

CompTIA

Exam Questions SY0-501

CompTIA Security+ Certification Exam





NEW QUESTION 1

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

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

Answer: A

NEW QUESTION 2

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

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

Answer: C

NEW QUESTION 3

Which of the following types of keys is found in a key escrow?

- A. Public
- B. Private
- C. Shared
- D. Session

Answer: B

Explanation: https://www.professormesser.com/security-plus/sy0-401/key-escrow-3/

NEW QUESTION 4

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 5

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

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 7

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

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

Answer: D

NEW QUESTION 8

After a user reports stow computer performance, a systems administrator detects a suspicious file, which was installed as part of a freeware software package. The systems administrator reviews the output below:

c:\Windows\system32>netstat -nab

Active Connections

Proto Local Address Foreign Address State

TCP 0.0.0.0:135 0.0.0.0:0 LISTENING RpcSs [svchost.exe]

TCP 0.0.0.0:445 0.0.0.0:0 LISTENING [svchost.exe]

TCP 192.168.1.10:5000 10.37.213.20 ESTABLISHED winserver.exe

UDP 192.168.1.10:1900 *.* SSDPSVR

Based on the above information, which of the following types of malware was installed on the user's computer?

- A. RAT
- B. Keylogger
- C. Spyware
- D. Worm
- E. Bot

Answer: D

NEW QUESTION 9

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

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

Answer: B

NEW QUESTION 10

A network administrator at a small office wants to simplify the configuration of mobile clients connecting to an encrypted wireless network. Which of the following should be implemented in the administrator does not want to provide the wireless password or he certificate to the employees?

- A. WPS
- B. 802.1x
- C. WPA2-PSK
- D. TKIP

Answer: A

NEW QUESTION 10

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

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

Answer: CE

NEW QUESTION 15

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

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

Answer: D

NEW QUESTION 19

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 22

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 23

A security administrator is developing controls for creating audit trails and tracking if a PHI data breach is to occur. The administrator has been given the following requirements:

- All access must be correlated to a user account.
- All user accounts must be assigned to a single individual.
- User access to the PHI data must be recorded.
- Anomalies in PHI data access must be reported.
- Logs and records cannot be deleted or modified.

Which of the following should the administrator implement to meet the above requirements? (Select three.)

- A. Eliminate shared accounts.
- B. Create a standard naming convention for accounts.
- C. Implement usage auditing and review.
- D. Enable account lockout thresholds.
- E. Copy logs in real time to a secured WORM drive.
- F. Implement time-of-day restrictions.
- G. Perform regular permission audits and reviews.

Answer: ACG

NEW QUESTION 25

A botnet has hit a popular website with a massive number of GRE-encapsulated packets to perform a DDoS attack. News outlets discover a certain type of refrigerator was exploited and used to send outbound packets to the website that crashed. To which of the following categories does the refrigerator belong?

A. SoC

B. ICS

C. IoT

D. MFD

Answer: C

NEW QUESTION 28

An organization wishes to provide better security for its name resolution services. Which of the following technologies BEST supports the deployment of DNSSEC at the organization?

A. LDAP

B. TPM

C. TLS

D. SSL E. PKI

Answer: E

NEW QUESTION 33

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

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

Answer: D



NEW QUESTION 37

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 39

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

A. RA

B. CA

C. CRL

D. CSR

Answer: B

NEW QUESTION 43

An organization has determined it can tolerate a maximum of three hours of downtime. Which of the following has been specified?

A. RTO

B. RPO

C. MTBF

D. MTTR

Answer: A

NEW QUESTION 44

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

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

Answer: A

NEW QUESTION 46

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

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

Answer: AC

NEW QUESTION 47

A company is using a mobile device deployment model in which employees use their personal devices for work at their own discretion. Some of the problems the company is encountering include the following:

There is no standardization.

Employees ask for reimbursement for their devices.

Employees do not replace their devices often enough to keep them running efficiently.

The company does not have enough control over the devices.

Which of the following is a deployment model that would help the company overcome these problems?

A. BYOD

B. VDI

C. COPE

D. CYOD

Answer: D

NEW QUESTION 52

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 56

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

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

Answer: CD

NEW QUESTION 58

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 62

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 66

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 71

Which of the following occurs when the security of a web application relies on JavaScript for input validation?

- A. The integrity of the data is at risk.
- B. The security of the application relies on antivirus.
- C. A host-based firewall is required.
- D. The application is vulnerable to race conditions.

Answer: A

NEW QUESTION 74

A system administrator wants to provide for and enforce wireless access accountability during events where external speakers are invited to make presentations to a mixed audience of employees and non-employees.

Which of the following should the administrator implement?



- A. Shared accounts
- B. Preshared passwords
- C. Least privilege
- D. Sponsored guest

Answer: D

NEW QUESTION 76

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 81

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 86

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



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

Which of the following vulnerabilities is present?

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

Answer: B

NEW QUESTION 91

As part of a new industry regulation, companies are required to utilize secure, standardized OS settings. A technical must ensure the OS settings are hardened. Which of the following is the BEST way to do this?

- A. Use a vulnerability scanner.
- B. Use a configuration compliance scanner.
- C. Use a passive, in-line scanner.
- D. Use a protocol analyzer.

Answer: B

NEW QUESTION 94

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 95

An application team is performing a load-balancing test for a critical application during off-hours and has requested access to the load balancer to review which servers are up without having the administrator on call.

The security analyst is hesitant to give the application team full access due to other critical applications running on the load balancer. Which of the following is the BEST solution for security analyst to process the request?

- A. Give the application team administrator access during off-hours.
- B. Disable other critical applications before granting the team access.
- C. Give the application team read-only access.
- D. Share the account with the application team.

Answer: C

NEW QUESTION 96

A security analyst is hardening a web server, which should allow a secure certificate-based session using the organization's PKI infrastructure. The web server should also utilize the latest security techniques and standards. Given this set of requirements, which of the following techniques should the analyst implement to BEST meet these requirements? (Select two.)

- A. Install an X- 509-compliant certificate.
- B. Implement a CRL using an authorized CA.
- C. Enable and configure TLS on the server.
- D. Install a certificate signed by a public CA.
- E. Configure the web server to use a host header.

Answer: AC

NEW QUESTION 97



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

A. MAC

B. DAC

C. RBAC

D. ABAC

Answer: A

NEW QUESTION 100

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 104

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 108

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 110

A company is developing a new secure technology and requires computers being used for development to be isolated. Which of the following should be implemented to provide the MOST secure environment?

A. A perimeter firewall and IDS

- B. An air gapped computer network
- C. A honeypot residing in a DMZ
- D. An ad hoc network with NAT
- E. A bastion host

Answer: B

NEW QUESTION 115

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

A. DMZ

B. NAT

C. VPN

D. PAT

Answer: C

NEW QUESTION 118

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 123

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

A. CSR

B. CRL

C. CA

D. OID

Answer: B

NEW QUESTION 128

Ann. An employee in the payroll department, has contacted the help desk citing multiple issues with her device, including:

Slow performance

Word documents, PDFs, and images no longer opening

A pop-up

Ann states the issues began after she opened an invoice that a vendor emailed to her. Upon opening the invoice, she had to click several security warnings to view it in her word processor. With which of the following is the device MOST likely infected?

A. Spyware

B. Crypto-malware

C. Rootkit

D. Backdoor

Answer: D

NEW QUESTION 133

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

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

Answer: A

NEW QUESTION 135

A company is currently using the following configuration:

IAS server with certificate-based EAP-PEAP and MSCHAP

Unencrypted authentication via PAP

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

PAP authentication method

PEAP and EAP provide two-factor authentication

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

A. PAP

B. PEAP

C. MSCHAP

D. PEAP- MSCHAP

E. EAP

F. EAP-PEAP

Answer: AC

NEW QUESTION 139

A penetration tester is crawling a target website that is available to the public. Which of the following represents the actions the penetration tester is performing?

A. URL hijacking

B. Reconnaissance

C. White box testing

D. Escalation of privilege

Answer: B

NEW QUESTION 141

Which of the following attacks specifically impact data availability?

