First Lab

A security analyst received an alert regarding multiple successful MFA log-ins for a particular user When reviewing the authentication logs the analyst sees the following:

Time	Username	Application	Access device	MFA device
16:07 UTC	jdoe	Productivity Portal	1.2.3.4 (United States)	1.2.3.4 (United States)
16:11 UTC	jdoe	HR Portal	1.2.3.4 (United States)	1.2.3.4 (United States)
17:28 UTC	jdoe	Productivity Portal	3.4.5.6 (Russia)	1.2.3.4 (United States)
17:30 UTC	jdoe	Productivity Portal	1.2.3.4 (United States)	1.2.3.4 (United States)
17:31 UTC	jdoe	HR Portal	3.4.5.6 (Russia)	3.4.5.6 (Russia)

Which of the following are most likely occurring, based on the MFA logs? (Select two).

A. Dictionary attack

B. Push phishing

C. impossible geo-velocity

D. Subscriber identity module swapping

E. Rogue access point

F. Password spray

Answer: B C

Explanation

C. Impossible geo-velocity: This is an event where a single user's account is accessed from different geographical locations within a timeframe that is impossible for normal human travel. In the log, we can see that the user "jdoe" is accessing from the United States and then within a few minutes from Russia, which is practically impossible to achieve without the use of some form of automated system or if the account credentials are being used by different individuals in different locations.

B. Push phishing: This could also be an indication of push phishing, where the user is tricked into approving a multi-factor authentication request that they did not initiate. This is less clear from the logs directly, but it could be inferred if the user is receiving MFA requests that they are not initiating and are being approved without their genuine desire to access the resources.

Question #:83

The developers recently deployed new code to three web servers. A daffy automated external device scan report shows server vulnerabilities that are failure items according to PCI DSS.

If the venerability is not valid, the analyst must take the proper steps to get the scan clean.

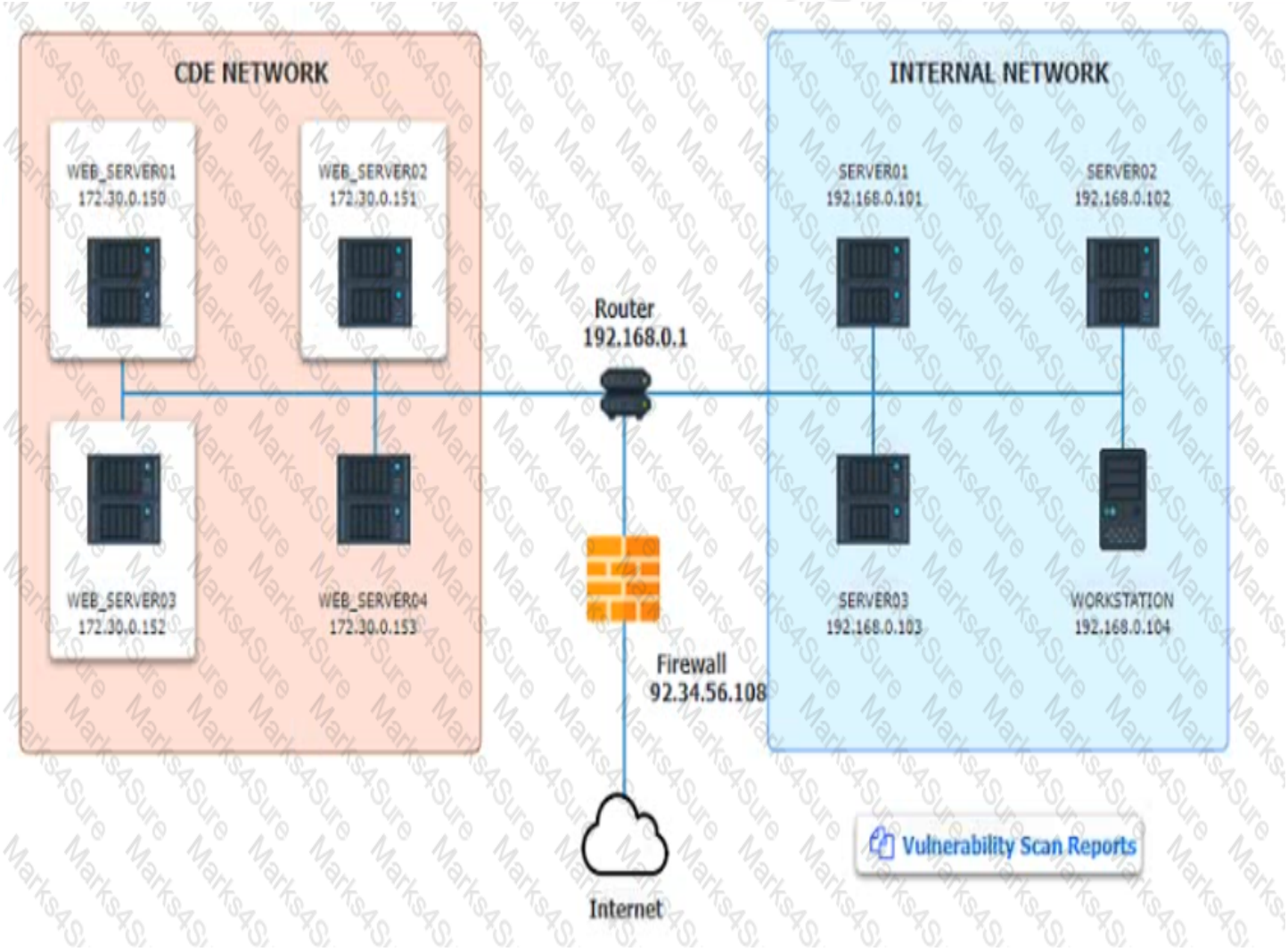
If the venerability is valid, the analyst must remediate the finding.

After reviewing the information provided in the network diagram, select the STEP 2 tab to complete the simulation by selecting the correct Validation Result and Remediation Action for each server listed using the drop-down options.

INTRUCTIONS:

The simulation includes 2 steps.

Step1:Review the information provided in the network diagram and then move to the STEP 2 tab.



Vulnerability Scan Report

HIGH SEVERITY

Title:	Cleartext Transmission of Sensitive Information
Description:	The software transmits sensitive or securitycritical data in Cleartext in a communication channel that can be sniffed by authorized users.
Affected Asset:	172.30.0.15
Risk:	Anyone can read the information by gaining access to the channel being used for communication.
Reference:	CVE-2002-1949

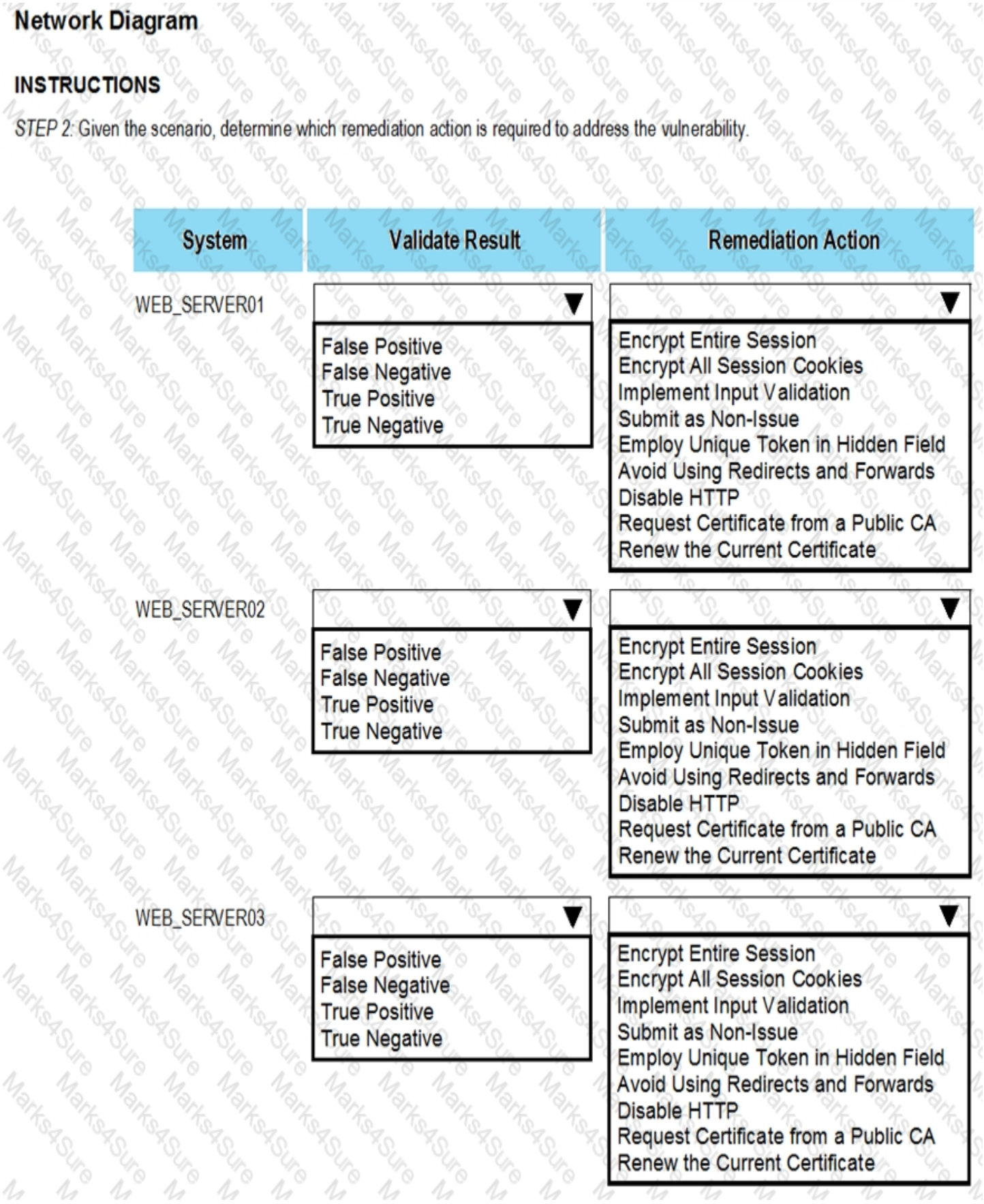
MEDIUM SEVERITY

Title:	Sensitive Cookie in HTTPS session without 'Secure' Attribute
Description:	The Secure attribute for sensitive cookies in HTTPS sessions is not set, which could cause the use agent to send those cookies in plaintex over HTTP session.
Affected Asset:	172.30.0.152
Risk:	Session Sidejacking
Reference:	CVE-2004-0462

LOW SEVERITY

Title:	Untrusted SSL/TLS Server X.509 Certificate
Description:	The server's TLS/SSL certificate is signed by a Certification Authority that is untrusted or unknown.
Affected Asset:	172.30.0.153
Risk:	May allow man-in-the-middle attackers to insert a spoofed certificate for any Distinguished Name (DN).
Reference:	CVE-2005-1234

STEP 2: Given the Scenario, determine which remediation action is required to address the vulnerability.



Answer:

Network Diagram

INSTRUCTIONS

Web Server 1 --> True positive - Encrypt entire session
Web Server 2 --> False Positive - Submit as non-issue
Web Server 3 --> True Positive - Request certificate from a public CA

STEP 2: Given the scenario, determine which remediation action is required to address the vulnerability.

System	Validate Result	Remediation Action
WEB_SERVER01	False Positive False Negative True Positive True Negative	Encrypt Entire Session Encrypt All Session Cookies Implement Input Validation Submit as Non-Issue Employ Unique Token in Hidden Field Avoid Using Redirects and Forwards Disable HTTP Request Certificate from a Public CA Renew the Current Certificate
WEB_SERVER02	False Positive False Negative True Positive True Negative	Encrypt Entire Session Encrypt All Session Cookies Implement Input Validation Submit as Non-Issue Employ Unique Token in Hidden Field Avoid Using Redirects and Forwards Disable HTTP Request Certificate from a Public CA Renew the Current Certificate
WEB_SERVER03	False Positive False Negative True Positive True Negative	Encrypt Entire Session Encrypt All Session Cookies Implement Input Validation Submit as Non-Issue Employ Unique Token in Hidden Field Avoid Using Redirects and Forwards Disable HTTP Request Certificate from a Public CA Renew the Current Certificate

Question #:84

A user downloads software that contains malware onto a computer that eventually infects numerous other systems. Which of the following has the user become?

A. Hacklivist

B. Advanced persistent threat

C. Insider threat

D. Script kiddie

Answer: C

Explanation

The user has become an insider threat by downloading software that contains malware onto a computer that eventually infects numerous other systems. An insider threat is a person or entity that has legitimate access to an organization's systems, networks, or resources and uses that access to cause harm or damage to the organization. An insider threat can be intentional or unintentional, malicious or negligent, and can result from various actions or behaviors, such as downloading unauthorized software, violating security policies, stealing data, sabotaging systems, or collaborating with external attackers.

Second Lab

Which of the following should the security administrator investigate next?

A. tiki

B. phpList

C. shtml.exe

D. sshome

Answer: C

Explanation

The security administrator should investigate shtml.exe next, as it is a potential vulnerability that allows remote code execution on the web server. Nikto scan results indicate that the web server is running Apache on Windows, and that the shtml.exe file is accessible in the /scripts/ directory. This file is part of the Server Side Includes (SSI) feature, which allows dynamic content generation on web pages. However, if the SSI feature is not configured properly, it can allow attackers to execute arbitrary commands on the web server by injecting malicious code into the URL or the web page12. Therefore, the security administrator should check the SSI configuration and permissions, and remove or disable the shtml.exe file if it is not needed. References: Nikto-Penetration testing. Introduction, Web application scanning with Nikto

Question #:102

A company recently experienced a security incident. The security team has determined

a user clicked on a link embedded in a phishing email that was sent to the entire company. The link resulted in a malware download, which was subsequently installed and run.

INSTRUCTIONS

Part 1

Review the artifacts associated with the security incident. Identify the name of the malware, the malicious IP address, and the date and time when the malware executable entered the organization.

Part 2

Review the kill chain items and select an appropriate control for each that would improve the security posture of the organization and would have helped to prevent this incident from occurring. Each

control may only be used once, and not all controls will be used.

