

<b>Server &amp; Cloud Security</b> Diploma in CSF/IT Oct 2023	Week 5-17  <b>Assignment (40%)</b>
<b>Assignment - Securing a Windows File Server</b>	

## Introduction

The final assignment of SCS module has the following components:

Deliverables	Weightage	Deadline
Group Report	25%	04 Feb 2024
Individual Demo & Presentation	15%	Week 16 or 17 class hours

## Scenario

A file server is a necessary but also critical component in an enterprise. It provides a centralized location for storing and sharing work related files, but at the same time, if the file server is compromised, there may be a big data breach to the company.

## Task Requirements

- Task 1: Setup and harden a file server
- Task 2: Secure the file server with endpoint security tools.

## Task Details

### Task 1: Setup and Harden a File Server

You can consider to setup a new Windows Server VM and add the **File and Storage Services** role to it to promote it into a file server. (**Alternatively**, you can add the role to your **MS1** VM to save your host computer's RAM and CPU. Do note that this is only an alternative to this assignment, but it is not a good choice in real practice to have multiple server roles in one server.)

Make sure your file server is successfully setup, and the share folders can be accessed from the client computer.

To harden the file server, refer to the LinkedIn Learning contents that you have learnt in Week 5. You may consider to implement but not limited to the following approaches:

- Encrypting File System (EFS)
- IPSec
- File Server Resource Manager
- Password Policies, Account Lockout Policies
- Audit Policies

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## **Task 2: Secure the File Server with Endpoint Security Tools**

Search and propose endpoint security tool(s) to secure the file server. You must install the tool(s) to your file server, configure it and test it to prove that your tool is a good solution to improve the security of the file server. The tool(s) can be but not limited to the following functions:

- Anti-Malware
- Host Firewall
- Host IDS/IPS
- Data Loss Prevention
- Full Disk Encryption
- Vulnerability Scanning

### **Deliverables**

The assignment group **report** should include the following details and necessary screenshots:

- Procedures of setting up a file server with connection testing results;
- File server hardening approaches and implementation results;
- Explain the key functions / features of the proposed security tool(s);
- Install, configure the tool(s), prepare test cases, and perform testing & evaluation of the tools;
- Any other good practices implemented to secure the file server (if applicable).

Each team is expected to have a balanced distribution of tasks and each member of the team is required to **present/demo** his/her tasks during Week 16 or 17 class hours.

**--End of Assignment--**