A. DDoS

B. Trojan

C. MITM

D. Rootkit

Answer: A

https://www.surepassexam.com/SY0-501-exam-dumps.html (540 New Questions)

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

NEW QUESTION 146

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 147

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 152

A chief Financial Officer (CFO) has asked the Chief Information Officer (CISO) to provide responses to a recent audit report detailing deficiencies in the organization security controls. The CFO would like to know ways in which the organization can improve its authorization controls. Given the request by the CFO, which of the following controls should the CISO focus on in the report? (Select Three)

- A. Password complexity policies
- B. Hardware tokens
- C. Biometric systems
- D. Role-based permissions
- E. One time passwords
- F. Separation of duties
- G. Multifactor authentication
- H. Single sign-on
- I. Lease privilege

Answer: DFI

NEW QUESTION 153

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 157

A dumpster diver recovers several hard drives from a company and is able to obtain confidential data from one of the hard drives. The company then discovers its information is posted online. Which of the following methods would have MOST likely prevented the data from being exposed?

- A. Removing the hard drive from its enclosure
- B. Using software to repeatedly rewrite over the disk space



- C. Using Blowfish encryption on the hard drives
- D. Using magnetic fields to erase the data

Answer: D

NEW QUESTION 161

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 165

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

```
A. nslookup
comptia.org
set type=ANY
ls-d example.org

B. nslookup
comptia.org
set type=MX
example.org

C. dig -axfr comptia.org @example.org

D. ipconfig /flushDNS

E. ifconfig eth0 down
ifconfig eth0 up
dhclient renew

F. dig @example.org comptia.org
```

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

Answer: AC

NEW QUESTION 168

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 171

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 174

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 178

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 183

An organization is comparing and contrasting migration from its standard desktop configuration to the newest version of the platform. Before this can happen, the Chief Information Security Officer (CISO) voices the need to evaluate the functionality of the newer desktop platform to ensure interoperability with existing software in use by the organization. In which of the following principles of architecture and design is the CISO engaging?

- A. Dynamic analysis
- B. Change management
- C. Baselining
- D. Waterfalling

Answer: B

NEW QUESTION 185

Which of the following differentiates a collision attack from a rainbow table attack?

- A. A rainbow table attack performs a hash lookup
- B. A rainbow table attack uses the hash as a password
- C. In a collision attack, the hash and the input data are equivalent
- D. In a collision attack, the same input results in different hashes

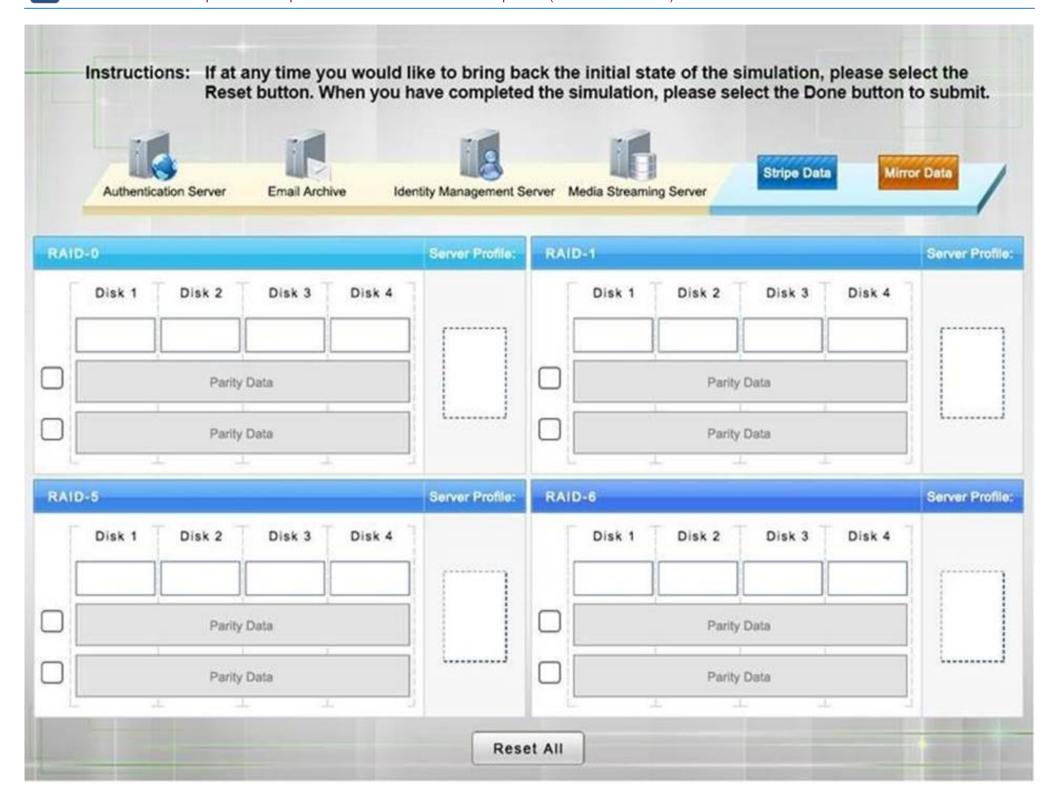
Answer: A

NEW QUESTION 190

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

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

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



Answer:

Explanation: RAID-0 is known as striping. It is not a fault tolerant solution but does improve disk performance for read/write operations. Striping requires a minimum of two disks and does not use parity.

RAID-0 can be used where performance is required over fault tolerance, such as a media streaming server. RAID-1 is known as mirroring because the same data is written to two disks so that the two disks have

identical data. This is a fault tolerant solution that halves the storage space. A minimum of two disks are used in mirroring and does not use parity. RAID-1 can be used where fault tolerance is required over performance, such as on an authentication server. RAID-5 is a fault tolerant solution that uses parity and striping. A minimum of three disks are required for RAID-5 with one disk's worth of space being used for parity information. However, the parity information is distributed across all the disks. RAID-5 can recover from a sing disk failure.

RAID-6 is a fault tolerant solution that uses dual parity and striping. A minimum of four disks are required for RAID-6. Dual parity allows RAID-6 to recover from the simultaneous failure of up to two disks. Critical data should be stored on a RAID-6 system.

http://www.adaptec.com/en-us/solutions/raid_levels.html

NEW QUESTION 194

A new mobile application is being developed in-house. Security reviews did not pick up any major flaws, however vulnerability scanning results show fundamental issues at the very end of the project cycle.

Which of the following security activities should also have been performed to discover vulnerabilities earlier in the lifecycle?

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

Answer: D

NEW QUESTION 196

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

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



D. URL hijacking

Answer: C

NEW QUESTION 200

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

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

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

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

Answer: D

NEW QUESTION 205

After a merger between two companies a security analyst has been asked to ensure that the organization's systems are secured against infiltration by any former employees that were terminated during the transition.

Which of the following actions are MOST appropriate to harden applications against infiltration by former employees? (Select TWO)

- A. Monitor VPN client access
- B. Reduce failed login out settings
- C. Develop and implement updated access control policies
- D. Review and address invalid login attempts
- E. Increase password complexity requirements
- F. Assess and eliminate inactive accounts

Answer: CF

NEW QUESTION 208

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

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

Answer: C

NEW QUESTION 213

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

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

Answer: C

NEW QUESTION 218

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

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

Answer: C

NEW QUESTION 221

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



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

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

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

Answer: C

NEW QUESTION 223

Which of the following precautions MINIMIZES the risk from network attacks directed at multifunction printers, as well as the impact on functionality at the same time?

- A. Isolating the systems using VLANs
- B. Installing a software-based IPS on all devices
- C. Enabling full disk encryption
- D. Implementing a unique user PIN access functions

Answer: A

NEW QUESTION 224

A security analyst is performing a quantitative risk analysis. The risk analysis should show the potential monetary loss each time a threat or event occurs. Given this requirement, which of the following concepts would assist the analyst in determining this value? (Select two.)

A. ALE

B. AV

C. ARO

D. EF

E. ROI

Answer: BD

NEW QUESTION 227

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 230

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

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

Answer: B

NEW QUESTION 233

Technicians working with servers hosted at the company's datacenter are increasingly complaining of electric shocks when touching metal items which have been linked to hard drive failures.

Which of the following should be implemented to correct this issue?

- A. Decrease the room temperature
- B. Increase humidity in the room
- C. Utilize better hot/cold aisle configurations



D. Implement EMI shielding

Answer: B

NEW QUESTION 237

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 239

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

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

Answer: D

NEW QUESTION 243

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 247

Which of the following cryptographic algorithms is irreversible?

