

STUDENT WORKSHEET: Capstone 2, Scenario 2

Name:

Scenario 2

Remediate Audit Findings

Read the scenario below. For each issue identified from the security audit, identify either an administrative, technical, or physical control to remediate the issue. You can use the example scenario below to guide your answers.

Example scenario:

You are a cybersecurity analyst for a publicly traded investment company. Recently, there has been an increase in the number of cyberattacks conducted on similar organizations. The leadership of your organization has decided to have a security audit performed on the organization's network in order to prepare for these cyberattacks.

The audit discovered several deficiencies in the security controls of the organization.

Review each finding below, which includes a prompt for a technical, administrative, or physical control. Your response will be a recommendation for a control or controls that fall into that category

Exemplar 1

Finding	Controls Recommended
Storage rooms containing sensitive data were not locked or access to the room audited. Identify a <u>physical</u> control to remediate the room access violations.	RFID ID Card access applied to the rooms containing sensitive data

Exemplar 2

Finding	Controls Recommended
Company financial data can be accessed by anyone. Identify a <u>technical</u> control to remediate the Sarbanes Oxley violation for financial data control.	Data Loss Prevention tools implemented where financial data is stored.

Scenario 2

Remediate Audit Findings

You are an analyst for a large healthcare organization.

The organization is responsible for providing patient care to over 1 million patients annually. It is a national leader in providing patient care to a major metropolitan area. Recently, a data breach occurred within the healthcare organization's computer network resulting in significant patient information being breached and leaked onto the dark web. The breach is suspected to be a result of a SQL Injection attack on the organization's patient portal webpage.

This event became publicly known and the hospital's reputation has been tarnished as a result. To remediate, the organization has allocated significant funds to overhaul their computer network and cyber security program.

The organization's IT architecture consists of a campus WAN with three main office buildings operating inside of the campus network: the main hospital, the children's hospital, and the administrative building. Close to 15% of administrative employees work remote.

It is your responsibility to provide recommendations for each of the audit findings below.

Review each finding below, which includes a prompt for a technical, administrative, or physical control. Your response will be a recommendation for a control or controls that fall into that category

1.

Finding	Controls Recommended
There were HIPAA violations around PHI data security, storage and handling identified in the file servers of the administrative building. Identify an <u>administrative</u> control to remediate the HIPAA violations.	Perform audit logs and see if changes were made that were unauthorized

2.

Finding	Controls Recommended
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Most network accounts contained privileges above the user's job requirements. Identify a <u>technical</u> control to remediate this issue.	Limit the users access to any other requirements outside of their job requirements.
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3.

Finding	Controls Recommended
Sensitive areas of the environment were not segregated from the rest of the network. Identify a <u>technical</u> control to remediate the flat network design.	Setup a firewall to segment the network so others are not able to access it.

4.

Finding	Controls Recommended
Remote employees had direct access to the internal network from outside the organization without the use of secure access. Identify a <u>technical</u> control to remediate external access control issues found during the audit.	I would set up a new firewall for employees that work remotely. They will be required to give a username and password to access the network. setting up an IPS tool on the network will help block any outsiders gaining access to the network.

5.

Finding	Controls Recommended
Physical areas of the IT facilities were not secured or otherwise easily accessible. Identify a <u>technical</u> control to remediate Physical Security control issues found during the audit.	You can add a RDID scanner to give employees access or a fingerprint scanner.

6.

Finding	Controls Recommended
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Hundreds of endpoints were not updated with the latest OS and patches. Identify an <u>administrative</u> control to remediate outdated operating system and patches.	Issuing an incident response plan to figure why the endpoints were not updated in the latest update
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7.

Finding	Controls Recommended
Weak passwords are being used for user accounts and default passwords in use across the network with no multi-factor authentication. Identify an <u>administrative</u> control to remediate password issues.	Set a requirement that passwords must be certain length also using numbers and symbols

8.

Finding	Controls Recommended
The customer relationship management (CRM) application contained several user input fields that did not have parameters to control number or type of characters. Identify an <u>administrative</u> control.	Remove the CRM application until we are able to set the parameters to control numbers