scan also indicates that incoming internet traffic to the servers has increased. Which of the following is the MOST likely cause of the decreased disk space?

A. Misconfigured devices
B. Logs and events anomalies
C. Authentication issues
D. Unauthorized software

Answer: D

NEW QUESTION 591
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