A. RC4

B. SHA-256

C. DES

D. AES

Answer: B

NEW QUESTION 251

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 254

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 258

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



https://www.surepassexam.com/SY0-501-exam-dumps.html (540 New Questions)

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

Answer: AD

NEW QUESTION 261

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

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

Answer: B

NEW QUESTION 266

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

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

Answer: B

NEW QUESTION 269

Which of the following should identify critical systems and components?

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

Answer: D

NEW QUESTION 271

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 274

An information security analyst needs to work with an employee who can answer QUESTION NO:s about how data for a specific system is used in the business. The analyst should seek out an employee who has the role of:

- A. steward
- B. owner
- C. privacy officer
- D. systems administrator

Answer: B

NEW QUESTION 275

A security analyst reviews the following output:

File name: somefile.pdf

File MD5: E289F21CD33E4F57890DDEA5CF267ED2

File size: 1.9 Mb Created by: Jan Smith Deleted by: Jan Smith

Date deleted: October 01, 2015 8:43:21 EST

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

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

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



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

Answer: B

NEW QUESTION 278

A security engineer is configuring a wireless network that must support mutual authentication of the wireless client and the authentication server before users provide credentials. The wireless network must also support authentication with usernames and passwords. Which of the following authentication protocols MUST the security engineer select?

- A. EAP-FAST
- B. EAP-TLS
- C. PEAP
- D. EAP

Answer: C

NEW QUESTION 283

A network administrator wants to ensure that users do not connect any unauthorized devices to the company network. Each desk needs to connect a VoIP phone and computer. Which of the following is the BEST way to accomplish this?

- A. Enforce authentication for network devices
- B. Configure the phones on one VLAN, and computers on another
- C. Enable and configure port channels
- D. Make users sign an Acceptable use Agreement

Answer: A

NEW QUESTION 285

A technician has installed new vulnerability scanner software on a server that is joined to the company domain. The vulnerability scanner is able to provide visibility over the patch posture of all company's clients. Which of the following is being used?

- A. Gray box vulnerability testing
- B. Passive scan
- C. Credentialed scan
- D. Bypassing security controls

Answer: A

NEW QUESTION 290

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

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

Answer: B

NEW QUESTION 293

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 295

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 300

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 302

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 305

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 310

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

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

Answer: D

NEW QUESTION 313

A company was recently audited by a third party. The audit revealed the company's network devices were transferring files in the clear. Which of the following protocols should the company use to transfer files?

A. HTTPS

B. LDAPS

C. SCP

D. SNMPv3

Answer: C

NEW QUESTION 318

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



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

A. Revoke exiting root certificates, re-issue new customer certificates, and ensure all transactions are digitally signed to minimize fraud, implement encryption for data in-transit between data centers

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

Answer: C

NEW QUESTION 320

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

A. NAC

B. Web proxy

C. DLP

D. ACL

Answer: C

NEW QUESTION 322

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

A. Public

B. Hybrid

C. Community

D. Private

Answer: C

NEW QUESTION 327

A security analyst accesses corporate web pages and inputs random data in the forms. The response received includes the type of database used and SQL commands that the database accepts. Which of the following should the security analyst use to prevent this vulnerability?

A. Application fuzzing

B. Error handling

C. Input validation

D. Pointer dereference

Answer: C

NEW QUESTION 331

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

A. Geofencing

B. Remote wipe

C. Near-field communication

D. Push notification services

E. Containerization

Answer: AE

NEW QUESTION 332

A user is presented with the following items during the new-hire onboarding process:

-Laptop

-Secure USB drive

-Hardware OTP token

-External high-capacity HDD

-Password complexity policy

-Acceptable use policy

-HASP key

-Cable lock

Which of the following is one component of multifactor authentication?

A. Secure USB drive

B. Cable lock

C. Hardware OTP token

D. HASP key

Answer: C



NEW QUESTION 335

A security analyst receives an alert from a WAF with the following payload: var data= "<test test test test>" ++ <../../../etc/passwd>" Which of the following types of attacks is this?

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

Answer: D

NEW QUESTION 336

An organization uses SSO authentication for employee access to network resources. When an employee resigns, as per the organization's security policy, the employee's access to all network resources is terminated immediately. Two weeks later, the former employee sends an email to the help desk for a password reset to access payroll information from the human resources server. Which of the following represents the BEST course of action?

- A. Approve the former employee's request, as a password reset would give the former employee access to only the human resources server.
- B. Deny the former employee's request, since the password reset request came from an external email address.
- C. Deny the former employee's request, as a password reset would give the employee access to all network resources.
- D. Approve the former employee's request, as there would not be a security issue with the former employee gaining access to network resources.

Answer: C

NEW QUESTION 338

A portable data storage device has been determined to have malicious firmware. Which of the following is the BEST course of action to ensure data confidentiality?

- A. Format the device
- B. Re-image the device
- C. Perform virus scan in the device
- D. Physically destroy the device

Answer: C

NEW QUESTION 342

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 344

A systems administrator is reviewing the following information from a compromised server:

Process	DEP	Local Address	Remote Address
LSASS	YES	0.0.0.0.	10.210.100.62
APACHE	NO	0.0.0.0	10.130.210.20
MySQL	NO	127.0.0.1	127.0.0.1
TFTP	YES	191.168.1.10	10.34.221.96

Given the above information, which of the following processes was MOST likely exploited via a remote buffer overflow attack?

- A. Apache
- B. LSASS
- C. MySQL
- D. TFTP

Answer: A

NEW QUESTION 347

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

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



Answer: B

NEW QUESTION 349

A security administrator is configuring a new network segment, which contains devices that will be accessed by external users, such as web and FTP server. Which of the following represents the MOST secure way to configure the new network segment?

- A. The segment should be placed on a separate VLAN, and the firewall rules should be configured to allow external traffic.
- B. The segment should be placed in the existing internal VLAN to allow internal traffic only.
- C. The segment should be placed on an intranet, and the firewall rules should be configured to allow external traffic.
- D. The segment should be placed on an extranet, and the firewall rules should be configured to allow both internal and external traffic.

Answer: A

NEW QUESTION 353

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

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

Answer: A

NEW QUESTION 356

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

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

Answer: B

NEW QUESTION 360

Phishing emails frequently take advantage of high-profile catastrophes reported in the news. Which of the following principles BEST describes the weakness being exploited?

- A. Intimidation
- B. Scarcity
- C. Authority
- D. Social proof

Answer: D

NEW QUESTION 364

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 369

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

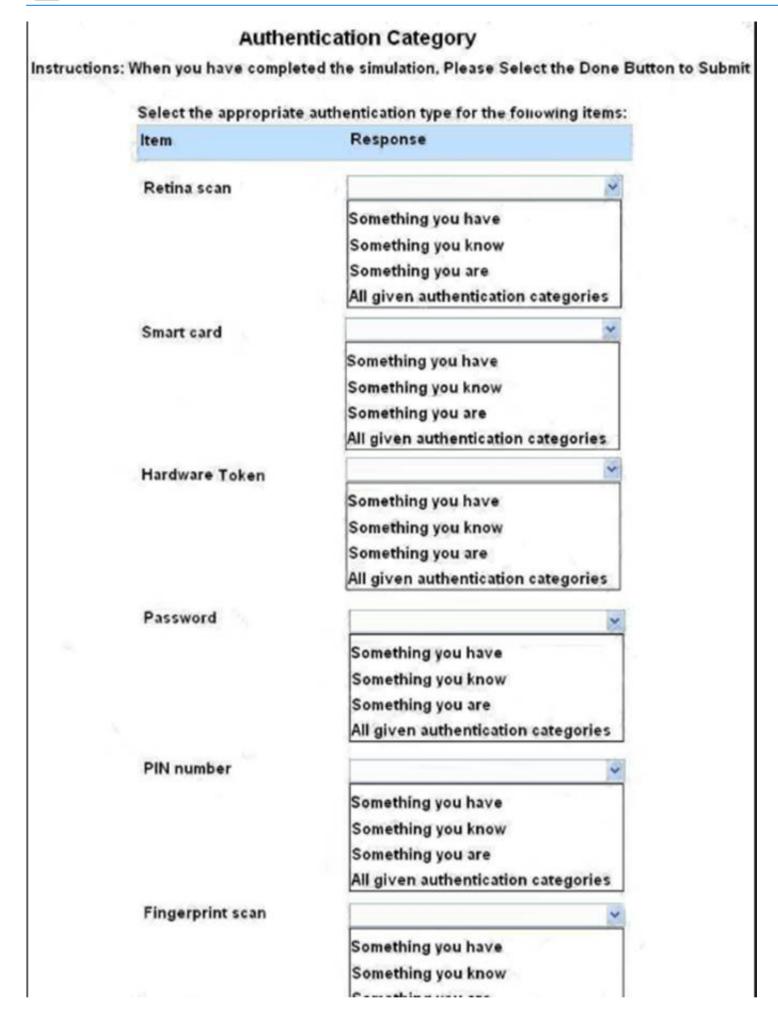
- A. Replace FTP with SFTP and replace HTTP with TLS
- B. Replace FTP with FTPS and replaces HTTP with TFTP
- C. Replace FTP with SFTP and replace HTTP with Telnet
- D. Replace FTP with FTPS and replaces HTTP with IPSec

Answer: A

NEW QUESTION 374

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.