Firewall log:

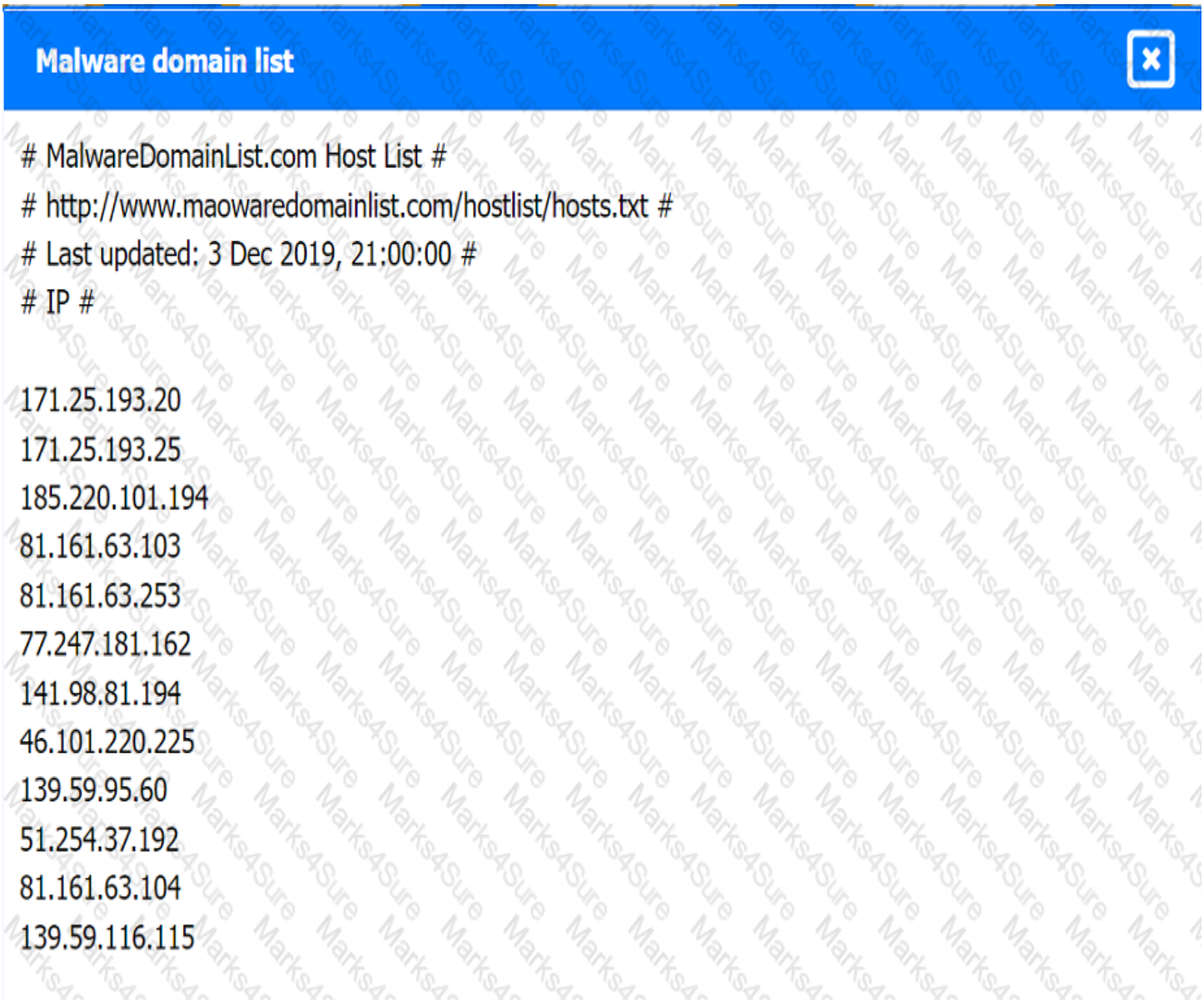
File integrity Monitoring Report:

File integrity monitoring report

Shows files, folders, shares, and permissions that were created, deleted, or modified.

Action	Object type	What	Who	When
Added Where: Workstation:	File Host1 172.30.0.152	\\host1\users\user1\Downloads\payroll.xlsx	Domainusers\user1	11/30/19 12:05:34
Removed Where: Workstation: Date created:	File Host1 172.30.0.152	\\host1\users\user1\Downloads\payroll.xlsx "11/30/19 12:05:34"	Domainusers\user1	11/30/19 12:25:13
Added Where: Workstation:	File Host1 172.30.0.152	\\host1\users\user1\Downloads\resume1.docx	Domainusers\user1	12/1/19 13:59:25
Added	File	\\host1\users\user1\Downloads\invoice.exe	Domainusers\user1	12/1/19 14:03:55
Where: Workstation:	Host1 172.30.0.152			
Renamed Where: Workstation: Name changed from:	File Host1 172.30.0.152	 resume1.docx to resume2.docx	Domainusers\user1	12/1/19 14:25:30

Malware domain list:



Vulnerability Scan Report:

Vulnerability scan report

HIGH SEVERITY

Title: Cleartext transmission of sensitive information

Description: The software transmits sensitive or security-critical data in Cleartext in a communication channel that can be sniffed by authorized users.

Affected asset: 172.30.0.150

Risk: Anyone can read the information by gaining access to the channel being used for communication.

Reference: CVE-2002-1949

HIGH SEVERITY

Title: Elevated privileges not required for software installations

Description: All account types can install software, requirements for privileged accounts for installation capabilities is not configured.

Affected asset: 172.30.0.152

Risk: Enhanced risk for unauthorized or malicious software installation

Reference: n/a

MEDIUM SEVERITY

Title:	Sensitive cookie in HTTPS session without "secure" attribute
Description:	The secure attribute for sensitive cookies in HTTPS sessions is not set, which could cause the user agent to send those cookies in plaintext over HTTP session.
Affected asset:	172.30.0.157
Risk:	Session sidejacking
Reference:	CVE-2004-0462

LOW SEVERITY

Title:	Untrusted SSL/TLS Server X.509 certificate
Description:	The server's TLS/SSL certificate is signed by a certificate authority that is untrusted or unknown.
Affected asset:	172.30.0.153
Risk:	May allow on-path attackers to insert a spoofed certificate for any distinguished name (DN).
Reference:	CVE-2005-1234

Phishing Email:

Phishing email

From: IT HelpDesk <it-helpdesk@company.com>
Sent: Sun 12/01/2019 2:00:00
To: Global Users <globalusers@company.com>
Subject: Moving our mail servers

Hi,

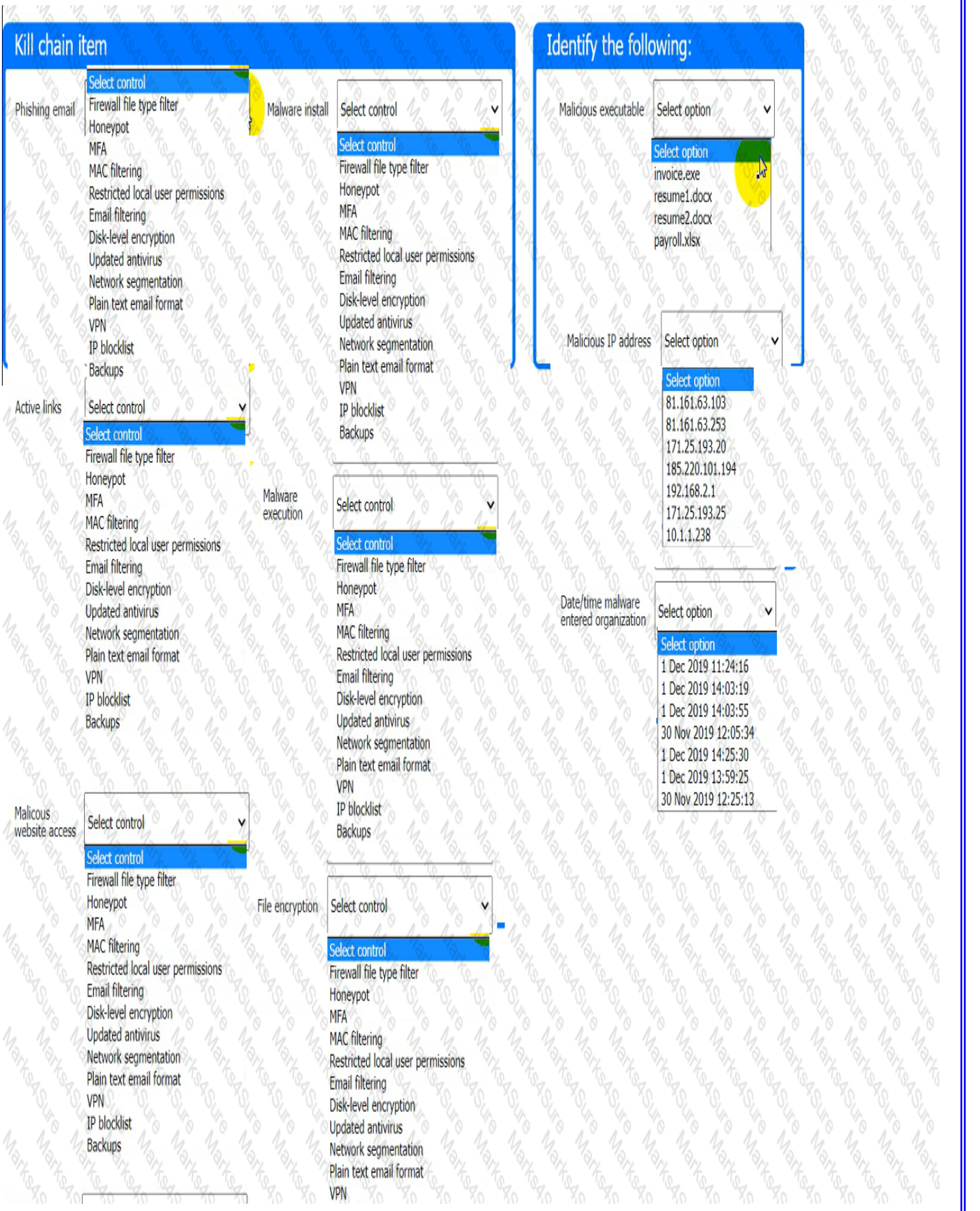
In the upcoming days, we will be moving our mail servers. Check out the new Company Webmail to know if it has started working for you.

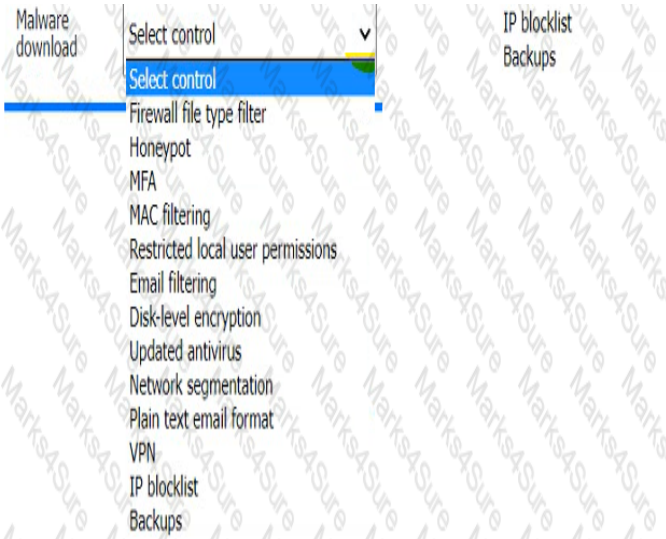
Visit the new Company Webmail to see all the new features.
Use your current username and password at Company Webmail.

Download the latest mail client located here.

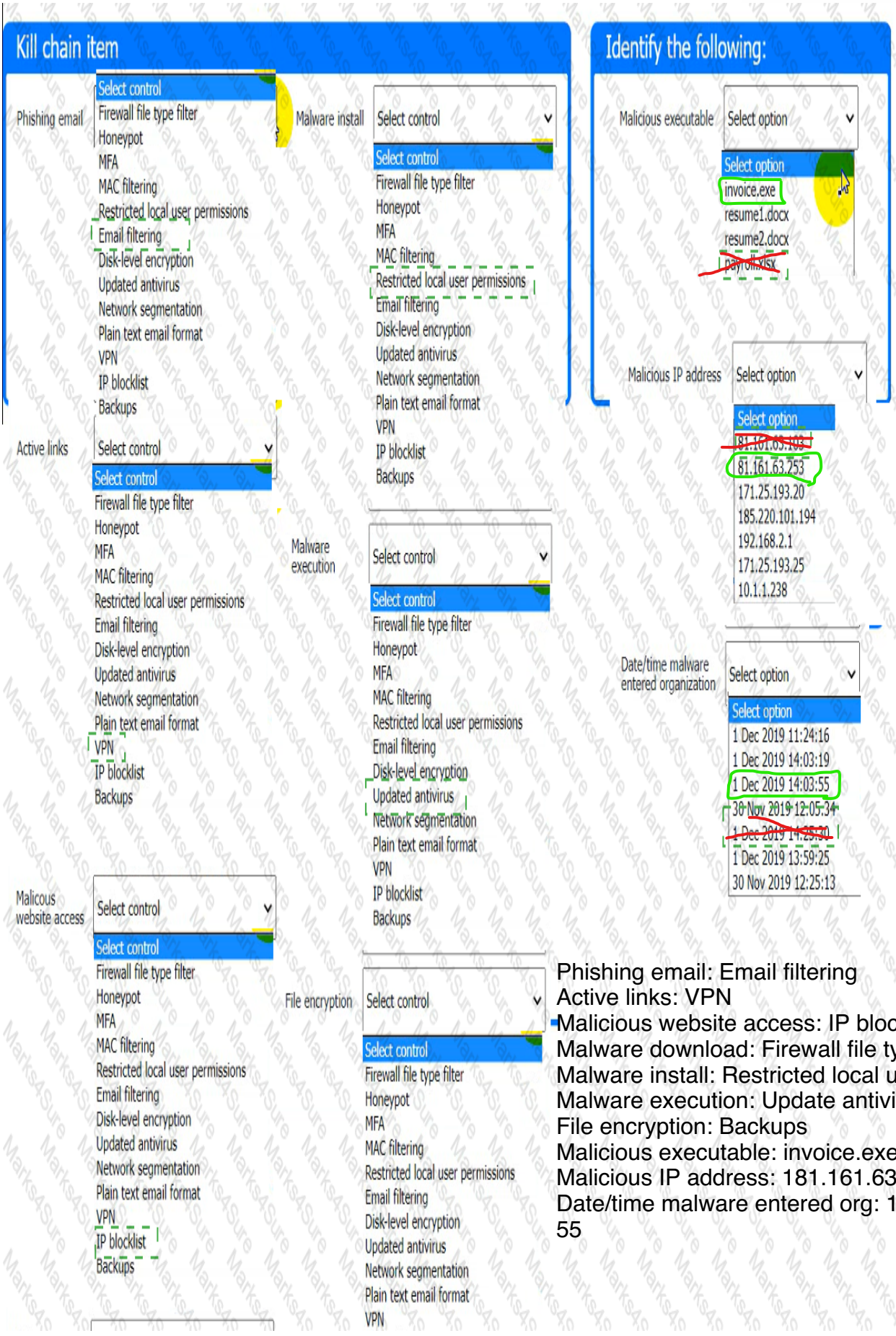
Thank you.

