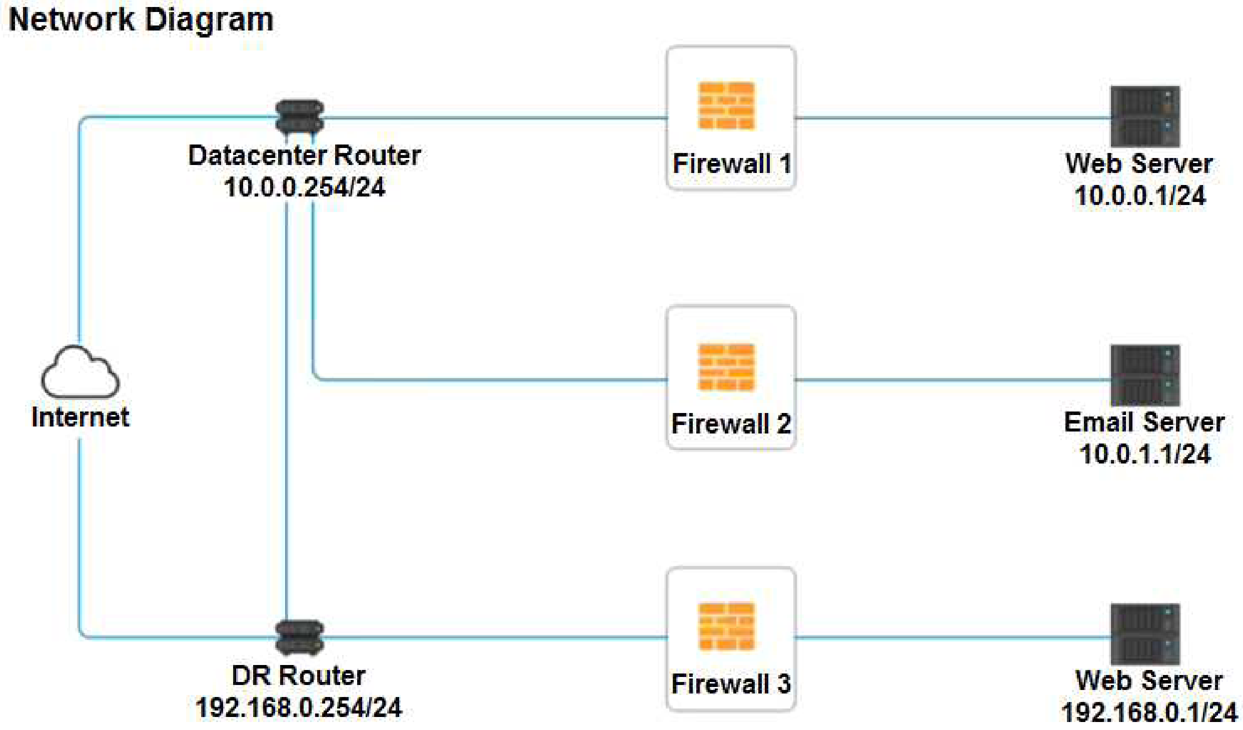
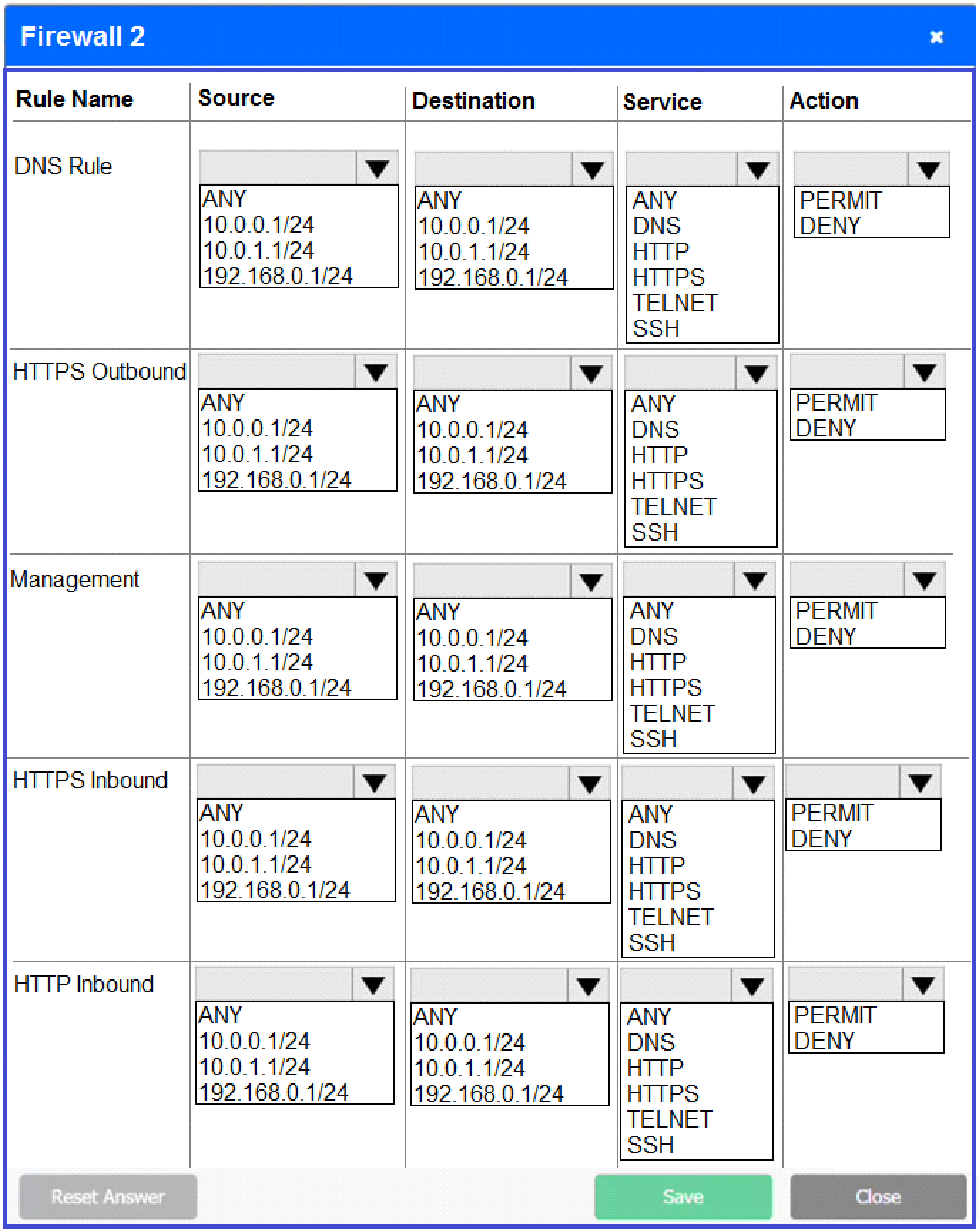
Latest Version: 36.0

