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

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Assignment guide for Candidates
Assignment C

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

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 **four** tasks

- Task A – Carry out a risk assessment
- Task B – Configure a workstation to connect to a wireless network
- Task C – Install an Ethernet card
- Task D – Set up permissions for a new group of users

Scenario

You have been asked to install a new PC workstation in a college chemistry teaching laboratory. The room was previously used as an ordinary teaching classroom and was converted to a laboratory some time ago. You have been asked to do a risk assessment before you start and have been told that you can, within reason, choose the time that you do the work. You must, however, fit in with the activities in the room during the installation. Relevant Health and Safety procedures for the room while it is in use will be provided on a separate sheet. A patch panel leading to a network switch has already been installed.

You are expected to use operating system utilities to obtain any information that is required but not provided.

Task A – Carry out a risk assessment

If possible, this task can be based on a real chemistry lab. If this is not possible, use the floor plan provided for the installation. You should use the following to produce a working diagram for the installation. Relevant features are:

- at the front of the room, there is a wall-mounted interactive white board, which is to be connected to the PC via a suitable cable
- in the room facing the white board, there are three rows of benches each with three sinks with running water and three double gas points for attaching heating devices
- against the outside wall, there is a table with a fume cabinet on it
- the fume cabinet is attached to a vent in the wall by a ventilation pipe
- there are three triple mains sockets mounted on each bench
- there are also double mains sockets mounted in each wall at floor height every 1.5 metres
- there are suitable locations for the hardware within the room.

1 Using the information given above and in the Record of Risk Assessment document provided by your Assessor, carry out a risk assessment on the room to identify **four** hazards **and** associated risks that would affect someone doing an IT installation. You may assume that the most recent actions recorded in the document are still in force.

2 Enter the details of the assessment and your recommendations on the Record of Risk Assessment.

Task B – Configure a workstation to connect to a wireless network

In this task, you are asked to connect up a workstation and configure it to connect to a wireless network.

1 Using the work area indicated by your Assessor, install the wireless network card into the base unit.

2 Connect up the workstation as instructed by your Assessor. If necessary, install and configure the wireless network driver software supplied by your Assessor.

3 Create a post-installation test regime of **five** tests for the newly assembled workstation, including the wireless network connection. Write down the details of the tests in the System Test Record provided.

4 Carry out the post-installation tests on the system. Enter the results of each test in the System Test Record.

5 Correct any faults that you find and enter the details in the 'Action Taken' column of the System Test Record.

6 Using the data provided by your Assessor, use the operating system networking utility to set up and connect the workstation to the wireless network. Ensure the correct protocol(s) are installed.

7 Record all wireless networking configuration settings including MAC addresses, IP addresses and encryption keys on the System Installation Record.

8 When the wireless network has been configured and tested, copy a folder onto the workstation hard drive. The name and location of the folder will be given to you by your Assessor.

Task C – Install an Ethernet card

Here you are asked to enhance the connectivity by installing an Ethernet card.

1 Shut down the workstation and disconnect the base unit including the mains power.

2 Install the Ethernet card provided by your Assessor into the base unit.

3 Re-assemble the base unit and connect up the workstation. Connect the workstation to the network hub or patch panel using a suitable patch lead.

4 Boot up the workstation and configure it to disable the wireless connection and connect to the network via Ethernet only.

5 Make a record of all Ethernet networking configuration settings including MAC addresses and IP addresses.

6 Repeat the tests you devised in Task B3 and record the results in the System Test Record.

7 Based on the test results and other experience gained during the assignment, write a short installation report giving an opinion as to the most appropriate method of connecting the workstation to the network. Give **three** reasons for your decision. Alternatively, if you consider there is no difference between the two methods you should say so and give **three** reasons why.

Task D – Set up permissions for a new group of users

Here you are asked to set up permissions for a new group of users called 'Chemistry'.

1 Using the details provided by your Assessor, set up a new group of users called 'Chemistry'. Individuals in the group should be called 'Chemistry 1', Chemistry 2', etc.

2 Test the group settings to verify that **each** individual has the correct access and record the tests on the System Test Record. Make a record of the configuration settings.

3 Shut down the workstation.

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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