IT HelpDesk

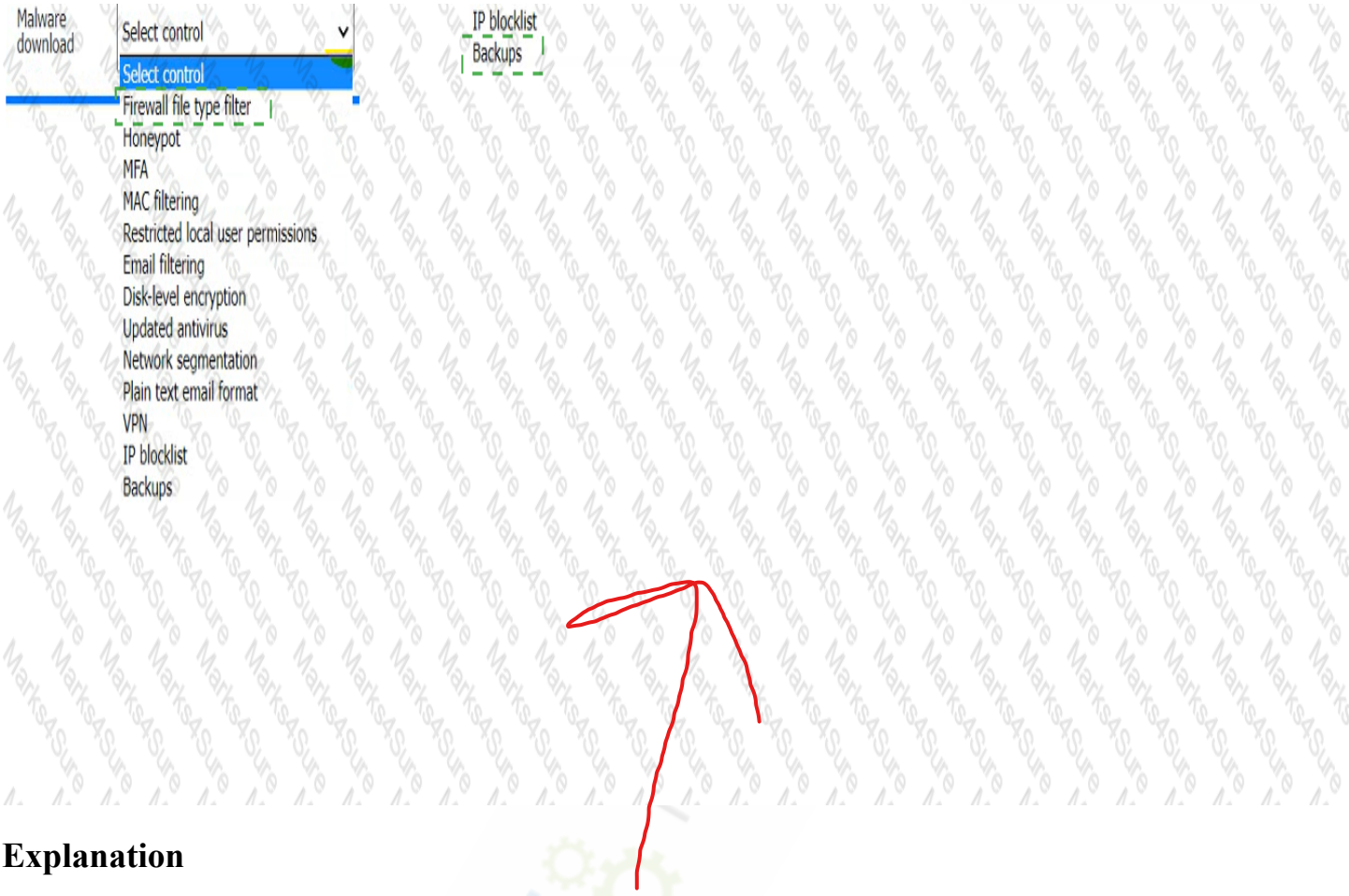

Kill chain item
Phishing email
Select control
Firewall file type filter
Honeypot
MFA
MAC filtering
Restricted local user permissions
Email filtering
Disk-level encryption
Updated antivirus
Network segmentation
Plain text email format
VPN
IP blocklist
Backups
Malware install
Select control
Firewall file type filter
Honeypot
MFA
MAC filtering
Restricted local user permissions
Email filtering
Disk-level encryption
Updated antivirus
Network segmentation
Plain text email format
VPN
IP blocklist
Backups
Active links
Select control
Firewall file type filter
Honeypot
MFA
MAC filtering
Restricted local user permissions
Email filtering
Disk-level encryption
Updated antivirus
Network segmentation
Plain text email format
VPN
IP blocklist
Backups
Malware execution
Select control
Firewall file type filter
Honeypot
MFA
MAC filtering
Restricted local user permissions
Email filtering
Disk-level encryption
Updated antivirus
Network segmentation
Plain text email format
VPN
IP blocklist
Backups
Malicous website access
Select control
Firewall file type filter
Honeypot
MFA
MAC filtering
Restricted local user permissions
Email filtering
Disk-level encryption
Updated antivirus
Network segmentation
Plain text email format
VPN
IP blocklist
Backups
File encryption
Select control
Firewall file type filter
Honeypot
MFA
MAC filtering
Restricted local user permissions
Email filtering
Disk-level encryption
Updated antivirus
Network segmentation
Plain text email format
VPN
Identify the following:
Malicious executable
Select option
invoice.exe
resume1.docx
resume2.docx
payroll.xlsx
Malicious IP address
Select option
81.161.63.103
81.161.63.253
171.25.193.20
185.220.101.194
192.168.2.1
171.25.193.25
10.1.1.238
Date/time malware entered organization
Select option
1 Dec 2019 11:24:16
1 Dec 2019 14:03:19
1 Dec 2019 14:03:55
30 Nov 2019 12:05:34
1 Dec 2019 14:25:30
1 Dec 2019 13:59:25
30 Nov 2019 12:25:13


Malware download
Select control
Select control
Firewall file type filter
Honeypot
MFA
MAC filtering
Restricted local user permissions
Email filtering
Disk-level encryption
Updated antivirus
Network segmentation
Plain text email format
VPN
IP blocklist
Backups
IP blocklist
Backups

Answer:

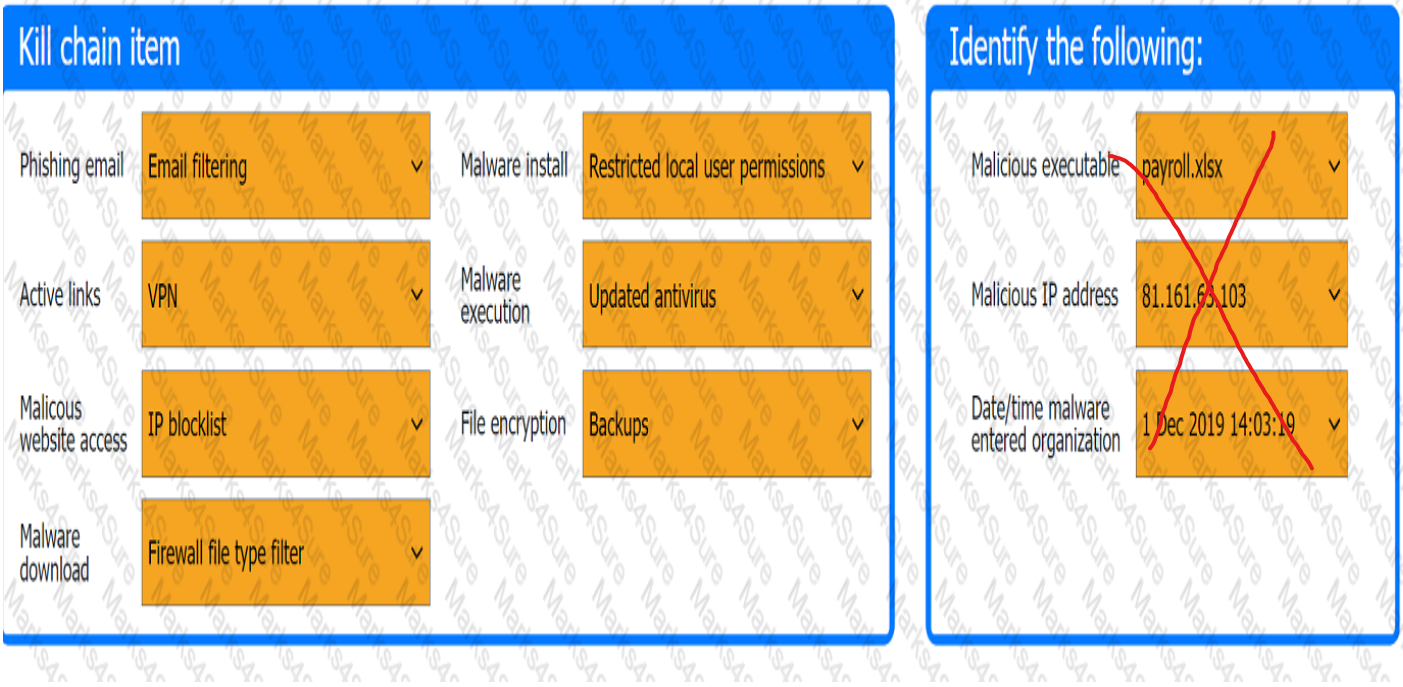


Phishing email: Email filtering
Active links: VPN
Malicious website access: IP blocklist
Malware download: Firewall file type filter
Malware install: Restricted local user permissions
Malware execution: Update antivirus
File encryption: Backups
Malicious executable: invoice.exe
Malicious IP address: 181.161.63.253
Date/time malware entered org: 1 Dec 2019 14:03:55



Explanation

A screenshot of a computer Description automatically generated



Question #:103

Third Lab

B. Change control documentation

C. Incident response playbook

D. Incident response plan

Answer: A

Explanation

A risk register typically contains details like ID, name, description, classification of information, and responsible party. It's used for tracking identified risks and managing them.Recording details like ID, Name, Description, Classification of information, and Responsible party is typically done in a Risk Register. This document is used to identify, assess, manage, and monitor risks within an organization. It's not directly related to incident response or change control documentation.

Question #:144

A security analyst noticed the following entry on a web server log:

Warning:

fopen (http://127.0.0.1:16) : failed to open stream:

Connection refused in /hj/var/www/showimage.php on line 7

Which of the following malicious activities was most likely attempted?

A. XSS

B. CSRF

C. SSRF

D. RCE

Answer: C

Explanation

The malicious activity that was most likely attempted is SSRF (Server-Side Request Forgery). This is a type of attack that exploits a vulnerable web application to make requests to other resources on behalf of the web server. In this case, the attacker tried to use the fopen function to access the local loopback address (127.0.0.1) on port 16, which could be a service that is not intended to be exposed to the public. The connection was refused, indicating that the port was closed or filtered. References: CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 2: Software and Application Security, page 66.

Question #:145

You are a penetration tester who is reviewing the system hardening guidelines for a company. Hardening guidelines indicate the following.

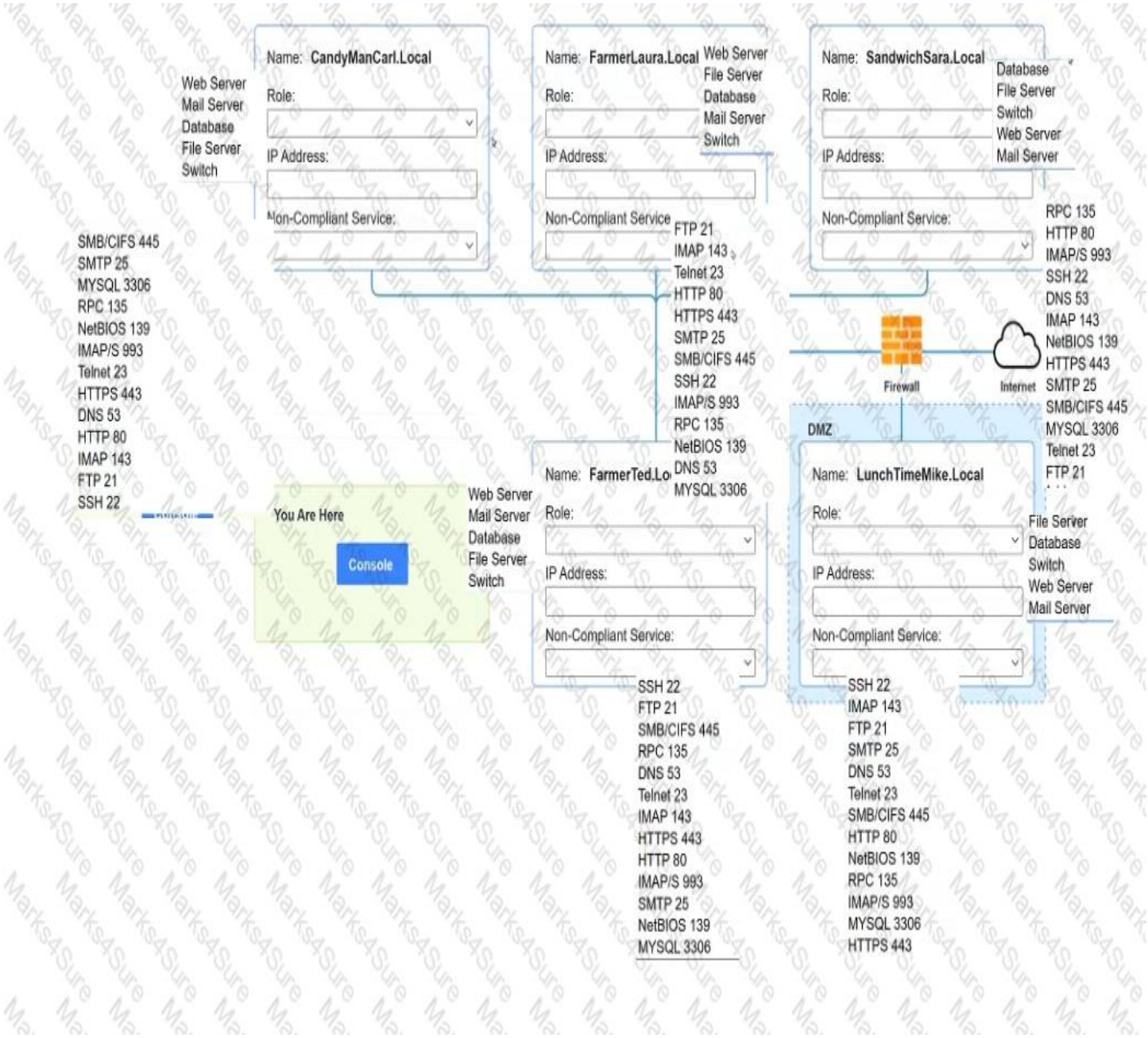
- There must be one primary server or service per device.
- Only default port should be used
- Non- secure protocols should be disabled.
- The corporate internet presence should be placed in a protected subnet

Instructions :

- Using the available tools, discover devices on the corporate network and the services running on these devices.