Question: 1

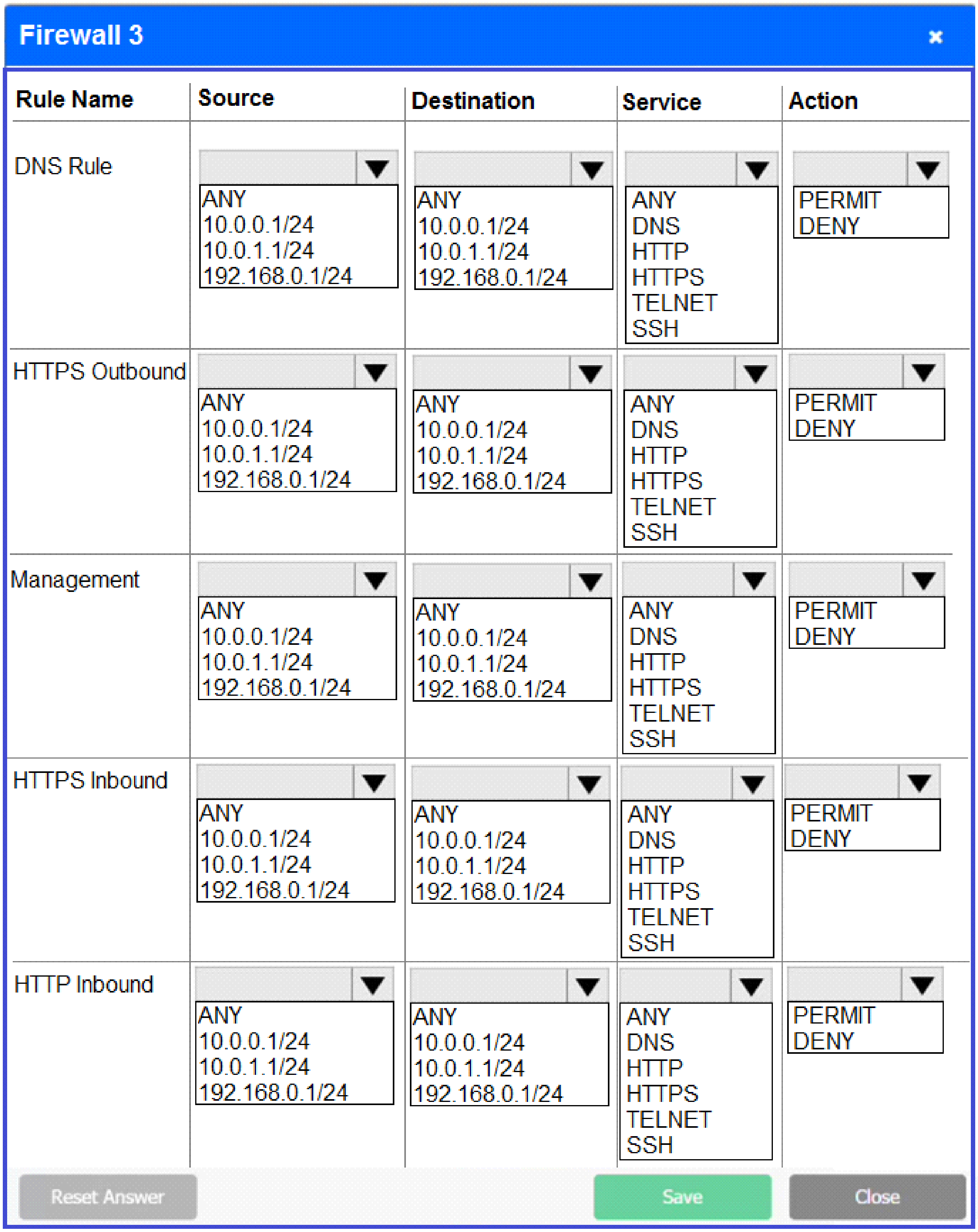
A company recently added a DR site and is redesigning the network. Users at the DR site are having issues browsing websites.
INSTRUCTIONS
Click on each firewall to do the following:
Deny cleartext web traffic.
Ensure secure management protocols are used.Resolve issues at the DR site.
The ruleset order cannot be modified due to outside constraints.
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.





Firewall 2

Rule Name	Source	Destination	Service	Action
DNS Rule	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
HTTPS Outbound	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
Management	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
HTTPS Inbound	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY
HTTP Inbound	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	ANY DNS HTTP HTTPS TELNET SSH	PERMIT DENY



Firewall 3

Rule Name	Source	Destination	Service	Action
DNS Rule	▼ ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	▼ ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	▼ ANY DNS HTTP HTTPS TELNET SSH	▼ PERMIT DENY
HTTPS Outbound	▼ ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	▼ ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	▼ ANY DNS HTTP HTTPS TELNET SSH	▼ PERMIT DENY
Management	▼ ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	▼ ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	▼ ANY DNS HTTP HTTPS TELNET SSH	▼ PERMIT DENY
HTTPS Inbound	▼ ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	▼ ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	▼ ANY DNS HTTP HTTPS TELNET SSH	▼ PERMIT DENY
HTTP Inbound	▼ ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	▼ ANY 10.0.0.1/24 10.0.1.1/24 192.168.0.1/24	▼ ANY DNS HTTP HTTPS TELNET SSH	▼ PERMIT DENY

Answer: See explanation below.

Explanation:

Explanation:

Firewall 1:

DNS Rule – ANY --> ANY --> DNS --> PERMIT

HTTPS Outbound – 10.0.0.1/24 --> ANY --> HTTPS --> PERMIT

Management – ANY --> ANY --> SSH --> PERMIT

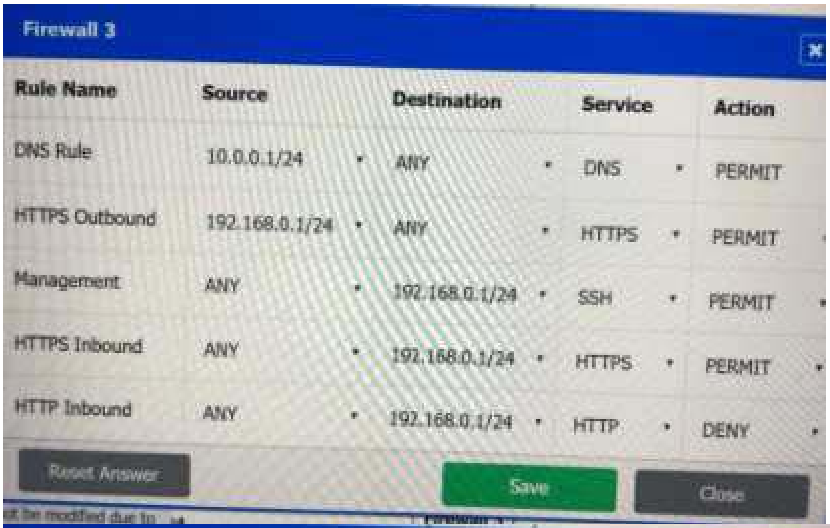
HTTPS Inbound – ANY --> ANY --> HTTPS --> PERMIT

HTTP Inbound – ANY --> ANY --> HTTP --> DENY

Firewall 2:

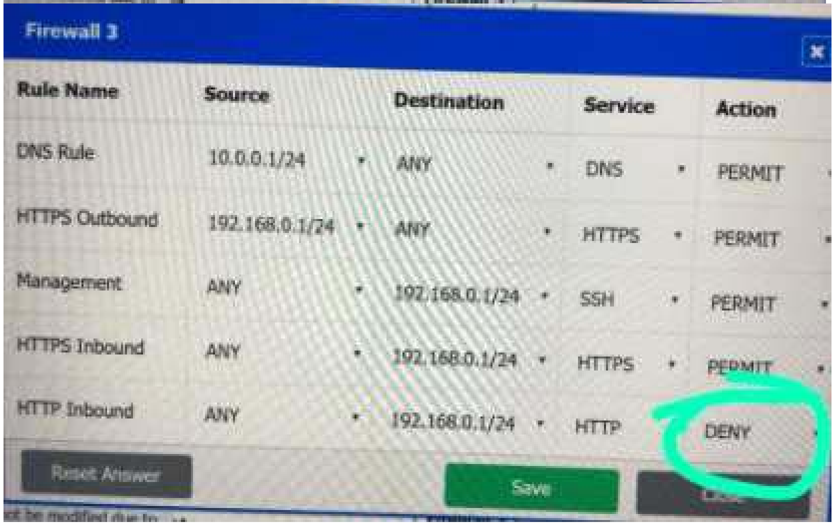
No changes should be made to this firewall

Firewall 3:



Firewall 3

Rule Name	Source	Destination	Service	Action
DNS Rule	10.0.0.1/24	ANY	DNS	PERMIT
HTTPS Outbound	192.168.0.1/24	ANY	HTTPS	PERMIT
Management	ANY	192.168.0.1/24	SSH	PERMIT
HTTPS Inbound	ANY	192.168.0.1/24	HTTPS	PERMIT
HTTP Inbound	ANY	192.168.0.1/24	HTTP	DENY



Firewall 3

Rule Name	Source	Destination	Service	Action
DNS Rule	10.0.0.1/24	ANY	DNS	PERMIT
HTTPS Outbound	192.168.0.1/24	ANY	HTTPS	PERMIT
Management	ANY	192.168.0.1/24	SSH	PERMIT
HTTPS Inbound	ANY	192.168.0.1/24	HTTPS	PERMIT
HTTP Inbound	ANY	192.168.0.1/24	HTTP	DENY