Answer:

Explanation: Something you are includes fingerprints, retina scans, or voice recognition. Something you have includes smart cards, token devices, or keys. Something you know includes a password, codes, PINs, combinations, or secret phrases. Somewhere you are including a physical location s or logical addresses, such as domain name, an IP address, or a MAC address.

Something you do includes your typing rhythm, a secret handshake, or a private knock

http://en.wikipedia.org/wiki/Password_authentication_protocol#Working_cycle http://en.wikipedia.org/wiki/Smart_card#Security

NEW QUESTION 375

A security team wants to establish an Incident Response plan. The team has never experienced an incident. Which of the following would BEST help them establish plans and procedures?

- A. Table top exercises
- B. Lessons learned
- C. Escalation procedures
- D. Recovery procedures

Answer: A

NEW QUESTION 376

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

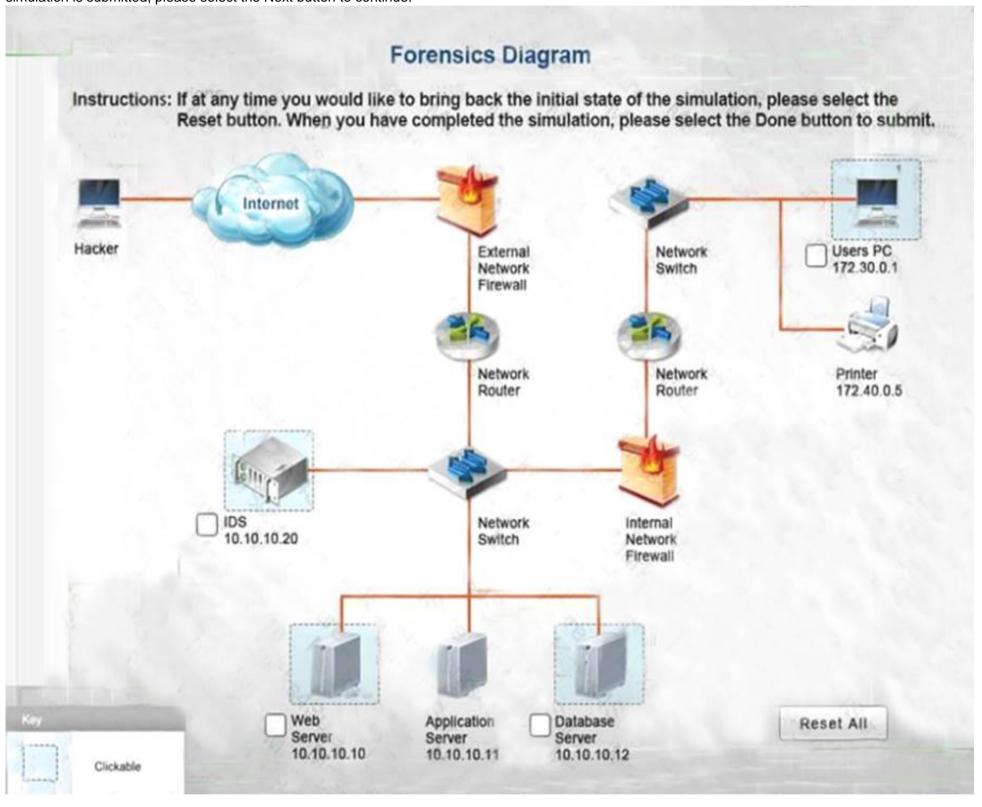
D. SHA

Answer: C

NEW QUESTION 379

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.

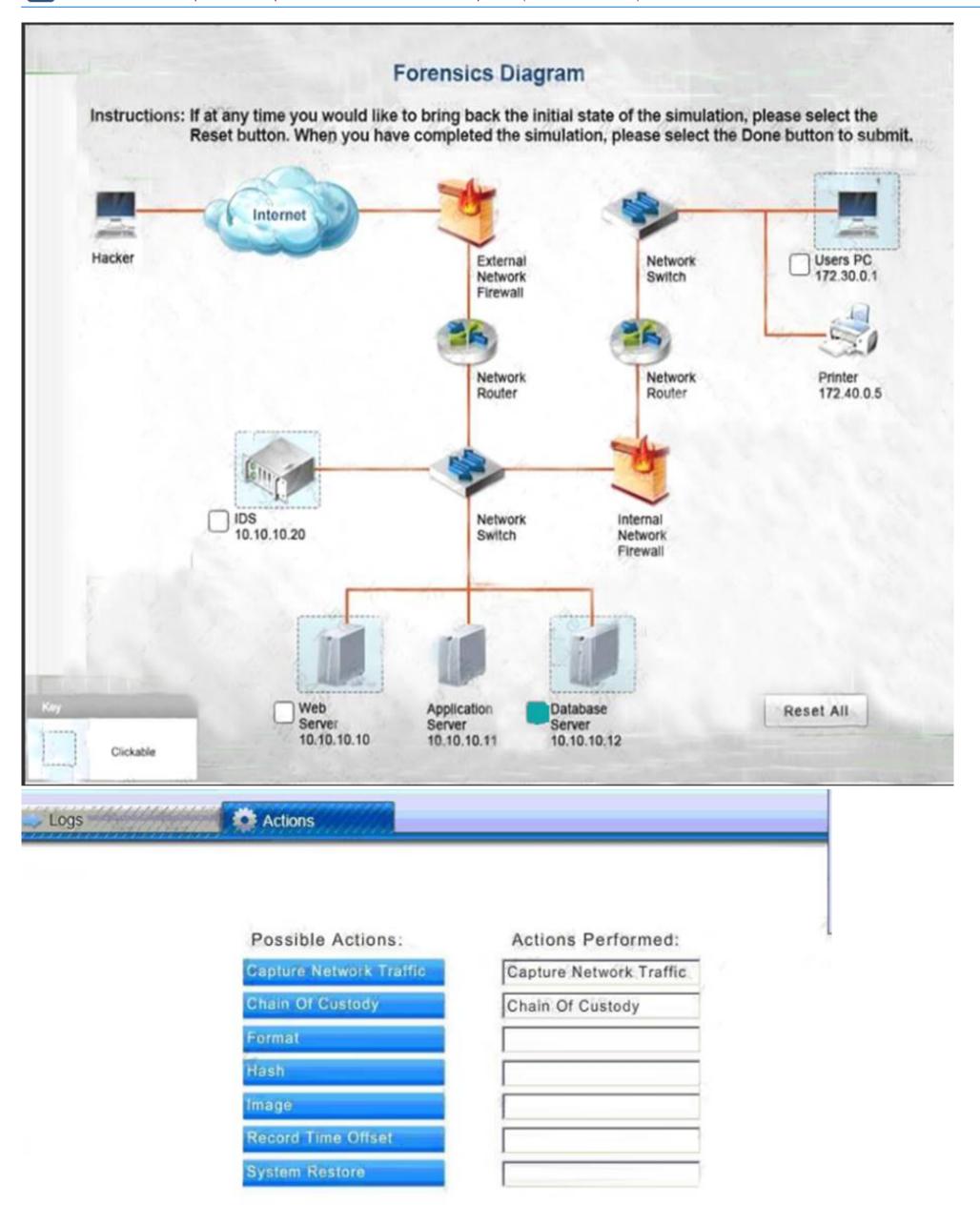
Instructions: The web server, database server, IDS, and User PC are clickable. Check the box of the node(s) that have been compromised and drag and drop the appropriate actions to complete the incident response on the network. Not all actions may be used, and order is not important. If at any time you 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.