You must determine

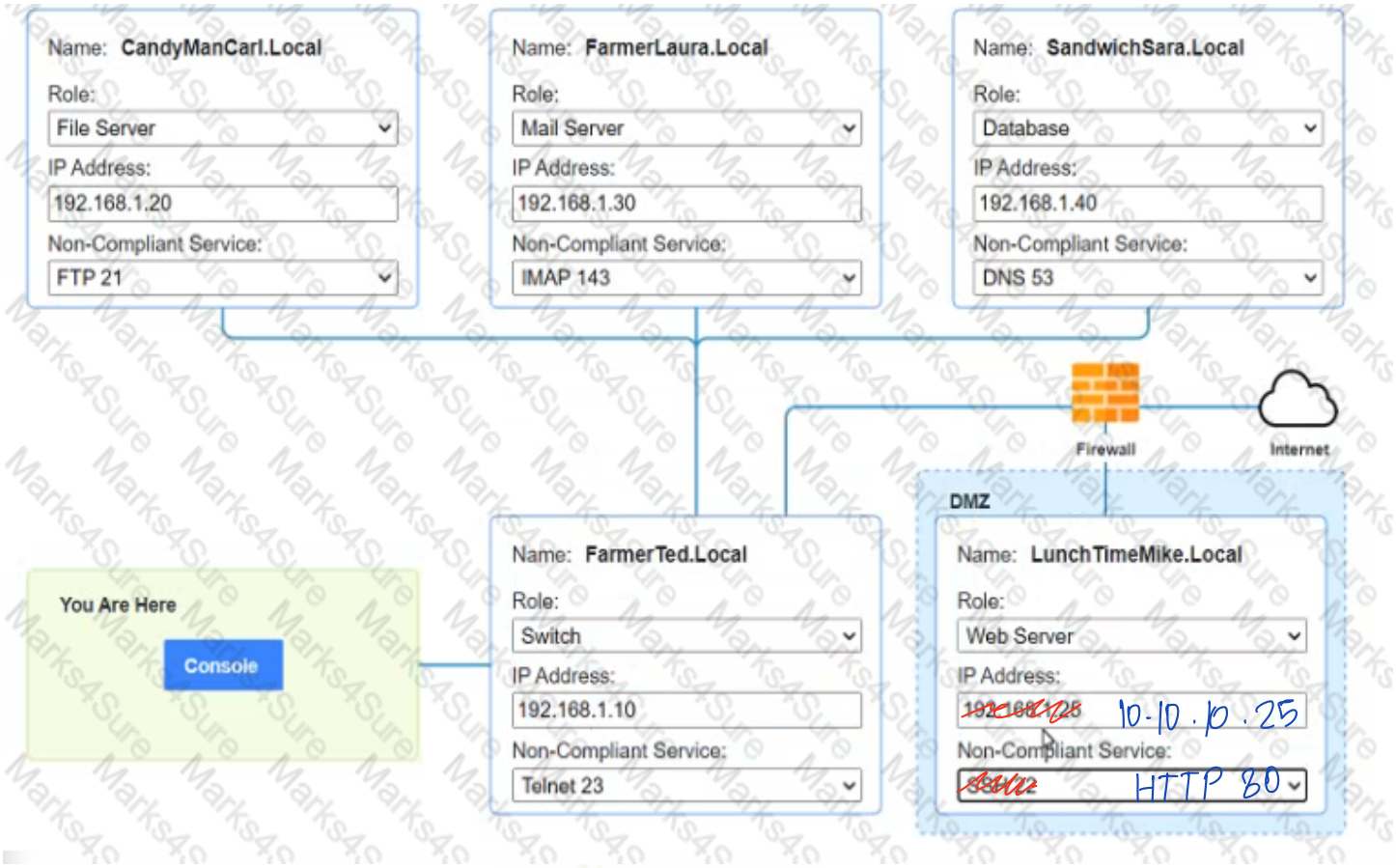
- ip address of each device
- The primary server or service each device
- The protocols that should be disabled based on the hardening guidelines

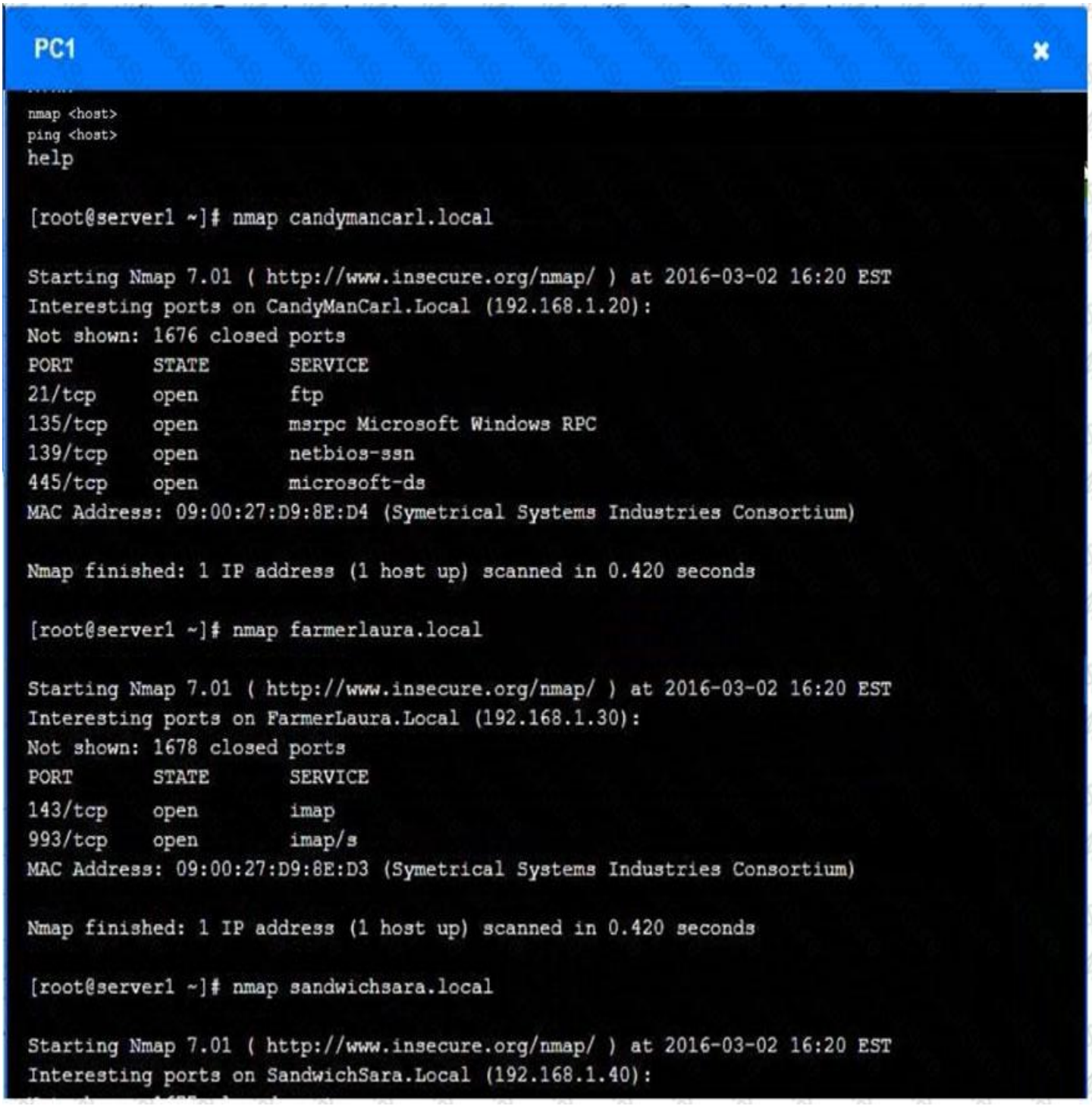


see the answer below in explanation:

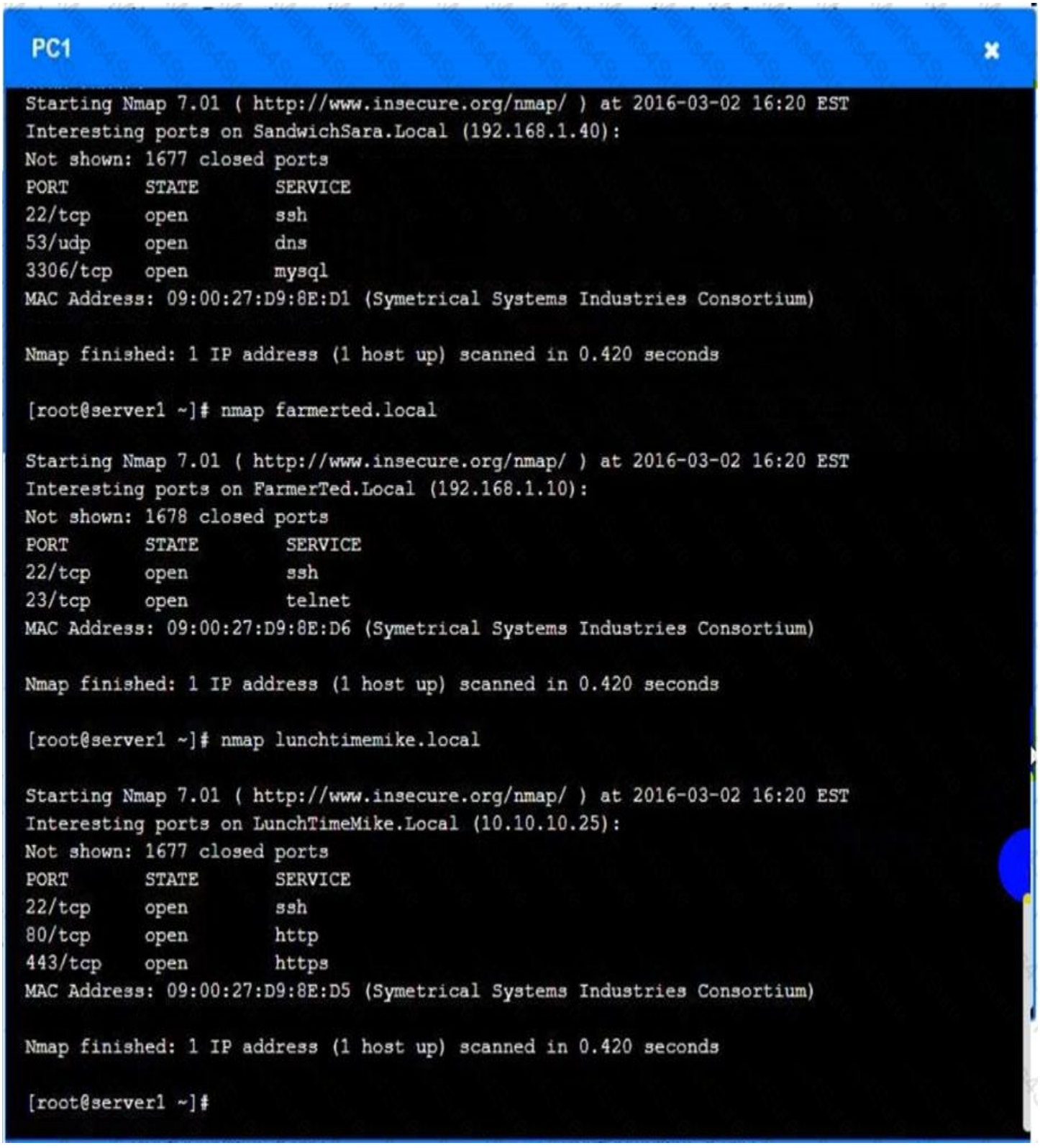
Explanation

Answer below images


Name: CandyManCarl.Local
Role:
File Server
IP Address:
192.168.1.20
Non-Compliant Service:
FTP 21
Name: FarmerLaura.Local
Role:
Mail Server
IP Address:
192.168.1.30
Non-Compliant Service:
IMAP 143
Name: SandwichSara.Local
Role:
Database
IP Address:
192.168.1.40
Non-Compliant Service:
DNS 53
Firewall
Internet
DMZ
You Are Here
Console
Name: FarmerTed.Local
Role:
Switch
IP Address:
192.168.1.10
Non-Compliant Service:
Telnet 23
Name: LunchTimeMike.Local
Role:
Web Server
IP Address:
10.10.10.25
Non-Compliant Service:
HTTP 80



A computer screen with white text Description automatically generated



Question #:146

A security analyst needs to mitigate a known, exploited vulnerability related not

tack vector that embeds software through the USB interface. Which of the following should the analyst do