DNS Rule – ANY --> ANY --> DNS --> PERMIT

HTTPS Outbound – 192.168.0.1/24 --> ANY --> HTTPS --> PERMIT

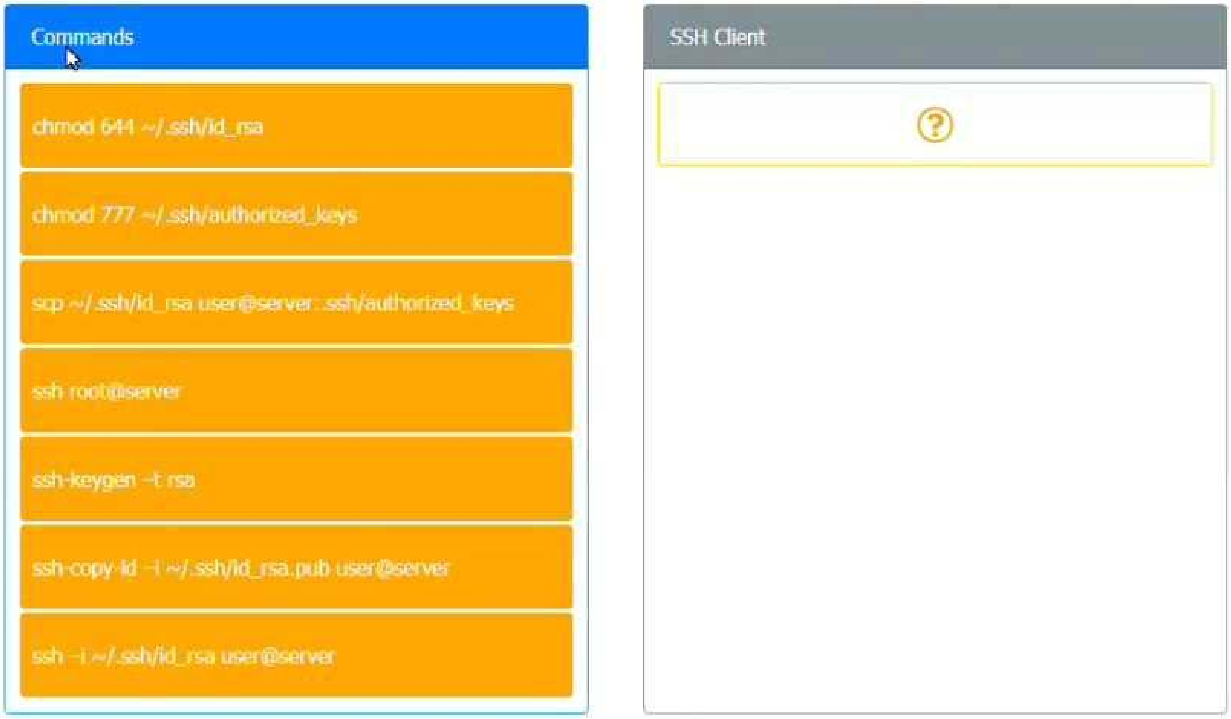
Management – ANY --> ANY --> SSH --> PERMIT