Answer:

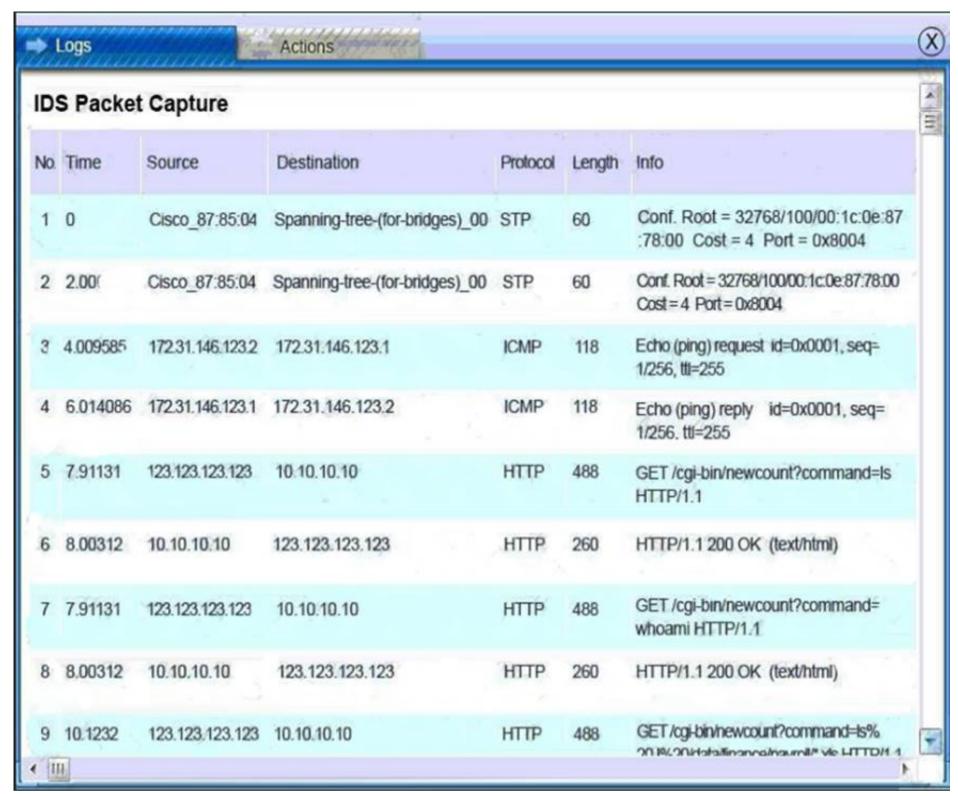
Explanation: Database server was attacked, actions should be to capture network traffic and Chain of Custody.





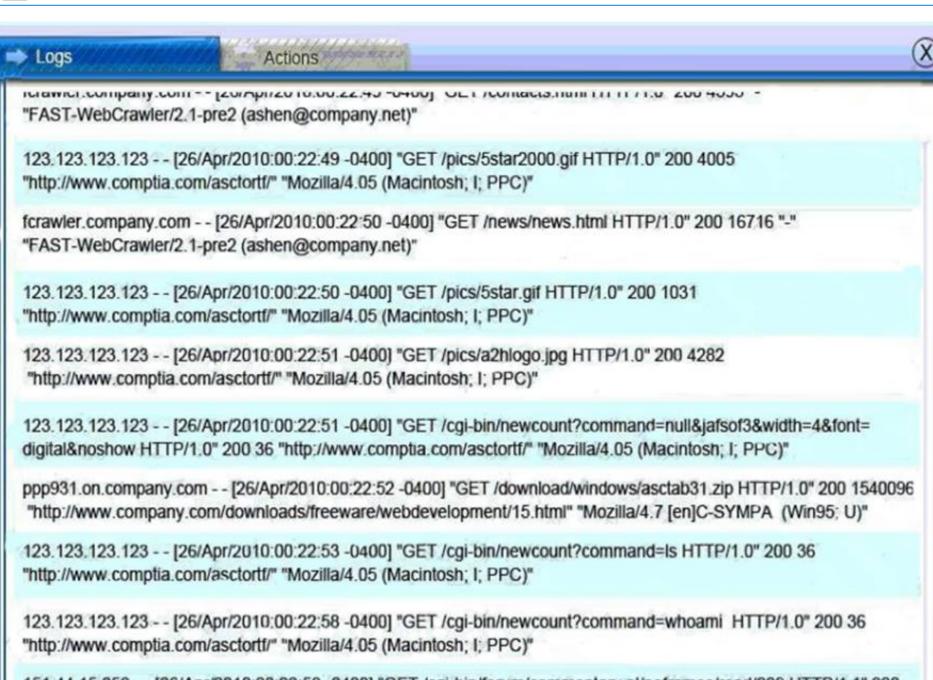
IDS Server Log:

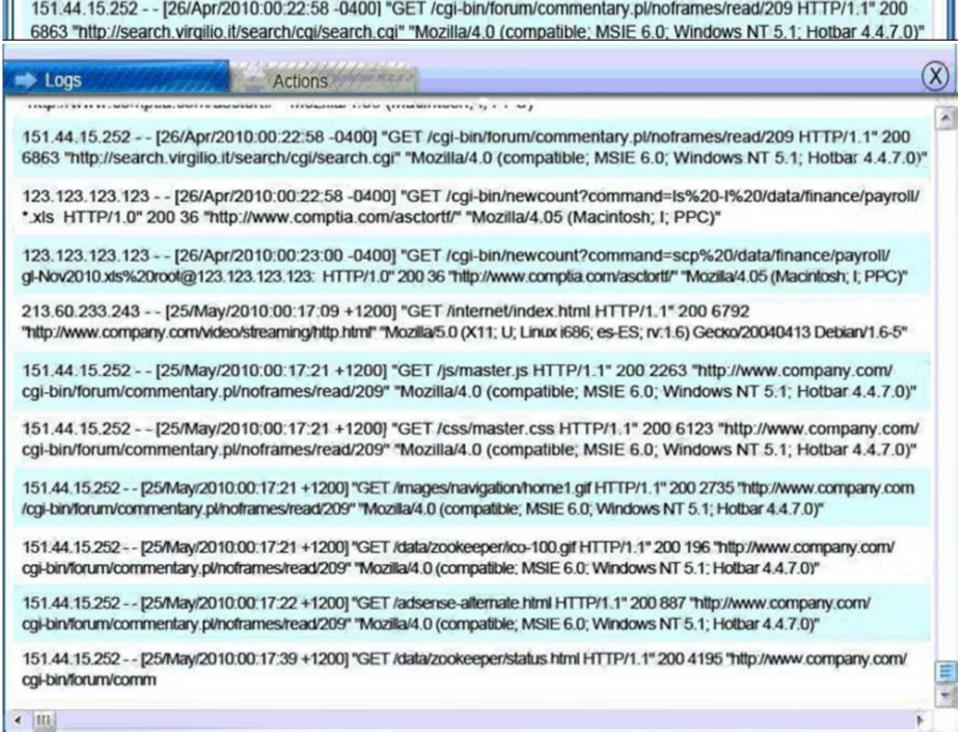




Web Server Log:

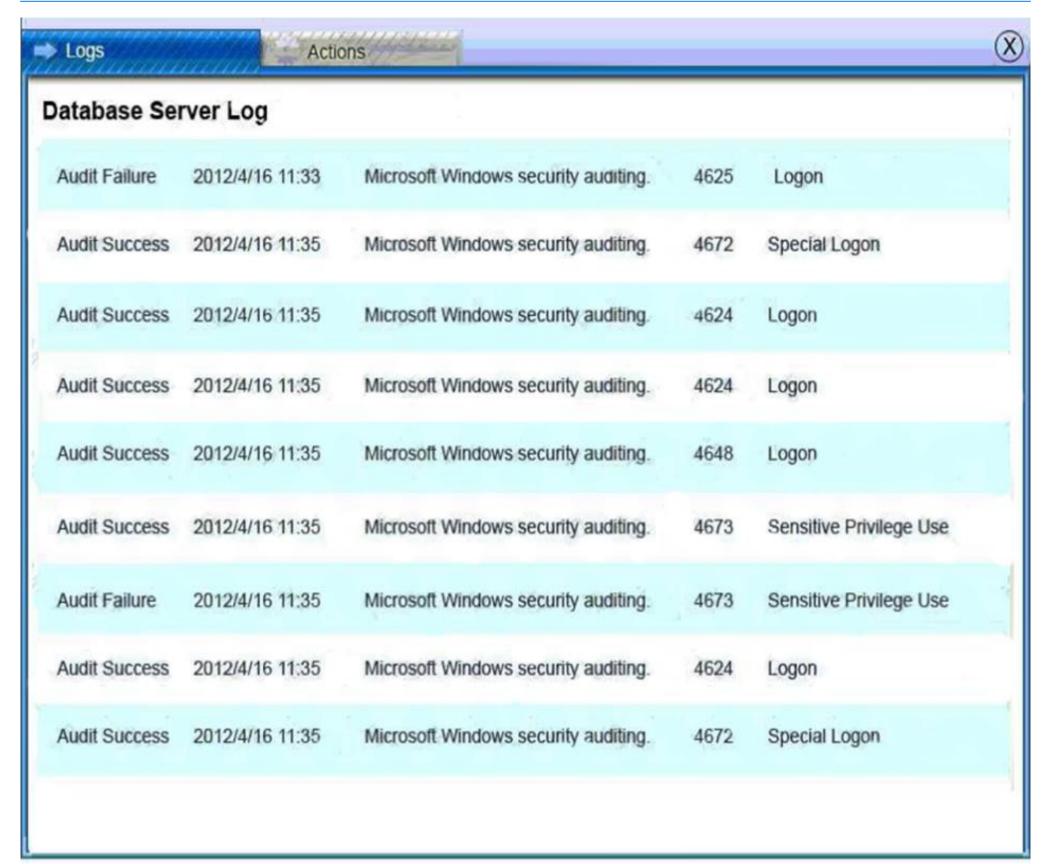






Database Server Log:





Users PC Log:



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NEW QUESTION 382

The chief security officer (CS0) has issued a new policy that requires that all internal websites be configured for HTTPS traffic only. The network administrator has been tasked to update all internal sites without incurring additional costs. Which of the following is the best solution for the network administrator to secure each internal website?

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

Answer: D

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

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

NEW QUESTION 387

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

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

Answer: A

NEW QUESTION 391

Ann a security analyst is monitoring the IDS console and noticed multiple connections from an internal host to a suspicious call back domain. Which of the following tools would aid her to decipher the network traffic?

- A. Vulnerability Scanner
- B. NMAP
- C. NETSTAT
- D. Packet Analyzer

Answer: C



NEW QUESTION 393

An organization relies heavily on an application that has a high frequency of security updates. At present, the security team only updates the application on the first Monday of each month, even though the security updates are released as often as twice a week.

Which of the following would be the BEST method of updating this application?

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

Answer: A

NEW QUESTION 395

A new intern in the purchasing department requires read access to shared documents. Permissions are normally controlled through a group called "Purchasing", however, the purchasing group permissions allow write access. Which of the following would be the BEST course of action?

- A. Modify all the shared files with read only permissions for the intern.
- B. Create a new group that has only read permissions for the files.
- C. Remove all permissions for the shared files.
- D. Add the intern to the "Purchasing" group.

Answer: B

NEW QUESTION 399

Malware that changes its binary pattern on specific dates at specific times to avoid detection is known as a (n):

- A. armored virus
- B. logic bomb
- C. polymorphic virus
- D. Trojan

Answer: C

NEW QUESTION 400

The process of applying a salt and cryptographic hash to a password then repeating the process many times is known as which of the following?

- A. Collision resistance
- B. Rainbow table
- C. Key stretching
- D. Brute force attack

Answer: C

NEW QUESTION 401

For each of the given items, select the appropriate authentication category from the drop down choices. Select the appropriate authentication type for the following items:



ltem Response Fingerprint scan Biometric authentication One Time Password Multi-factor PAP authentication PAP authentication Biometric authentication Hardware token Biometric authentication One Time Password Multi-factor PAP authentication PAP authentication Biometric authentication Smart card Biometric authentication One Time Password Multi-factor PAP authentication PAP authentication Biometric authentication Password Biometric authentication One Time Password Multi-factor PAP authentication PAP authentication Biometric authentication PIN number Biometric authentication One Time Password Multi-factor PAP authentication PAP authentication Biometric authentication Retina Scan Biometric authentication One Time Password Multi-factor PAP authentication PAP authentication Biometric authentication

Answer:

Explanation:



Item Response

Fingerprint scan

Biometric authentication
One Time Password
Multi-factor
PAP authentication
PAP authentication
Biometric authentication

Hardware token

Biometric authentication
One Time Password
Multi-factor
PAP authentication
PAP authentication
Biometric authentication

Smart card

Biometric authentication
One Time Password
Multi-factor
PAP authentication
PAP authentication
Biometric authentication

Password

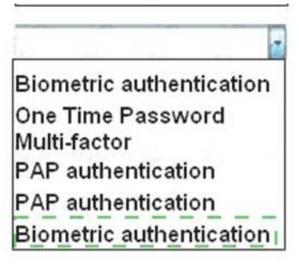
Biometric authentication
One Time Password
Multi-factor
PAP authentication
PAP authentication
Biometric authentication

PIN number

Biometric authentication
One Time Password
Multi-factor
PAP authentication
PAP authentication
Biometric authentication



Retina Scan



NEW QUESTION 403

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

A. MD5

B. AES

C. UDP

D. PKI

Answer: B

NEW QUESTION 407

An employee uses RDP to connect back to the office network. If RDP is misconfigured, which of the following security exposures would this lead to?

- A. A virus on the administrator's desktop would be able to sniff the administrator's username and password.
- B. Result in an attacker being able to phish the employee's username and password.
- C. A social engineering attack could occur, resulting in the employee's password being extracted.
- D. A man in the middle attack could occur, resulting the employee's username and password being captured.

Answer: D

NEW QUESTION 408

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 413

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

Which of the following categories BEST describes what she is looking for?

A. ALE

B. MTTR

C. MTBF

D. MTTF

Answer: D

NEW QUESTION 416

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 420

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



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

Answer: B

NEW QUESTION 425

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

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

Answer: D

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

NEW QUESTION 428

A security analyst has been asked to perform a review of an organization's software development lifecycle. The analyst reports that the lifecycle does not contain a phase in which team members evaluate and provide critical feedback of another developer's code. Which of the following assessment techniques is BEST described in the analyst's report?

- A. Architecture evaluation
- B. Baseline reporting
- C. Whitebox testing
- D. Peer review

Answer: D

NEW QUESTION 431

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 433

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 437

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

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

Answer: C

NEW QUESTION 439

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

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

Answer:

D

NEW QUESTION 443

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 446

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

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

Answer: B

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

NEW QUESTION 447

Joe notices there are several user accounts on the local network generating spam with embedded malicious code. Which of the following technical control should Joe put in place to BEST reduce these incidents?

- A. Account lockout
- B. Group Based Privileges
- C. Least privilege
- D. Password complexity

Answer: A

NEW QUESTION 451

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



Can perform authenticated requests for A and AAA records

Uses RRSIG

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

A. DNSSEC

B. SFTP

C. nslookup

D. dig

E. LDAPS

Answer: A

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

NEW QUESTION 455

Recently several employees were victims of a phishing email that appeared to originate from the company president. The email claimed the employees would be disciplined if they did not click on a malicious link in the message. Which of the following principles of social engineering made this attack successful?

- A. Authority
- B. Spamming
- C. Social proof
- D. Scarcity

Answer: A

NEW QUESTION 456

An administrator is testing the collision resistance of different hashing algorithms. Which of the following is the strongest collision resistance test?

- A. Find two identical messages with different hashes
- B. Find two identical messages with the same hash
- C. Find a common has between two specific messages



D. Find a common hash between a specific message and a random message

Answer: A

NEW QUESTION 459

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

A. 53

B. 110

C. 143

D. 443

Answer: A

NEW QUESTION 462

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 466

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 468

Which of the following use the SSH protocol?