Fourth Lab

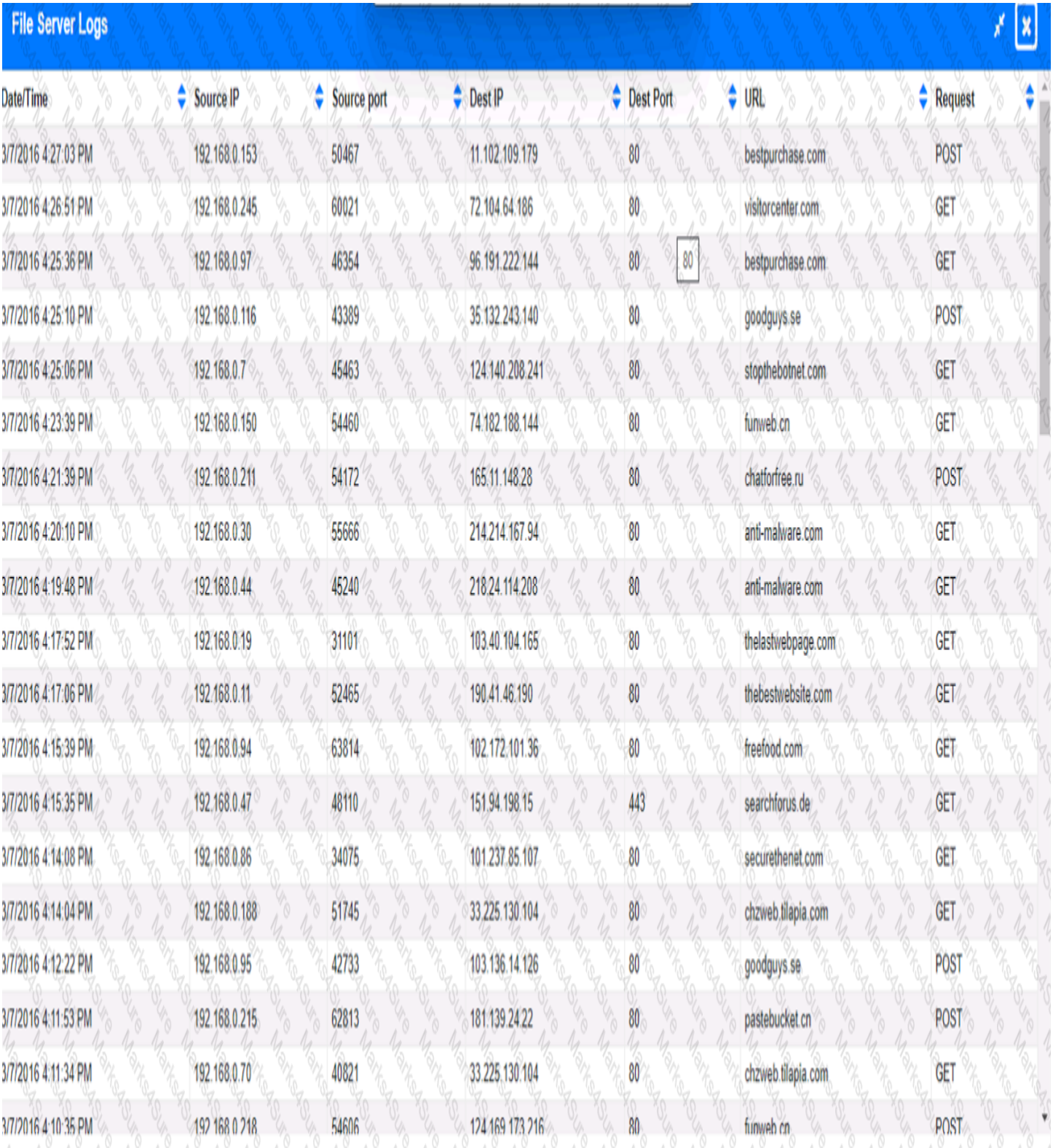
References: CompTIA CySA+ CS0-003 Certification Study Guide, Chapter 3: Security Operations, page 107; CompTIA CySA+ Study Guide: Exam CS0-003, 3rd Edition, Chapter 4: Security Operations, page 153.

Question #:151

Approximately 100 employees at your company have received a Phishing email. AS a security analyst. you have been tasked with handling this Situation.

Email Server Logs

Date/Time	Protocol	SIP	Source port	From	To
3/7/2016 4:17:08 PM	TCP	192.168.0.110	37196	kmatthews@anycorp.com	dfritz@anycorp.com
3/7/2016 4:16:19 PM	TCP	192.168.0.117	57888	stanimoto@anycorp.com	adifabio@anycorp.com
3/7/2016 4:15:13 PM	TCP	192.168.0.139	46550	hparikh@anycorp.com	adifabio@anycorp.com
3/7/2016 4:14:25 PM	TCP	192.168.0.185	63616	jlee@anycorp.com	jlee@anycorp.com;adifabio@anycorp.com
3/7/2016 4:13:02 PM	TCP	192.168.0.47	60919	adifabio@anycorp.com	cpuziss@anycorp.com
3/7/2016 4:12:50 PM	TCP	192.168.0.155	32891	kwilliams@anycorp.com	hparikh@anycorp.com
3/7/2016 4:11:09 PM	TCP	192.168.0.34	46187	lbalk@anycorp.com	jlee@anycorp.com
3/7/2016 4:10:54 PM	TCP	192.168.0.181	34556	dfritz@anycorp.com	kmatthews@anycorp.com
3/7/2016 4:10:38 PM	TCP	192.168.0.155	32891	kwilliams@anycorp.com	hparikh@anycorp.com
3/7/2016 4:10:23 PM	TCP	192.168.0.185	63616	jlee@anycorp.com	asmith@anycorp.com
3/7/2016 4:09:34 PM	TCP	192.168.0.34	30364	asmith@anycorp.com	hparikh@anycorp.com
3/7/2016 4:08:49 PM	TCP	192.168.0.61	48734	cpuziss@anycorp.com	kmatthews@anycorp.com
3/7/2016 4:07:33 PM	TCP	192.168.0.197	33585	gromney@anycorp.com	lbalk@anycorp.com
3/7/2016 4:07:32 PM	TCP	192.168.0.47	60919	adifabio@anycorp.com	adifabio@anycorp.com;jlee@anycorp.com
3/7/2016 4:05:47 PM	TCP	192.168.0.34	30364	asmith@anycorp.com	jlee@anycorp.com
3/7/2016 4:04:24 PM	TCP	192.168.0.139	46550	hparikh@anycorp.com	asmith@anycorp.com
3/7/2016 4:03:50 PM	TCP	192.168.0.181	34556	dfritz@anycorp.com	cpuziss@anycorp.com
3/7/2016 4:03:25 PM	TCP	192.168.0.61	48734	cpuziss@anycorp.com	kmatthews@anycorp.com
3/7/2016 4:01:37 PM	TCP	58.125.17.196	54566	it-helpdesk@sobergrill.com	shoaz@anycorp.com



File Server Logs

Date/Time	Source IP	Source port	Dest IP	Dest Port	URL	Request
3/7/2016 4:27:03 PM	192.168.0.153	50467	11.102.109.179	80	bestpurchase.com	POST
3/7/2016 4:26:51 PM	192.168.0.245	60021	72.104.64.186	80	visitorcenter.com	GET
3/7/2016 4:25:36 PM	192.168.0.97	46354	96.191.222.144	80	bestpurchase.com	GET
3/7/2016 4:25:10 PM	192.168.0.116	43389	35.132.243.140	80	goodguys.se	POST
3/7/2016 4:25:06 PM	192.168.0.7	45463	124.140.208.241	80	stopthebotnet.com	GET
3/7/2016 4:23:39 PM	192.168.0.150	54460	74.182.188.144	80	funweb.cn	GET
3/7/2016 4:21:39 PM	192.168.0.211	54172	165.11.148.28	80	chatforfree.ru	POST
3/7/2016 4:20:10 PM	192.168.0.30	55666	214.214.167.94	80	anti-malware.com	GET
3/7/2016 4:19:48 PM	192.168.0.44	45240	218.24.114.208	80	anti-malware.com	GET
3/7/2016 4:17:52 PM	192.168.0.19	31101	103.40.104.165	80	thelastwebpage.com	GET
3/7/2016 4:17:06 PM	192.168.0.11	52465	190.41.46.190	80	thebestwebsite.com	GET
3/7/2016 4:15:39 PM	192.168.0.94	63814	102.172.101.36	80	freefood.com	GET
3/7/2016 4:15:35 PM	192.168.0.47	48110	151.94.198.15	443	searchforus.de	GET
3/7/2016 4:14:08 PM	192.168.0.86	34075	101.237.85.107	80	securethenet.com	GET
3/7/2016 4:14:04 PM	192.168.0.188	51745	33.225.130.104	80	chzweb.tilapia.com	GET
3/7/2016 4:12:22 PM	192.168.0.95	42733	103.136.14.126	80	goodguys.se	POST
3/7/2016 4:11:53 PM	192.168.0.215	62813	181.139.24.22	80	pastebucket.cn	POST
3/7/2016 4:11:34 PM	192.168.0.70	40821	33.225.130.104	80	chzweb.tilapia.com	GET
3/7/2016 4:10:35 PM	192.168.0.218	54606	124.169.173.216	80	funweb.cn	POST

SIEM Logs

Keywords	Date and Time	Event ID	Task Category	Log Message	IP Address	Account Name	Process ID	Process Name
Audit Success	3/7/2016 4:23:29 PM	4689	Process Termination	A process has exited.	192.168.0.141	dfritz	505	excel.exe
Audit Success	3/7/2016 4:21:44 PM	4688	Process Creation	A new process has been created.	192.168.0.104	kwilliams	522	winword.exe
Audit Success	3/7/2016 4:20:23 PM	4689	Process Termination	A process has exited.	192.168.0.24	jlee	435	cmd.exe
Audit Success	3/7/2016 4:20:22 PM	4689	Process Termination	A process has exited.	192.168.0.134	asmith	558	winlogon.exe
Audit Success	3/7/2016 4:20:11 PM	4688	Process Creation	A new process has been created.	192.168.0.43	SYSTEM	1900	svchost.exe
Audit Success	3/7/2016 4:18:53 PM	4688	Process Creation	A new process has been created.	192.168.0.82	gromney	1067	notepad.exe
Audit Success	3/7/2016 4:18:34 PM	4689	Process Termination	A process has exited.	192.168.0.43	SYSTEM	1709	svchost.exe
Audit Success	3/7/2016 4:17:53 PM	4634	Logoff	An account was logged off.	192.168.0.134	asmith	459	lsass.exe
Audit Success	3/7/2016 4:16:33 PM	4624	Logon	An account was successfully logged on.	192.168.0.70	cpuziss	507	lsass.exe
Audit Success	3/7/2016 4:14:34 PM	4688	Process Creation	A new process has been created.	192.168.0.188	kmatthews	1234	mailclient.exe
Audit Success	3/7/2016 4:12:13 PM	4688	Process Creation	A new process has been created.	192.168.0.132	jshmo	1517	outlook.exe
Audit Success	3/7/2016 4:13:50 PM	4689	Process Termination	A process has exited.	192.168.0.104	kwilliams	1144	outlook.exe
Audit Success	3/7/2016 4:13:07 PM	4634	Logoff	An account was logged off.	192.168.0.24	jlee	533	lsass.exe
Audit Success	3/7/2016 4:12:46 PM	4624	Logon	An account was successfully logged on.	192.168.0.141	dfritz	979	lsass.exe
Audit Success	3/7/2016 4:12:32 PM	4634	Logoff	An account was logged off.	192.168.0.104	kwilliams	1889	lsass.exe
Audit Success	3/7/2016 4:12:00 PM	4624	Logon	An account was successfully logged on.	192.168.0.24	jlee	151	lsass.exe
Audit Success	3/7/2016 4:11:56 PM	4624	Logon	An account was successfully logged on.	192.168.0.134	asmith	1583	lsass.exe
Audit Success	3/7/2016 4:11:40 PM	4624	Logon	An account was successfully logged on.	192.168.0.70	cpuziss	638	lsass.exe
Audit Success	3/7/2016 4:11:39 PM	4634	Logoff	An account was logged off.	192.168.0.82	gromney	682	lsass.exe

Review the information provided and determine the following:

1. HOW many employees Clicked on the link in the Phishing email?

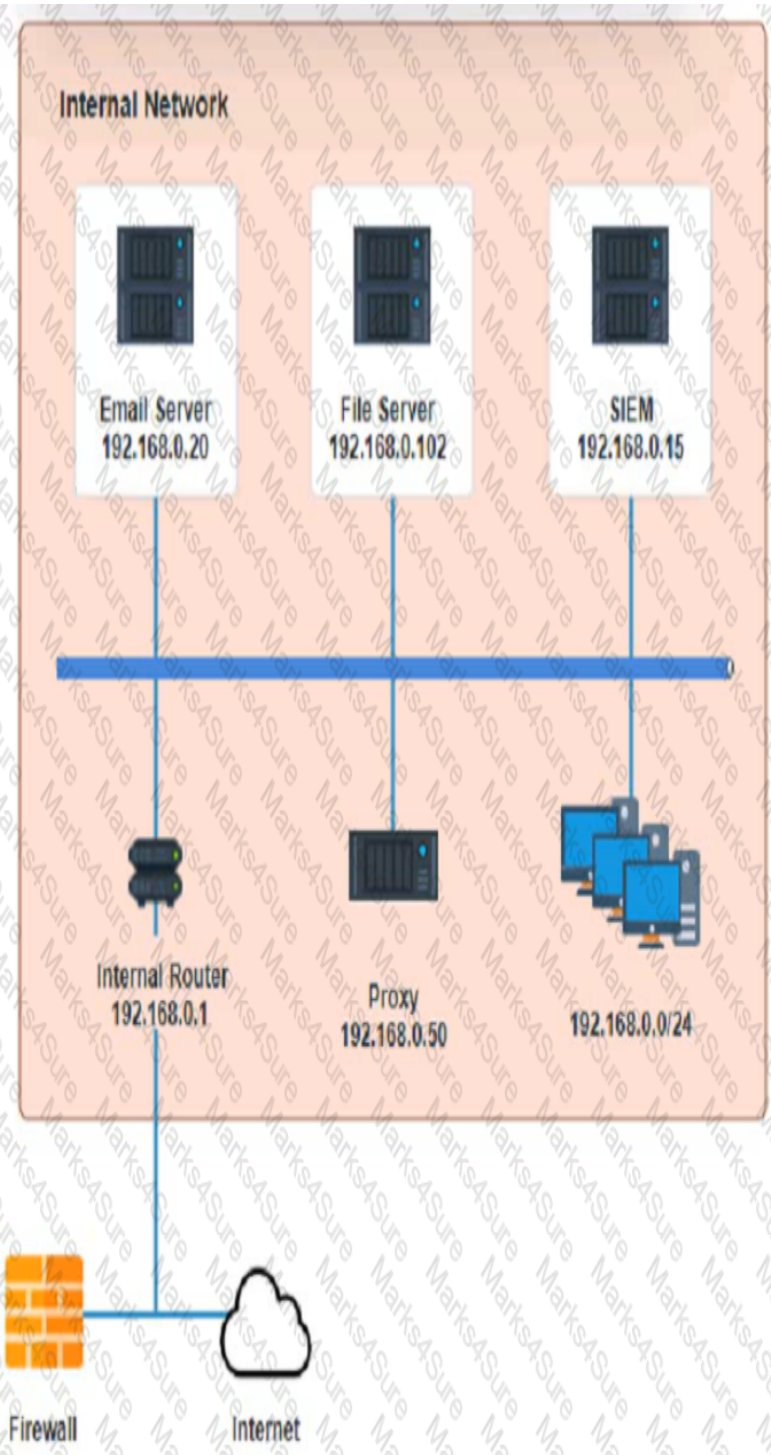
2. on how many workstations was the malware installed?