HTTPS Inbound – ANY --> ANY --> HTTPS --> PERMIT

HTTP Inbound – ANY --> ANY --> HTTP --> DENY

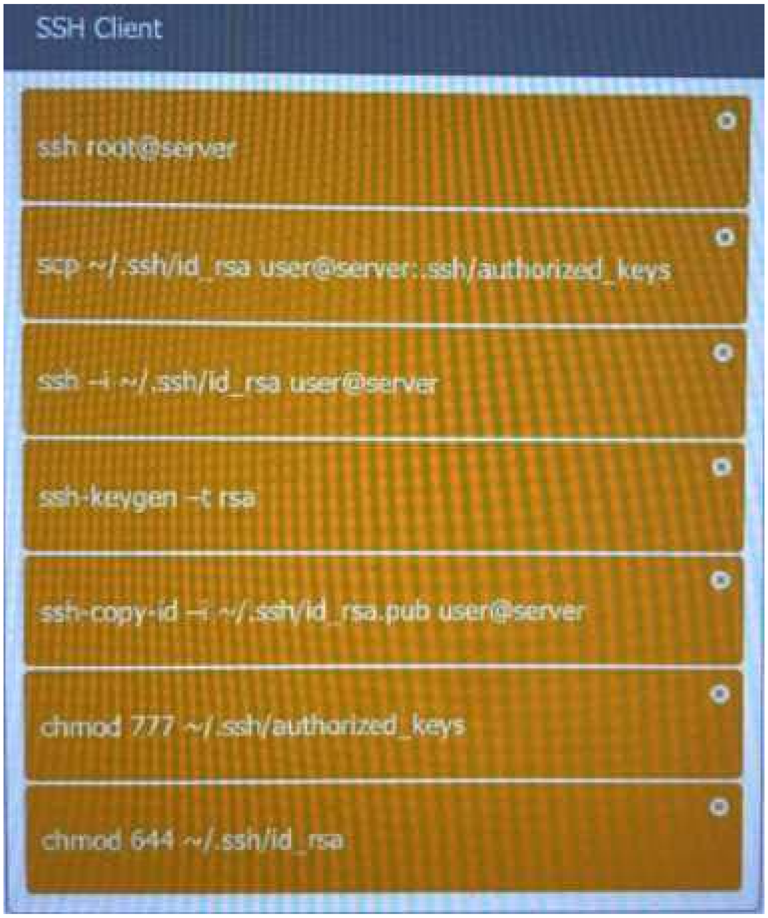
Question: 2

DRAG DROP
A security engineer is setting up passwordless authentication for the first time.
INSTRUCTIONS
Use the minimum set of commands to set this up and verify that it works. Commands cannot be reused.
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.



```
chmod 644 ~/.ssh/id_rsa
chmod 777 ~/.ssh/authorized_keys
scp ~/.ssh/id_rsa user@server:.ssh/authorized_keys
ssh root@server
ssh-keygen -t rsa
ssh-copy-id -i ~/.ssh/id_rsa.pub user@server
ssh -i ~/.ssh/id_rsa user@server
```

Answer:



SSH Client

```
ssh root@server
scp ~/.ssh/id_rsa user@server:.ssh/authorized_keys
ssh -i ~/.ssh/id_rsa user@server
ssh-keygen -t rsa
ssh-copy-id -i ~/.ssh/id_rsa.pub user@server
chmod 777 ~/.ssh/authorized_keys
chmod 644 ~/.ssh/id_rsa
```