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

Answer: BF

NEW QUESTION 473

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

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

Answer: C

NEW QUESTION 474

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 476

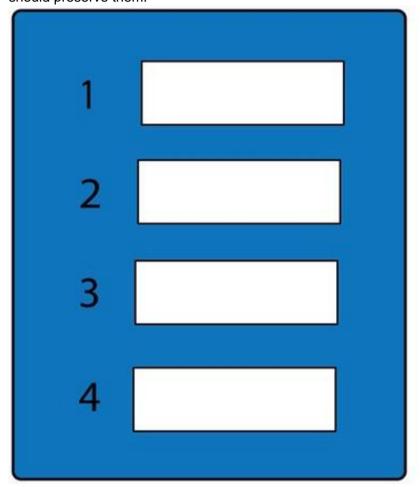
A security administrator is developing training for corporate users on basic security principles for personal email accounts. Which of the following should be mentioned as the MOST secure way for password recovery?

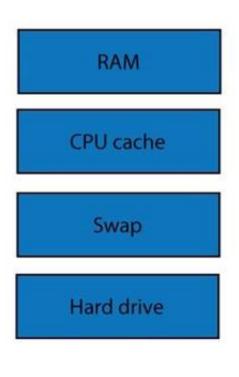
- A. Utilizing a single Qfor password recovery
- B. Sending a PIN to a smartphone through text message
- C. Utilizing CAPTCHA to avoid brute force attacks
- D. Use a different e-mail address to recover password

Answer: B

NEW QUESTION 478

A forensic analyst is asked to respond to an ongoing network attack on a server. Place the items in the list below in the correct order in which the forensic analyst should preserve them.





Answer:

Explanation: When dealing with multiple issues, address them in order of volatility (OOV); always deal with the most volatile first. Volatility can be thought of as the amount of time that you have to collect certain data before a window of opportunity is gone. Naturally, in an investigation you want to collect everything, but some data will exist longer than others, and you cannot possibly collect all of it once. As an example, the OOV in an investigation may be RAM, hard drive data, CDs/DVDs, and printouts.

Order of volatility: Capture system images as a snapshot of what exists, look at network traffic and logs, capture any relevant video/screenshots/hashes, record time offset on the systems, talk to witnesses, and track total man-hours and expenses associated with the investigation.

NEW QUESTION 480

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 481

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

A. HMAC

B. PCBC

C. CBC

D. GCM

E. CFB

Answer: A



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





A friend/colleague asks you questions of a personal nature, which could be considered typical password reset questions.

up from a friend with a link to

a new breakthrough diet



Choose Attack Type

Answer:

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

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

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

C: Vishing is the act of using the telephone in an attempt to scam the user into surrendering private

information that will be used for identity theft. The scammer usually pretends to be a legitimate business, and fools the victim into thinking he or she will profit. D: SPIM is a term sometimes used to refer to spam over IM (Instant Messaging). It's also called just spam, instant spam, or IM marketing. No matter what the name, it consists of unwanted messages transmitted through some form of instant messaging service, which can include Short Message Service (SMS) E: Social engineering is a non-technical method of intrusion hackers use that relies heavily on human interaction and often involves tricking people into breaking normal security procedures. It is one of the greatest threats that organizations today encounter. A social engineer runs what used to be called a "con game." For example, a person using social engineering to break into a computer network might try to gain the confidence of an authorized user and get them to reveal information that compromises the network's security. Social engineers often rely on the natural helpfulness of people as well as on their weaknesses. They might, for example, call the authorized employee with some kind of urgent problem that requires immediate network access. Appealing to vanity, appealing to authority, appealing to greed, and old-fashioned eavesdropping are other typical social engineering techniques.

http://www.webopedia.com/TERM/P/phishing.html http://www.techopedia.com/definition/28643/whaling http://www.webopedia.com/TERM/V/vishing.html http://searchsecurity.techtarget.com/definition/social-engineering

NEW QUESTION 490

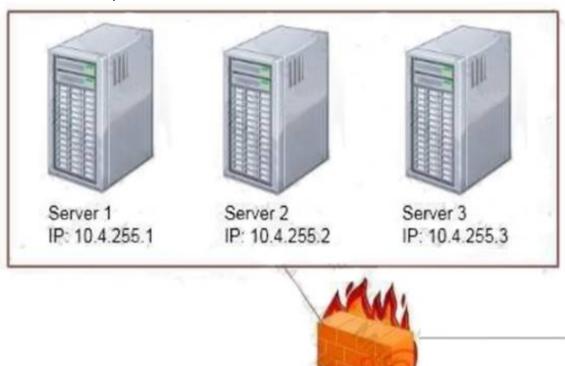
Task: Configure the firewall (fill out the table) to allow these four rules:

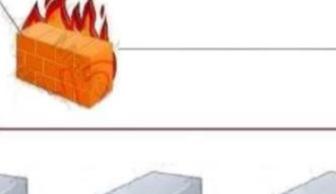
Only allow the Accounting computer to have HTTPS access to the Administrative server.

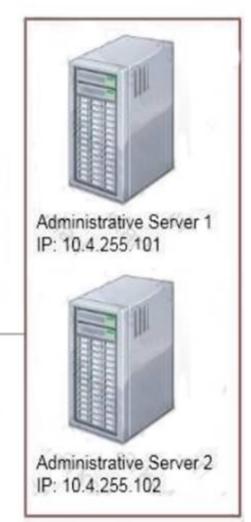
Only allow the HR computer to be able to communicate with the Server 2 System over SCP.

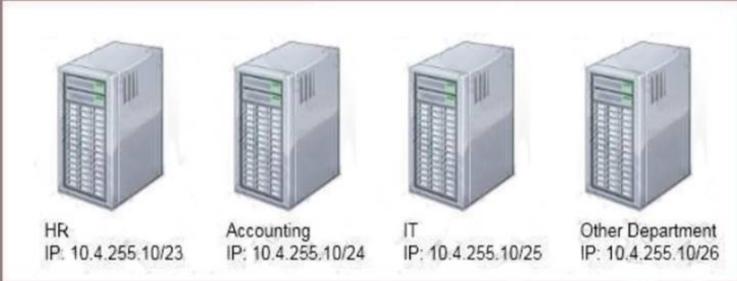


Allow the IT computer to have access to both the Administrative Server 1 and Administrative Server 2









Source IP	Destination IP	Port Number	TCP/UDP	Allow/Deny

Answer:

Explanation: Use the following answer for this simulation task. Below table has all the answers required for this question.

Source IP	Destination IP	Port Number	TCP/UDP	Allow/Deny
10. 4. 255. 10/24	10. 4. 255. 101	443	TCP	Allow
10. 4. 255. 10/23	10. 4. 255. 2	22	TCP	Allow
10. 4. 255. 10/25	10. 4. 255. 101	Any	Any	Allow
10. 4. 255. 10/25	10. 4. 255. 102	Any	Any	Allow

Firewall rules act like ACLs, and they are used to dictate what traffic can pass between the firewall and the internal network. Three possible actions can be taken based on the rule's criteria:

Block the connection Allow the connection only if it is secured

TCP is responsible for providing a reliable, one-to-one, connection-oriented session. TCP establishes a connection and ensures that the other end receives any



packets sent.

Two hosts communicate packet results with each other. TCP also ensures that packets are decoded and sequenced properly. This connection is persistent during the session.

When the session ends, the connection is torn down.

UDP provides an unreliable connectionless communication method between hosts. UDP is considered a best-effort protocol, but it's considerably faster than TCP. The sessions don't establish a synchronized session like the kind used in TCP, and UDP doesn't guarantee error-free communications.

The primary purpose of UDP is to send small packets of information.

The application is responsible for acknowledging the correct reception of the data. Port 22 is used by both SSH and SCP with UDP.

Port 443 is used for secure web connections? HTTPS and is a TCP port.

Thus to make sure only the Accounting computer has HTTPS access to the Administrative server you should use TCP port 443 and set the rule to allow communication between 10.4.255.10/24 (Accounting) and 10.4.255.101 (Administrative server1) Thus to make sure that only the HR computer has access to Server2 over SCP you need use of TCP port 22 and set the rule to allow communication between 10.4.255.10/23 (HR) and 10.4.255.2 (server2)

Thus to make sure that the IT computer can access both the Administrative servers you need to use a port and accompanying port number and set the rule to allow communication between: 10.4.255.10.25 (IT computer) and 10.4.255.101 (Administrative server1)

10.4.255.10.25 (IT computer) and 10.4.255.102 (Administrative server2)

NEW QUESTION 495

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

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

Answer: B

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

NEW QUESTION 497

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

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

Answer: B

NEW QUESTION 500

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

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

Answer: B

NEW QUESTION 501

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 506

A company wants to ensure that the validity of publicly trusted certificates used by its web server can be determined even during an extended internet outage. Which of the following should be implemented?