3. what is the executable file name of the malware?

View Phishing Email

Select the malware excecutable name.

- chrome.exe
- excel.exe
- svchost.exe
- mailclient.exe
- iexplore.exe
- putty.exe
- winword.exe
- cmd.exe
- winlogon.exe
- outlook.exe
- time.exe
- lsass.exe
- explorer.exe
- notepad.exe
- firefox.exe



How many workstations were infected?

4

How many users clicked the link in the fishing e-mail?

7

see the answer in explanation for this task.

Explanation

1. How many employees clicked on the link in the phishing email?

According to the email server logs, 25 employees clicked on the link in the phishing email.

2. On how many workstations was the malware installed?

According to the file server logs, the malware was installed on 15 workstations.

3. What is the executable file name of the malware?

The executable file name of the malware is svchost.EXE.

Answers are on prev page.

- 1. 25
- 2. 15
- 3. svchost.EXE

Question #:152

A vulnerability management team found four major vulnerabilities during an assessment and needs to provide a report for the proper prioritization for further mitigation. Which of the following vulnerabilities should have the highest priority for the mitigation process?

A. A vulnerability that has related threats and loCs, targeting a different industry

B. A vulnerability that is related to a specific adversary campaign, with loCs found in the SIEM

C. A vulnerability that has no adversaries using it or associated loCs

D. A vulnerability that is related to an isolated system, with no loCs

Answer: B

Explanation

A vulnerability that is related to a specific adversary campaign, with IoCs found in the SIEM, should have the highest priority for the mitigation process. This is because it indicates that the vulnerability is actively being exploited by a known threat actor, and that the organization's security monitoring system has detected signs of compromise. This poses a high risk of data breach, service disruption, or other adverse impacts. References:

Fifth Lab

C. Seize all related evidence

D. Interview the witnesses

Answer: B

Explanation

The first thing that must be done when starting an investigation is to secure the scene. Securing the scene involves isolating and protecting the area where the incident occurred, as well as any potential evidence or witnesses. Securing the scene can help prevent any tampering, contamination, or destruction of evidence, as well as any interference or obstruction of the investigation.

Question #:204

A security team identified several rogue Wi-Fi access points during the most recent network scan. The network scans occur once per quarter. Which of the following controls would best all ow the organization to identity rogue

devices more quickly?

A. Implement a continuous monitoring policy.

B. Implement a BYOD policy.

C. Implement a portable wireless scanning policy.

D. Change the frequency of network scans to once per month.

Answer: A

Explanation

The best control to allow the organization to identify rogue devices more quickly is A. Implement a continuous monitoring policy. A continuous monitoring policy is a set of procedures and tools that enable an organization to detect and respond to unauthorized or anomalous activities on its network in real time or near real time. A continuous monitoring policy can help identify rogue access points as soon as they appear on the network, rather than waiting for quarterly or monthly scans. A continuous monitoring policy can also help improve the overall security posture and compliance of the organization by providing timely and accurate information about its network assets, vulnerabilities, threats, and incidents1.

Question #:205

A security analyst performs various types of vulnerability scans. Review the vulnerability scan results to determine the type of scan that was executed and if a false positive occurred for each device.

Instructions:

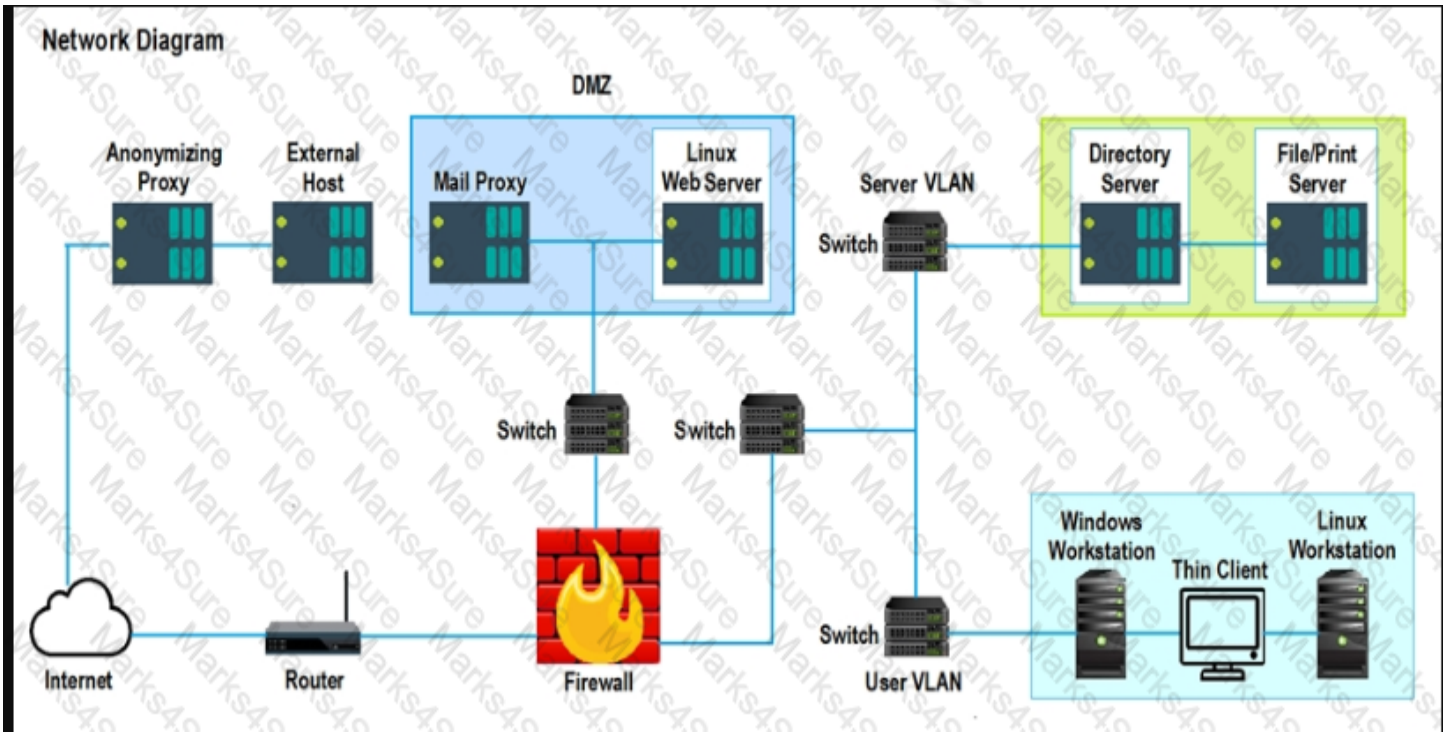
Select the Results Generated drop-down option to determine if the results were generated from a credentialed scan, non-credentialed scan, or a compliance scan.

For ONLY the credentialed and non-credentialed scans, evaluate the results for false positives and check the findings that display false positives. NOTE: If you would like to uncheck an option that is currently selected, click on the option a second time.

Lastly, based on the vulnerability scan results, identify the type of Server by dragging the Server to the results.

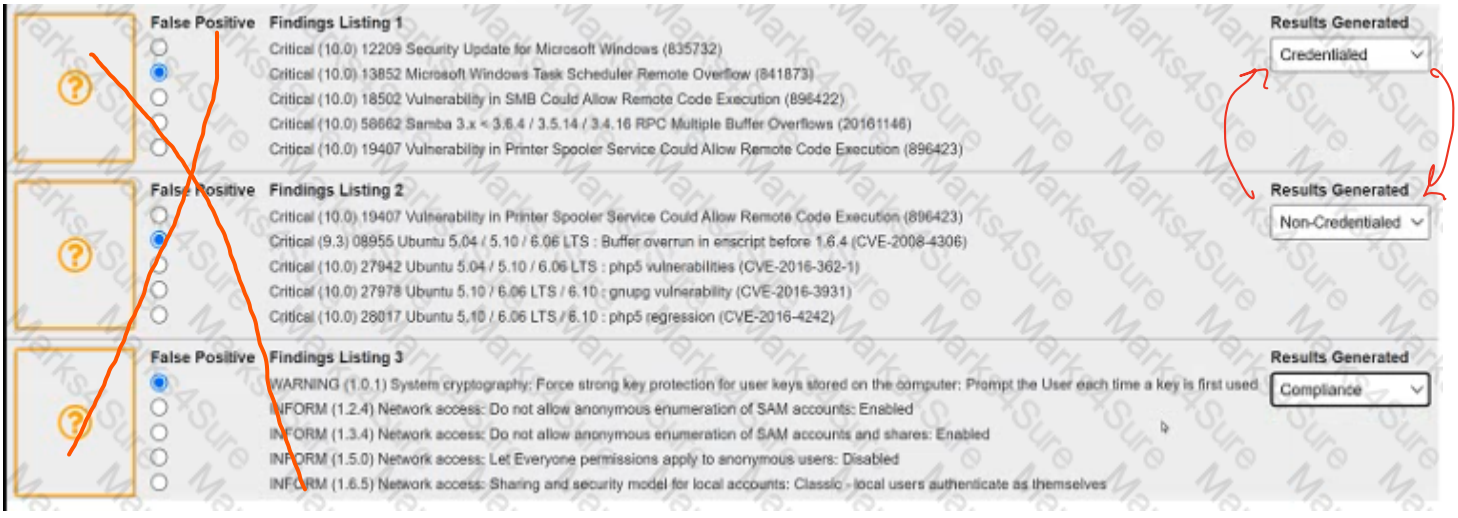
The Linux Web Server, File-Print Server and Directory Server are draggable.

If at any time you would like to bring back the initial state of the simulation, please select the Reset All 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:

File-Print Server / non-credentialed / fp: 4th one due to it's a windows machine and samba is for linux
Linux Web Server / credentialed / fp: 1st one due to it's a linux machine and printer spooler service is for windows
Directory Server / compliance / no fp



Question #:206

An organization recently changed its BC and DR plans. Which of the following would best allow for the incident response team to test the changes without any impact to the business?

Sixth Lab

D. Enable SSO to enterprise applications

Answer: A

Explanation

The best priority based on common attack frameworks for a new program to reduce attack surface risks and threats as part of a zero trust approach is to reduce the administrator and privileged access accounts. Administrator and privileged access accounts are accounts that have elevated permissions or capabilities to perform sensitive or critical tasks on systems or networks, such as installing software, changing configurations, accessing data, or granting access. Reducing the administrator and privileged access accounts can help minimize the attack surface, as it can limit the number of potential targets or entry points for attackers, as well as reduce the impact or damage of an attack if an account is compromised.

Question #:243

You are a cybersecurity analyst tasked with interpreting scan data from Company As servers You must verify the requirements are being met for all of the servers and recommend changes if you find they are not

The company's hardening guidelines indicate the following

• TLS 1 2 is the only version of TLS

running.

• Apache 2.4.18 or greater should be used.

• Only default ports should be used.

INSTRUCTIONS

using the supplied data. record the status of compliance With the company’s guidelines for each server.

The question contains two parts: make sure you complete Part 1 and Part 2. Make recommendations for Issues based ONLY on the hardening guidelines provided.

