Level 3 Install, configure and integrate networked hardware and software (7266/7267-503/7540-361)

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Assignment guide for Candidates
Assignment D

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Contents

Introduction – Information for Candidates	2
Level 3 Install, configure and integrate networked hardware and software (7266/7267-503/7540-361)	3
Candidate instructions	3

Level 3 Install, configure and integrate networked hardware and software (7266/7267-503/7540-361) Assignment D

Introduction – Information for Candidates

About this document

This assignment comprises part of the assessment for Level 3 Install, configure and integrate networked hardware and software (7266/7267-503/7540-361).

Health and safety

You are asked to consider the importance of safe working practices at all times.

You are responsible for maintaining the safety of others as well as your own. Anyone behaving in an unsafe fashion will be stopped and a suitable warning given. You will **not** be allowed to continue with an assignment if you compromise any of the Health and Safety requirements. This may seem rather strict but, apart from the potentially unpleasant consequences, you must acquire the habits required for the workplace.

Time allowance

The recommended time allowance for this assignment is **5 hours**.

Level 3 Install, configure and integrate networked hardware and software (7266/7267-503/7540-361)
Candidate instructions

Time allowance: 5 hours

Assignment set up:

This assignment is made up of **three** tasks

- Task A – Write a survey report for the installation of a server
- Task B – Assess the suitability of additional network components
- Task C – Configure the new system

Scenario

You work as an installation engineer for a company that specialises in the installation of home computer networks. You have been asked to expand a customer's home IT system by adding a small server to hold primarily multimedia files so that they can be accessed from anywhere in the house. The customer is a student and shares the house with three other students. For this assignment, you may use as a model your own home or one that you are familiar with. Alternatively, you may use the description provided by your Assessor. The home already has four PCs and a laptop connected via a wireless hub – two of the PCs are hard-wired to the hub using Cat 5 cable and the remaining PCs and the laptop are connected wirelessly in a peer-to-peer network.

Task A – Write a survey report for the installation of a server

In this task, you are asked to write a survey report for the installation of a server that will be hard-wired to the wireless hub, and will be used in a client-server network using all of the existing equipment. The customer does not want any existing equipment to be moved.

1 Produce a sketch diagram of the installation site either from your own knowledge of a real home or from the description given to you by your Assessor. **Note:** this does not count towards the total assignment time.

2 Produce a checklist of factors that might affect any installation and problems that might arise during any installation. The checklist should include **five** factors and **five** potential problems.

3 Complete the checklist based on the information you produced in Task A1.

4 Produce a short report covering

- positioning of network cabling (or need for wireless connection) to hubs, routers etc
- location of stand alone equipment
- location of the client server
- connection to telephone lines
- access to power supply
- environmental control
- protection of data.

5 Produce a brief installation plan for the installation that includes

- actions required to preserve the integrity of any existing system or data
- configuration of components
- installation of new components
- tests to ensure that the expected functionality and performance have been achieved.

Task B – Assess the suitability of additional network components

In this task, you are asked to assess the suitability of the additional network components for use in expanding the existing network. You will be given a server, software for the server and two PCs. The PCs represent those belonging to two of the students and will be fully functioning. There will be multimedia files stored on each of the PC hard drives – these are to be transferred to appropriate folders on the server when they have been set up.

1 Compare the specifications of the two PCs and the server. Confirm that they are compatible. Write down **three** parts of the specification that you have used to make that decision.

2 Connect up the server and install the network operating system.

3 Install anti-malware software onto the server.

4 Install and configure network security software onto the server. Include specific settings as defined by your Assessor.

5 Connect two PCs to the network and boot them up.

6 Using the installation plan devised in Task A5, test **each** of the PCs **and** the server to confirm they are working correctly as individual machines. Enter the results on the test plan.

7 Create **four** user accounts in groups named Student 1 and Student 2 (Group 1), Student 3 and Student 4 (Group 2).

8 Create folders and user rights according to the specification given to you by your Assessor.

9 Using the installation plan devised in Task A5, test the user accounts and folder permissions to confirm that they comply with the required specification. Enter the results on the test plan.

10 Create a record of the network configuration settings you have applied in Task B.

Task C – Configure the new system

1 Configure the network to give Internet access to both PCs via the server.

2 Configure the network operating system to monitor **four** aspects of network performance as directed by your Assessor.

3 Configure the password policies for the **four** student users **and** the administrator to include **four** different policy settings eg 'force password renewal after 28 days'.

4 Configure full anti-malware scans on each of the machines for a set time each day.

5 Configure each of the PCs to back up their data daily to a designated area on the server hard drive.

6 Demonstrate the log-on procedure and access the computer to the Internet as though you are Student 3.

7 Create a record of the configurations set in Task C.

8 Shut down the PCs and the server.

When you have finished working:

- Sign each document above your name and label all removable storage media with your name.
- Hand all paperwork and removable storage media to your assessor.

If the assignment is taken over more than one period, all paperwork and removable media must be returned to the test supervisor at the end of each sitting.

End of assignment

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