- A. Recovery agent
- B. Ocsp
- C. Crl
- D. Key escrow



Answer: B

NEW QUESTION 509

AChief Security Officer (CSO) has been unsuccessful in attempts to access the website for a potential partner (www.example.net). Which of the following rules is preventing the CSO from accessing the site?

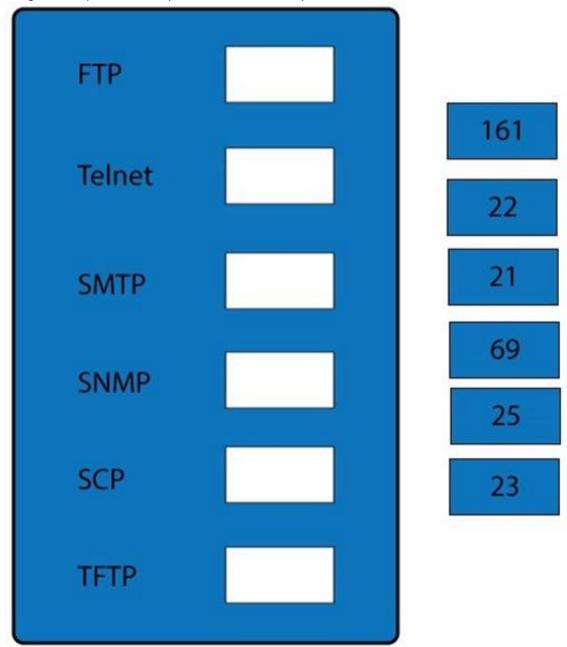
Blocked sites: *.nonews.com, *.rumorhasit.net, *.mars?

- A. Rule 1: deny from inside to outside source any destination any service smtp
- B. Rule 2: deny from inside to outside source any destination any service ping
- C. Rule 3: deny from inside to outside source any destination (blocked sites) service http-https
- D. Rule 4: deny from any to any source any destination any service any

Answer: C

NEW QUESTION 510

Drag and drop the correct protocol to its default port.



Answer:

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

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

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

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

NEW QUESTION 515

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 518

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

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

Answer: D

NEW QUESTION 520

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

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

Answer: B

NEW QUESTION 522

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 527

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

A. ARO

B. ROI

C. RPO

D. SLE

E. RTO

Answer: AD

NEW QUESTION 530

Which of the following is the BEST choice for a security control that represents a preventive and corrective logical control at the same time?

- A. Security awareness training
- B. Antivirus
- C. Firewalls
- D. Intrusion detection system

Answer: B

NEW QUESTION 533

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

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

Answer: C



Which of the following strategies should a systems architect use to minimize availability risks due to insufficient storage capacity?

- A. High availability
- B. Scalability
- C. Distributive allocation
- D. Load balancing

Answer: B

NEW QUESTION 539

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 542

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 543

Which of the following is the appropriate network structure used to protect servers and services that must be provided to external clients without completely eliminating access for internal users?

- A. NAC
- B. VLAN
- C. DMZ
- D. Subnet

Answer: C

NEW QUESTION 547

A company would like to prevent the use of a known set of applications from being used on company computers. Which of the following should the security administrator implement?

- A. Whitelisting
- B. Anti-malware
- C. Application hardening
- D. Blacklisting
- E. Disable removable media

Answer: D

NEW QUESTION 549

Due to regulatory requirements, a security analyst must implement full drive encryption on a Windows file server. Which of the following should the analyst implement on the system to BEST meet this requirement? (Choose two.)

- A. Enable and configure EFS on the file system.
- B. Ensure the hardware supports TPM, and enable it in the BIOS.
- C. Ensure the hardware supports VT-X, and enable it in the BIOS.
- D. Enable and configure BitLocker on the drives.
- E. Enable and configure DFS across the file system.

Answer: BD

NEW QUESTION 552

A company is deploying a new VoIP phone system. They require 99.999% uptime for their phone service and are concerned about their existing data network interfering with the VoIP phone system. The core switches in the existing data network are almost fully saturated. Which of the following options will pro-vide the best performance and availability for both the VoIP traffic, as well as the traffic on the existing data network?

- A. Put the VoIP network into a different VLAN than the existing data network.
- B. Upgrade the edge switches from 10/100/1000 to improve network speed
- C. Physically separate the VoIP phones from the data network



D. Implement flood guards on the data network

Answer: A

NEW QUESTION 553

A user needs to send sensitive information to a colleague using PKI. Which of the following concepts apply when a sender encrypts the message hash with the sender's private key? (Select TWO)

- A. Non-repudiation
- B. Email content encryption
- C. Steganography
- D. Transport security
- E. Message integrity

Answer: AE

NEW QUESTION 558

A penetration tester harvests potential usernames from a social networking site. The penetration tester then uses social engineering to attempt to obtain associated passwords to gain unauthorized access to shares on a network server.

Which of the following methods is the penetration tester MOST likely using?

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

Answer: C

NEW QUESTION 559

Users in a corporation currently authenticate with a username and password. A security administrator wishes to implement two-factor authentication to improve security

Which of the following authentication methods should be deployed to achieve this goal?

- A. PIN
- B. Security QUESTION NO:
- C. Smart card
- D. Passphrase
- E. CAPTCHA

Answer: C

NEW QUESTION 562

A datacenter recently experienced a breach. When access was gained, an RF device was used to access an air-gapped and locked server rack. Which of the following would BEST prevent this type of attack?

- A. Faraday cage
- B. Smart cards
- C. Infrared detection
- D. Alarms

Answer: A

NEW QUESTION 566

A website administrator has received an alert from an application designed to check the integrity of the company's website. The alert indicated that the hash value for a particular MPEG file has changed. Upon further investigation, the media appears to be the same as it was before the alert. Which of the following methods has MOST likely been used?

- A. Cryptography
- B. Time of check/time of use
- C. Man in the middle
- D. Covert timing
- E. Steganography

Answer: E

NEW QUESTION 570

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

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

Answer: AD



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 576

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 577

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

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

Answer: C

NEW QUESTION 581

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 582

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 583

A malicious attacker has intercepted HTTP traffic and inserted an ASCII line that sets the referrer URL. Which of the following is the attacker most likely utilizing?

- A. Header manipulation
- B. Cookie hijacking
- C. Cross-site scripting
- D. Xml injection

Answer: A

NEW QUESTION 588

As part of a new BYOD rollout, a security analyst has been asked to find a way to securely store company data on personal devices. Which of the following would BEST help to accomplish this?

- A. Require the use of an eight-character PIN.
- B. Implement containerization of company data.
- C. Require annual AUP sign-off.
- D. Use geofencing tools to unlock devices while on the premises.



Answer: B

NEW QUESTION 589

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 590

An organization recently moved its custom web applications to the cloud, and it is obtaining managed services of the back-end environment as part of its subscription. Which of the following types of services is this company now using?

- A. SaaS
- B. CASB
- C. laaS
- D. PaaS

Answer: B

Explanation: Security Broker (CASB) gives you both visibility into your entire cloud stack and the security automation tool your IT team needs.

NEW QUESTION 593

Many employees are receiving email messages similar to the one shown below:

From IT department To employee Subject email quota exceeded Pease click on the following link http:www.website.info/email.php?quota=1Gb and provide your username and password to increase your email quotA. Upon reviewing other similar emails, the security administrator realized that all the phishing URLs have the following common elements; they all use HTTP, they all come from .info domains, and they all contain the same URI. Which of the following should the security administrator configure on the corporate content filter to prevent users from accessing the phishing URL, while at the same time minimizing false positives?

- A. BLOCKhttp://www.*.info/ "
- B. DROPhttp:// "website.info/email.php?*
- C. Redirecthttp://www,*.Info/email.php?quota=*TOhttp://company.com/corporate_polict.html
- D. DENYhttp://*.info/email.php?quota=1Gb

Answer: D

NEW QUESTION 594

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 595

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 599

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



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

A. Time of day restrictions

B. Principle of least privilege

C. Role-based access control

D. Separation of duties

Answer: D

NEW QUESTION 603

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 605

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