Part 1:

AppServ1:

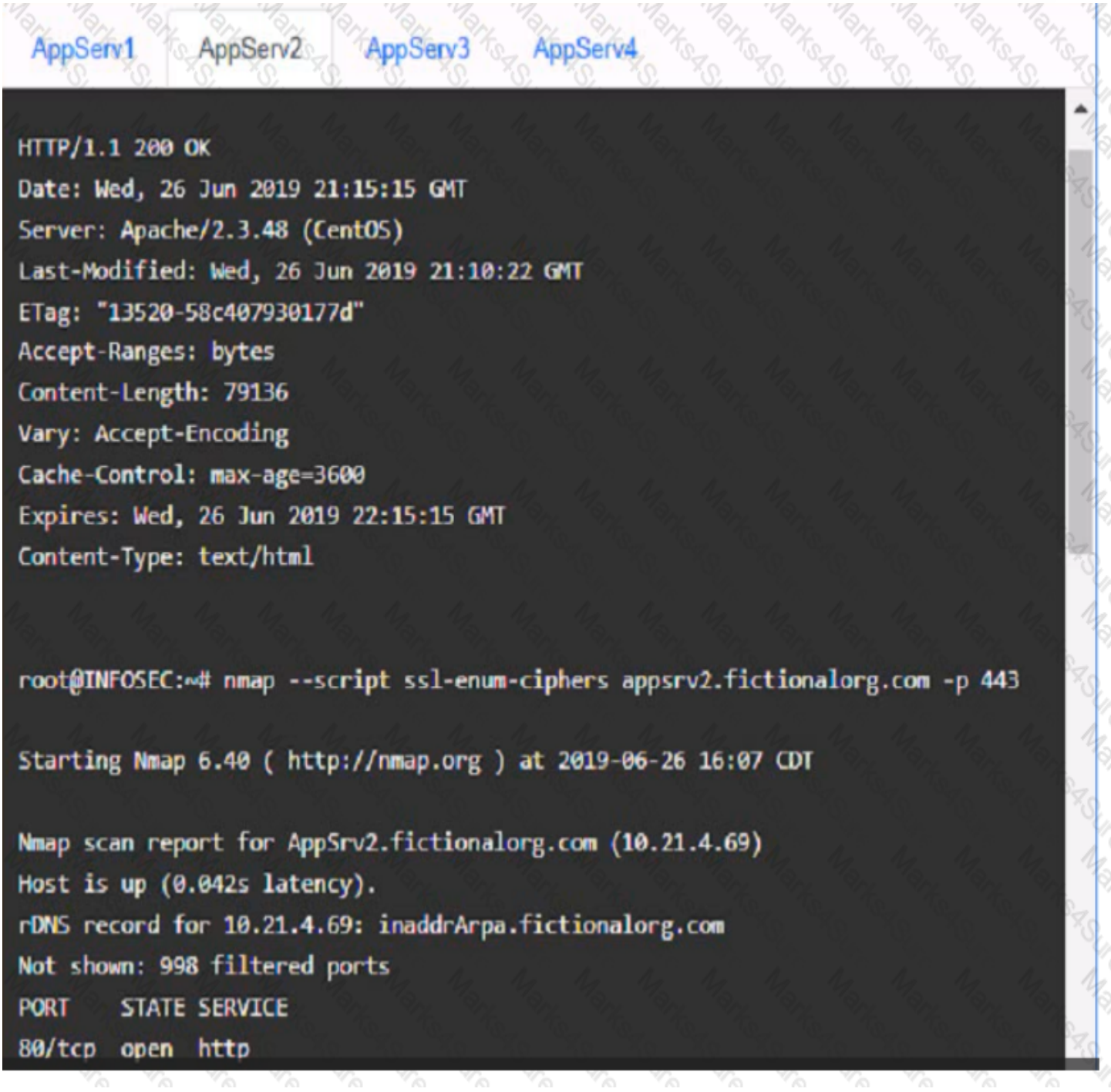
AppServ1 AppServ2 AppServ3 AppServ4

```
root@INFOSEC:~# curl --head appsrv1.fictionalorg.com:443

HTTP/1.1 200 OK
Date: Wed, 26 Jun 2019 21:15:15 GMT
Server: Apache/2.4.48 (CentOS)
Last-Modified: Wed, 26 Jun 2019 21:10:22 GMT
ETag: "13520-58c407930177d"
Accept-Ranges: bytes
Content-Length: 79136
Vary: Accept-Encoding
Cache-Control: max-age=3600
Expires: Wed, 26 Jun 2019 22:15:15 GMT
Content-Type: text/html


root@INFOSEC:~# nmap --script ssl-enum-ciphers appsrv1.fictionalorg.com -p 443

Starting Nmap 6.40 ( http://nmap.org ) at 2019-06-26 16:07 CDT

Nmap scan report for AppSrv1.fictionalorg.com (10.21.4.68)
Host is up (0.042s latency).
rDNS record for 10.21.4.68: inaddrArpa.fictionalorg.com
PORT    STATE SERVICE
```

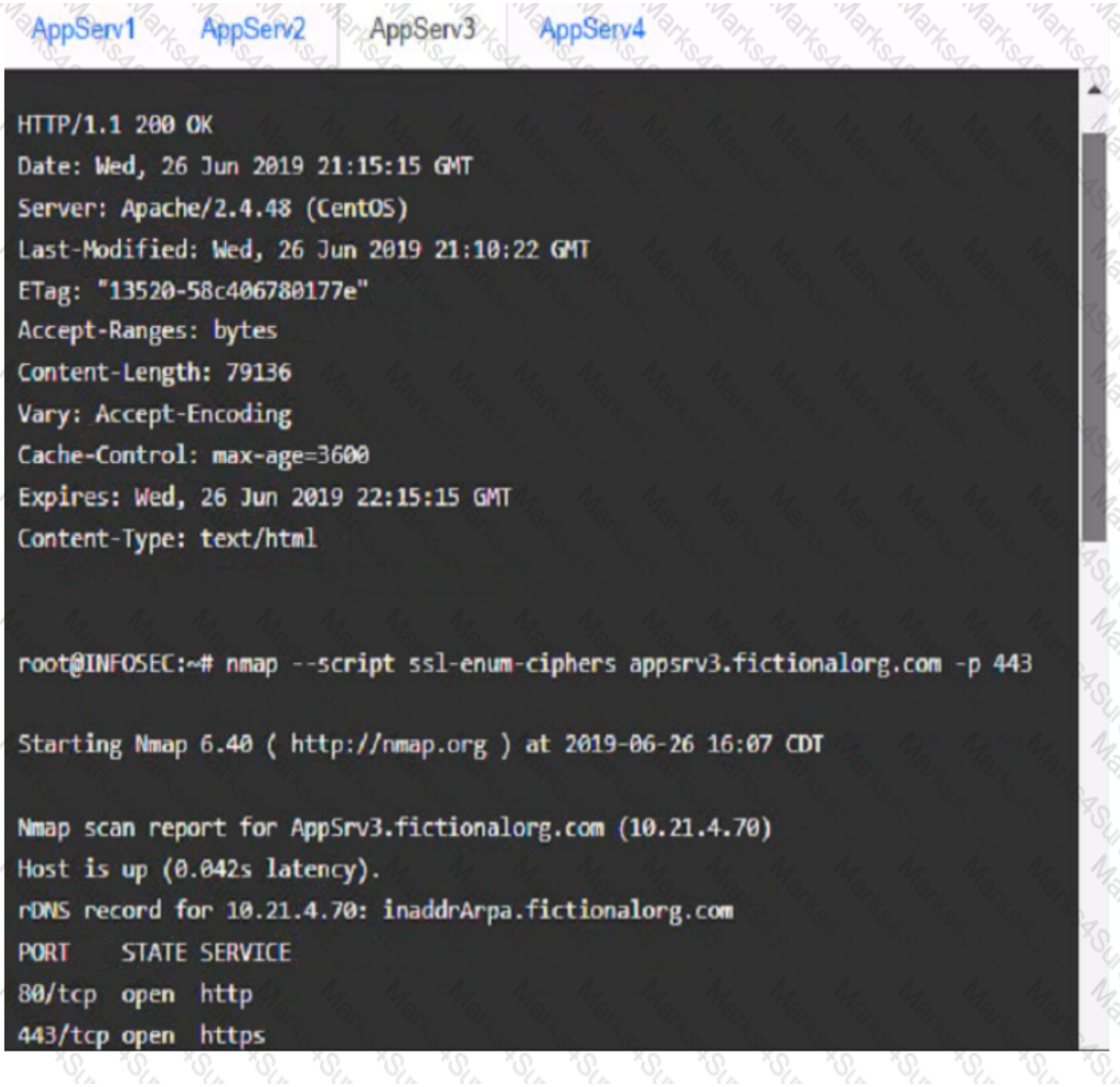
```
root@INFOSEC:~# nmap --script ssl-enum-ciphers appsrv1.fictionalorg.com -p 443

Starting Nmap 6.40 ( http://nmap.org ) at 2019-06-26 16:07 CDT

Nmap scan report for AppSrv1.fictionalorg.com (10.21.4.68)
Host is up (0.042s latency).
|       TLS_RSA_WITH_AES_256_GCM_SHA384 - strong
|     compressors:
```


|_ NULL
|_ least strength: strong
Nmap done: 1 IP address (1 host up) scanned in 8.63 seconds
root@INFOSEC:~# nmap --top-ports 10 appsrv1.fictionalorg.com
Starting Nmap 6.40 (http://nmap.org) at 2019-06-27 10:13 CDT
Nmap scan report for appsrv1.fictionalorg.com (10.21.4.68)
Host is up (0.15s latency).
rDNS record for 10.21.4.68: appsrv1.fictionalorg.com
PORT STATE SERVICE
80/tcp open http

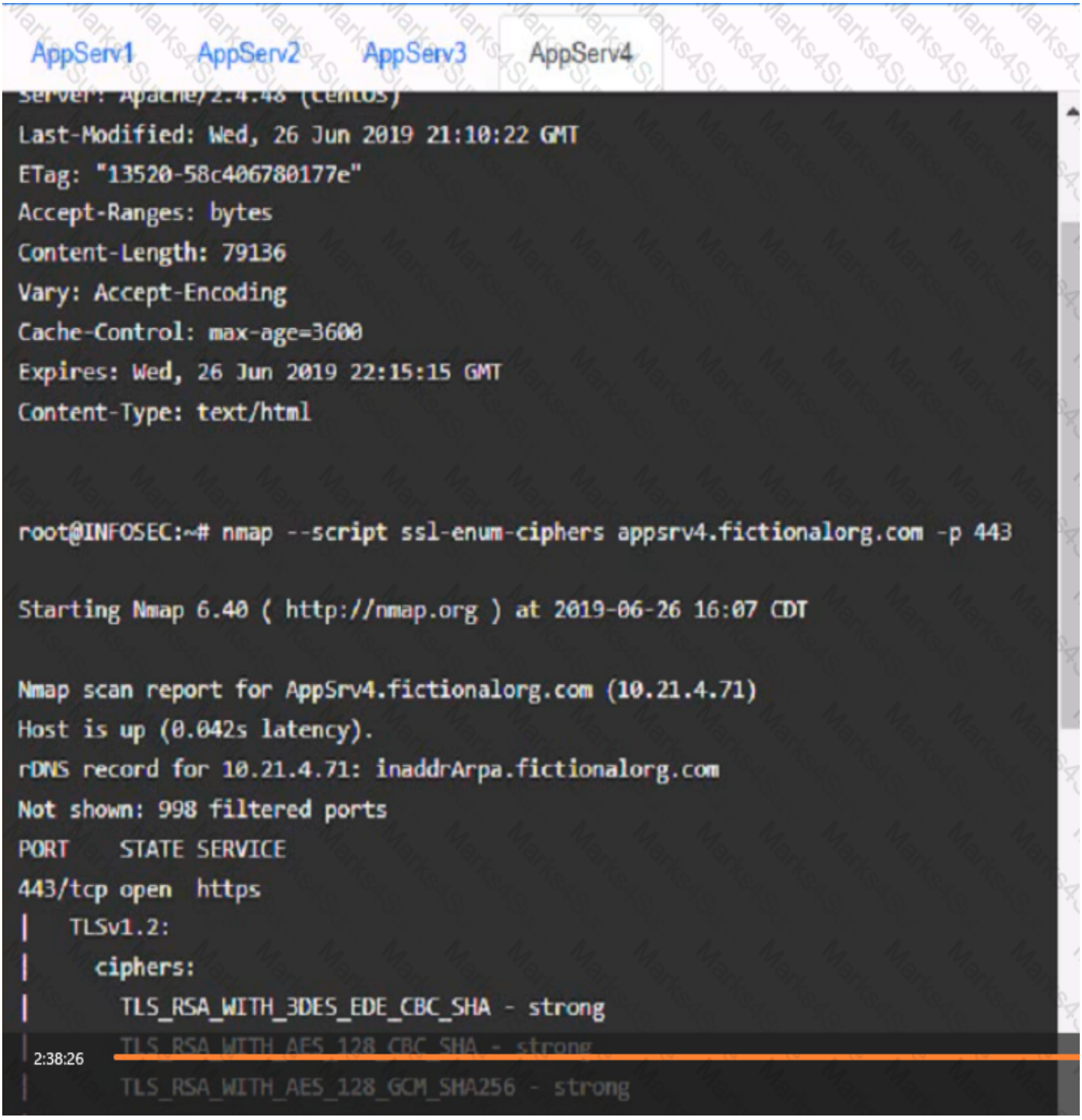
AppServ2:

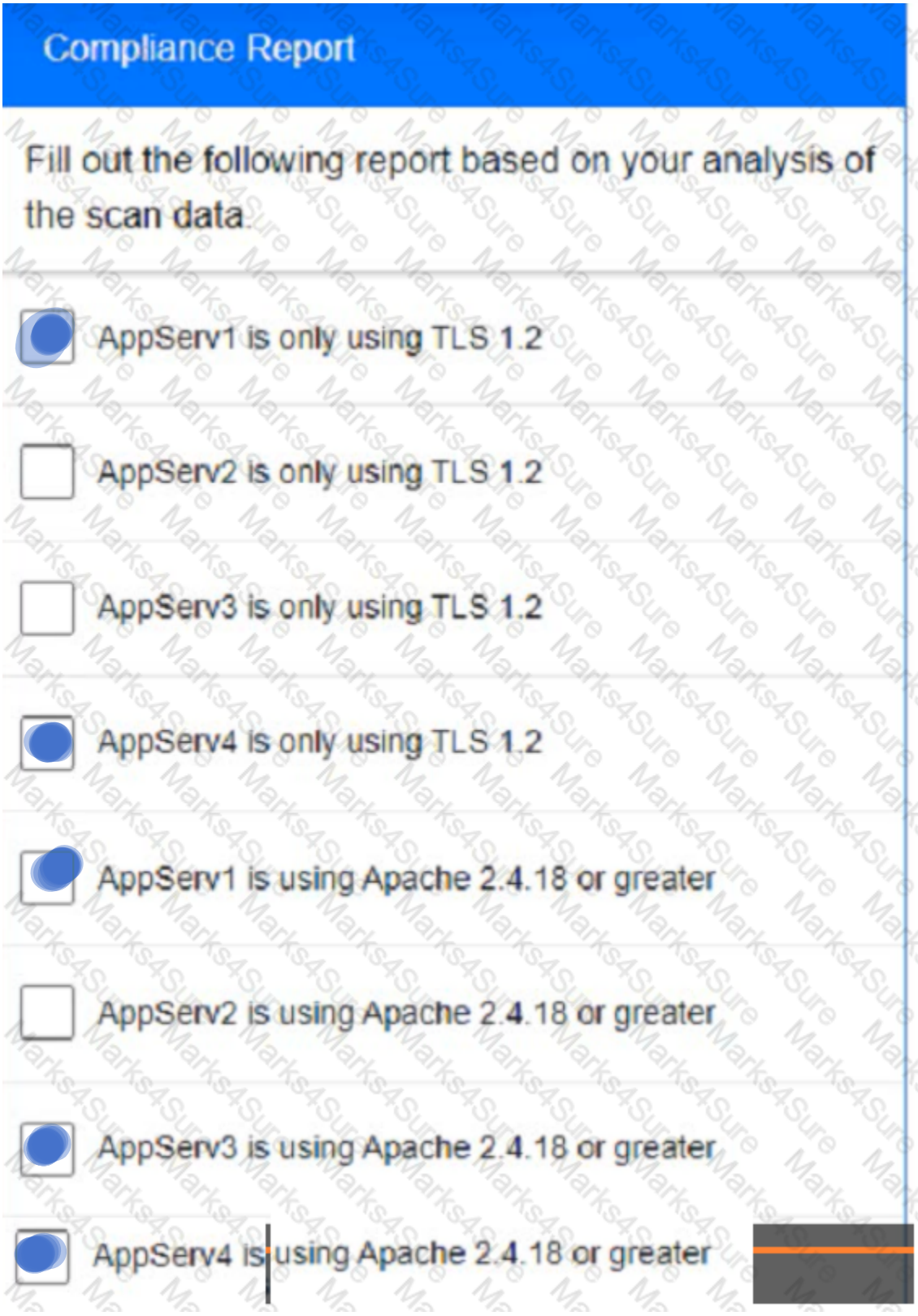

AppServ1
AppServ2
AppServ3
AppServ4
HTTP/1.1 200 OK
Date: Wed, 26 Jun 2019 21:15:15 GMT
Server: Apache/2.3.48 (CentOS)
Last-Modified: Wed, 26 Jun 2019 21:10:22 GMT
ETag: "13520-58c407930177d"
Accept-Ranges: bytes
Content-Length: 79136
Vary: Accept-Encoding
Cache-Control: max-age=3600
Expires: Wed, 26 Jun 2019 22:15:15 GMT
Content-Type: text/html
root@INFOSEC:~# nmap --script ssl-enum-ciphers appsrv2.fictionalorg.com -p 443
Starting Nmap 6.40 (http://nmap.org) at 2019-06-26 16:07 CDT
Nmap scan report for AppSrv2.fictionalorg.com (10.21.4.69)
Host is up (0.042s latency).
rDNS record for 10.21.4.69: inaddrArpa.fictionalorg.com
Not shown: 998 filtered ports
PORT STATE SERVICE
80/tcp open http