Question: 3

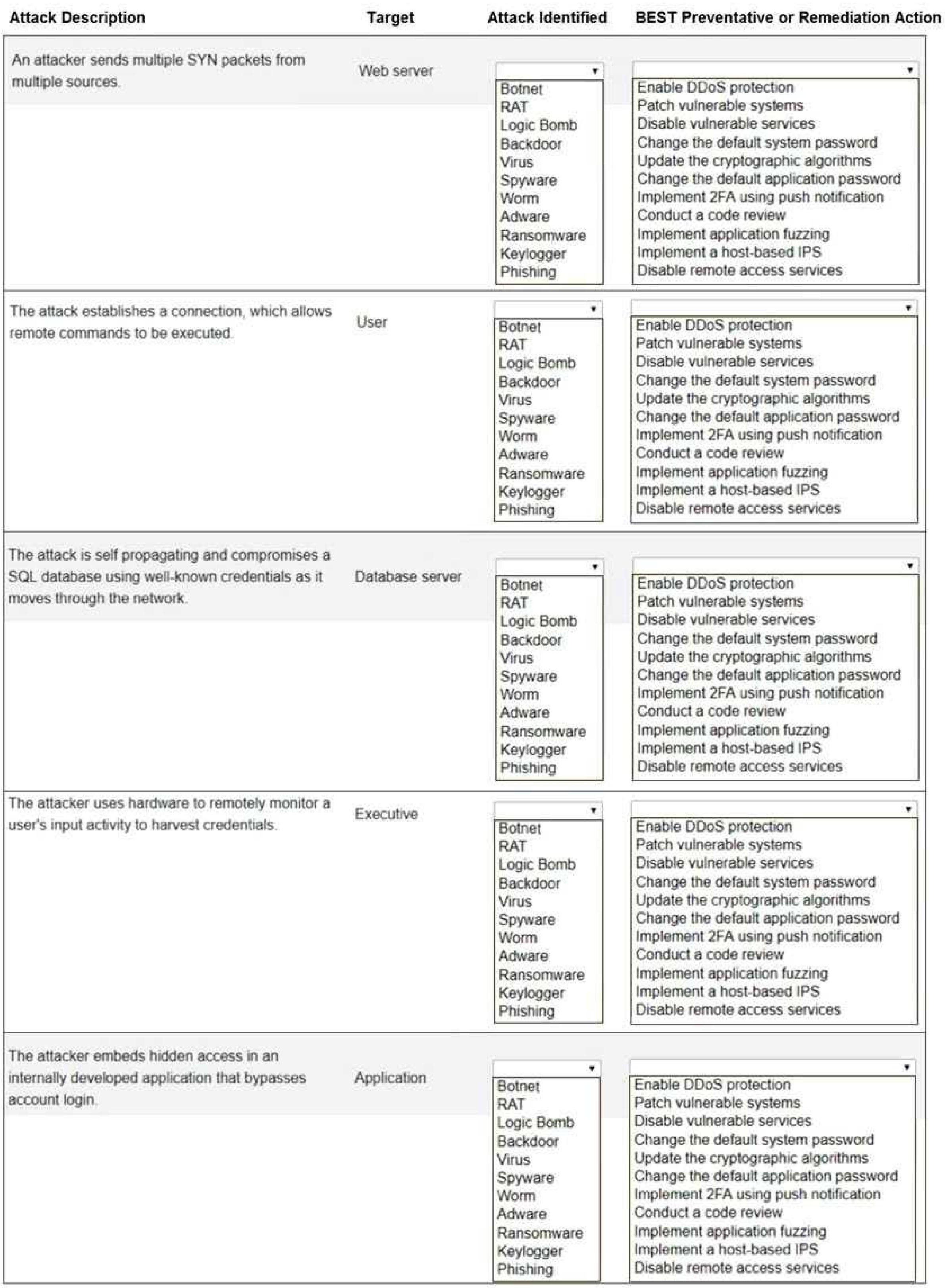
HOTSPOT

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

INSTRUCTIONS

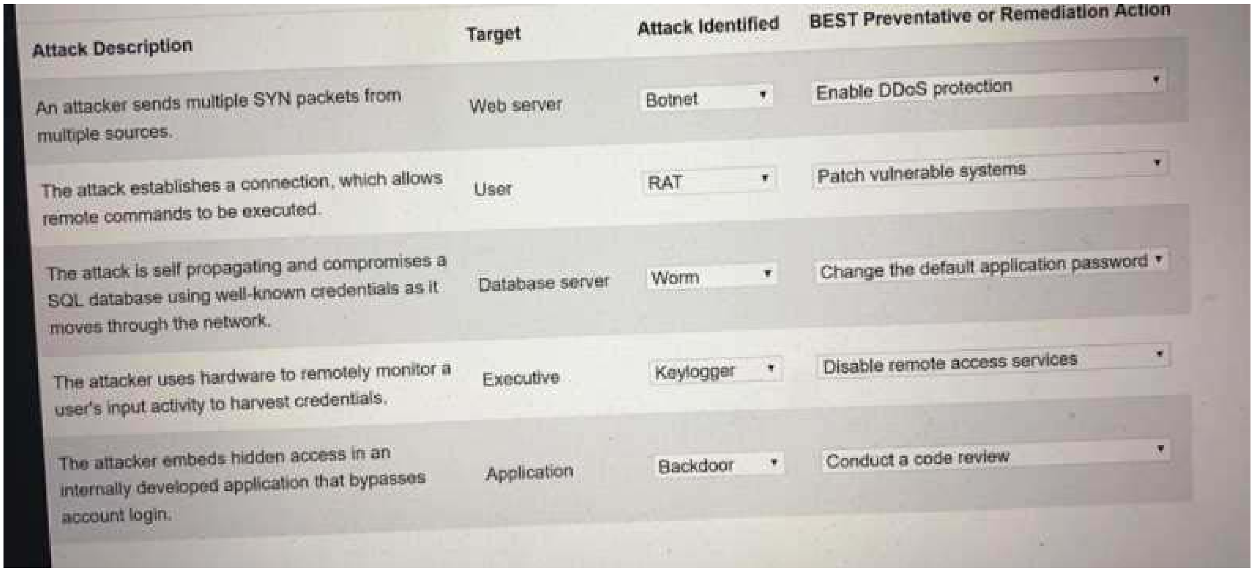
Not all attacks and remediation actions will be used.

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



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

Answer:



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

Question: 4

Which of the following will MOST likely adversely impact the operations of unpatched traditional programmable-logic controllers, running a back-end LAMP server and OT systems with humanmanagement interfaces that are accessible over the Internet via a web interface? (Choose two.)

A. Cross-site scripting
B. Data exfiltration
C. Poor system logging
D. Weak encryption
E. SQL injection
F. Server-side request forgery

Answer: DF

Question: 5

A company recently transitioned to a strictly BYOD culture due to the cost of replacing lost or damaged corporate-owned mobile devices. Which of the following technologies would be BEST to balance the BYOD culture while also protecting the company's data?

A. Containerization
B. Geofencing
C. Full-disk encryption
D. Remote wipe

Answer: A

Explanation:
https://www.hexnode.com/blogs/what-is-containerization-and-why-is-it-important-for-your-business/