AppServ3:

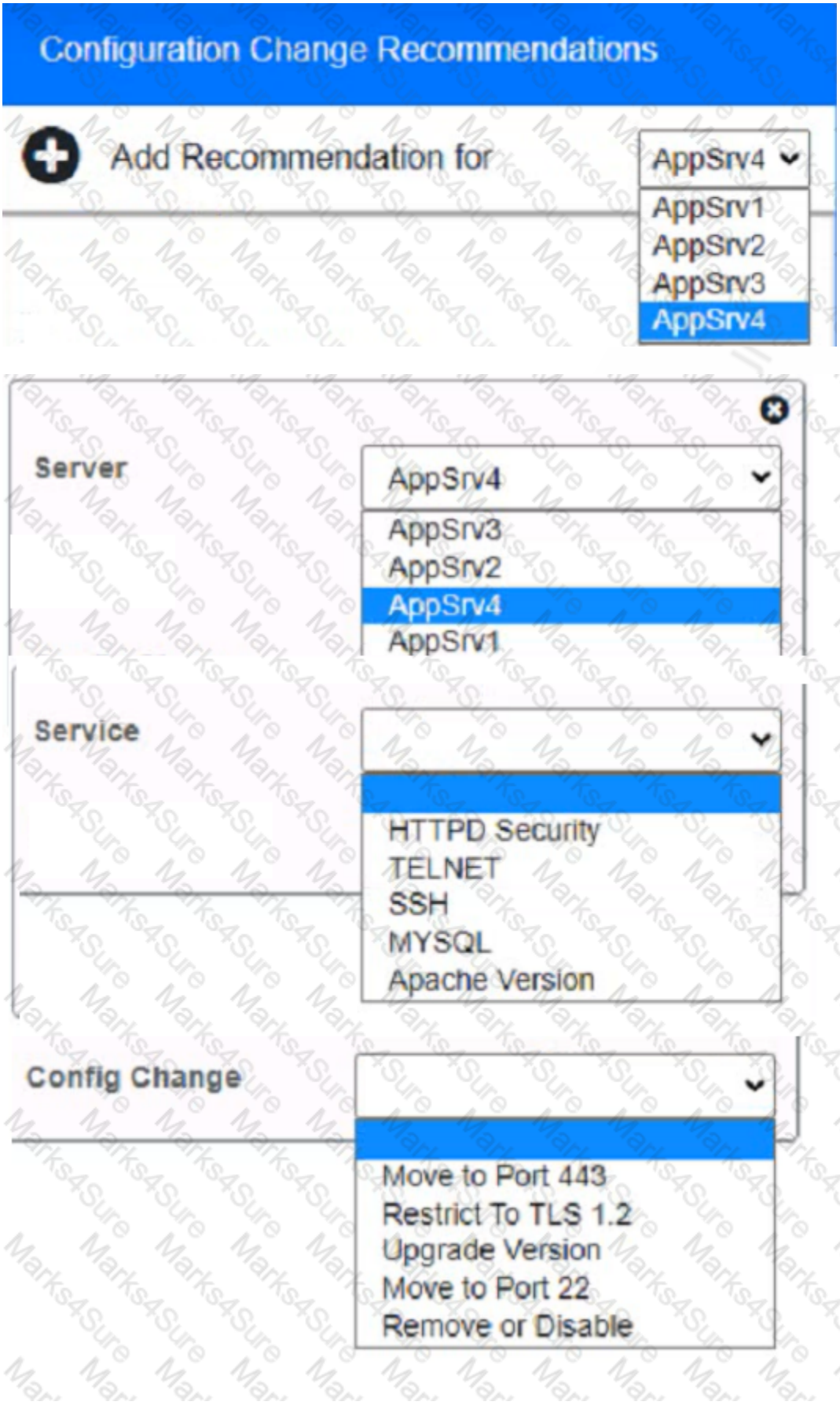

AppServ1
AppServ2
AppServ3
AppServ4
HTTP/1.1 200 OK
Date: Wed, 26 Jun 2019 21:15:15 GMT
Server: Apache/2.4.48 (CentOS)
Last-Modified: Wed, 26 Jun 2019 21:10:22 GMT
ETag: "13520-58c406780177e"
Accept-Ranges: bytes
Content-Length: 79136
Vary: Accept-Encoding
Cache-Control: max-age=3600
Expires: Wed, 26 Jun 2019 22:15:15 GMT
Content-Type: text/html
root@INFOSEC:~# nmap --script ssl-enum-ciphers appsrv3.fictionalorg.com -p 443
Starting Nmap 6.40 (http://nmap.org) at 2019-06-26 16:07 CDT
Nmap scan report for AppSrv3.fictionalorg.com (10.21.4.70)
Host is up (0.042s latency).
rDNS record for 10.21.4.70: inaddrArpa.fictionalorg.com
PORT STATE SERVICE
80/tcp open http
443/tcp open https

AppServ4:


AppServ1
AppServ2
AppServ3
AppServ4
Server: Apache/2.4.48 (CentOS)
Last-Modified: Wed, 26 Jun 2019 21:10:22 GMT
ETag: "13520-58c406780177e"
Accept-Ranges: bytes
Content-Length: 79136
Vary: Accept-Encoding
Cache-Control: max-age=3600
Expires: Wed, 26 Jun 2019 22:15:15 GMT
Content-Type: text/html
root@INFOSEC:~# nmap --script ssl-enum-ciphers appsrv4.fictionalorg.com -p 443
Starting Nmap 6.40 (http://nmap.org) at 2019-06-26 16:07 CDT
Nmap scan report for AppSrv4.fictionalorg.com (10.21.4.71)
Host is up (0.042s latency).
rDNS record for 10.21.4.71: inaddrArpa.fictionalorg.com
Not shown: 998 filtered ports
PORT STATE SERVICE
443/tcp open https
| TLSv1.2:
| ciphers:
| TLS_RSA_WITH_3DES_EDE_CBC_SHA - strong
2:38:26
| TLS_RSA_WITH_AES_128_GCM_SHA256 - strong


Compliance Report
Fill out the following report based on your analysis of the scan data.
AppServ1 is only using TLS 1.2
AppServ2 is only using TLS 1.2
AppServ3 is only using TLS 1.2
AppServ4 is only using TLS 1.2
AppServ1 is using Apache 2.4.18 or greater
AppServ2 is using Apache 2.4.18 or greater
AppServ3 is using Apache 2.4.18 or greater
AppServ4 is using Apache 2.4.18 or greater

Part 2:

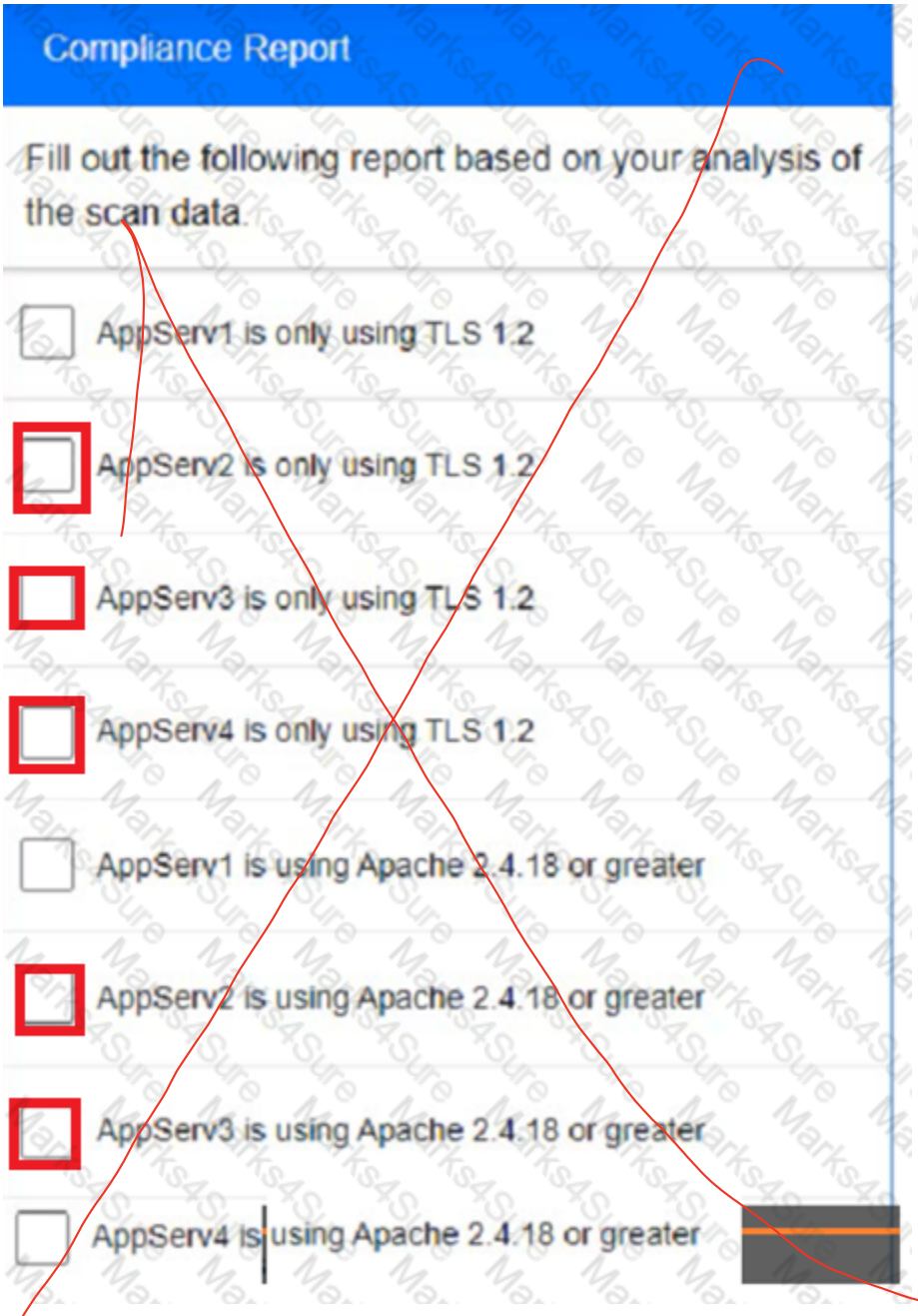


Recommendations - disable TLS v1.1 on AppServ2 and AppServ3 OR configure HTTPD Security service on both AppServ2 & AppServ3 to strictly use TLS 1.2 - upgrade AppServ2 Apache to version 2.4.48 from its current version of 2.3.48 - Move ssh service port to port 22 on AppServ4

check the explanation part below for the solution:

Explanation

Part 1:



Solution on Prev Page

Part 2:

Based on the compliance report, I recommend the following changes for each server:

AppServ1: No changes are needed for this server.

AppServ2: Disable or upgrade TLS 1.0 and TLS 1.1 to TLS 1.2 on this server to ensure secure encryption and communication between clients and the server. Update Apache from version 2.4.17 to version 2.4.18 or greater on this server to fix any potential vulnerabilities or bugs.

AppServ3: Downgrade Apache from version 2.4.19 to version 2.4.18 or lower on this server to ensure compatibility and stability with the company's applications and policies. Change the port number from 8080 to either port 80 (for HTTP) or port 443 (for HTTPS) on this server to follow the default port convention and avoid any confusion or conflicts with other services.

AppServ4: Update Apache from version 2.4.16 to version 2.4.18 or greater on this server to fix any potential vulnerabilities or bugs. Change the port number from 8443 to either port 80 (for HTTP) or port 443 (for HTTPS) on this server to follow the default port convention and avoid any confusion or conflicts with other services.

Question #:244

An analyst needs to provide recommendations based on a recent vulnerability scan:

Plug-in name	Family
SMB use domain SID to enumerate users	Windows : User management
SYN scanner	Port scanners
SSL certificate cannot be trusted	General
Scan not performed with admin privileges	Settings

Which of the following should the analyst recommend addressing to ensure potential vulnerabilities are identified?

A. SMB use domain SID to enumerate users

B. SYN scanner

C. SSL certificate cannot be trusted

D. Scan not performed with admin privileges

Answer: D

Explanation

This is because scanning without admin privileges can limit the scope and accuracy of the vulnerability scan, and potentially miss some critical vulnerabilities that require higher privileges to detect. According to the OWASP Vulnerability Management Guide1, "scanning without administrative privileges will result in a large number of false negatives and an incomplete scan". Therefore, the analyst should recommend addressing this issue to ensure potential vulnerabilities are identified.