Level 3 Install, configure and integrate networked hardware and software (7540-361)

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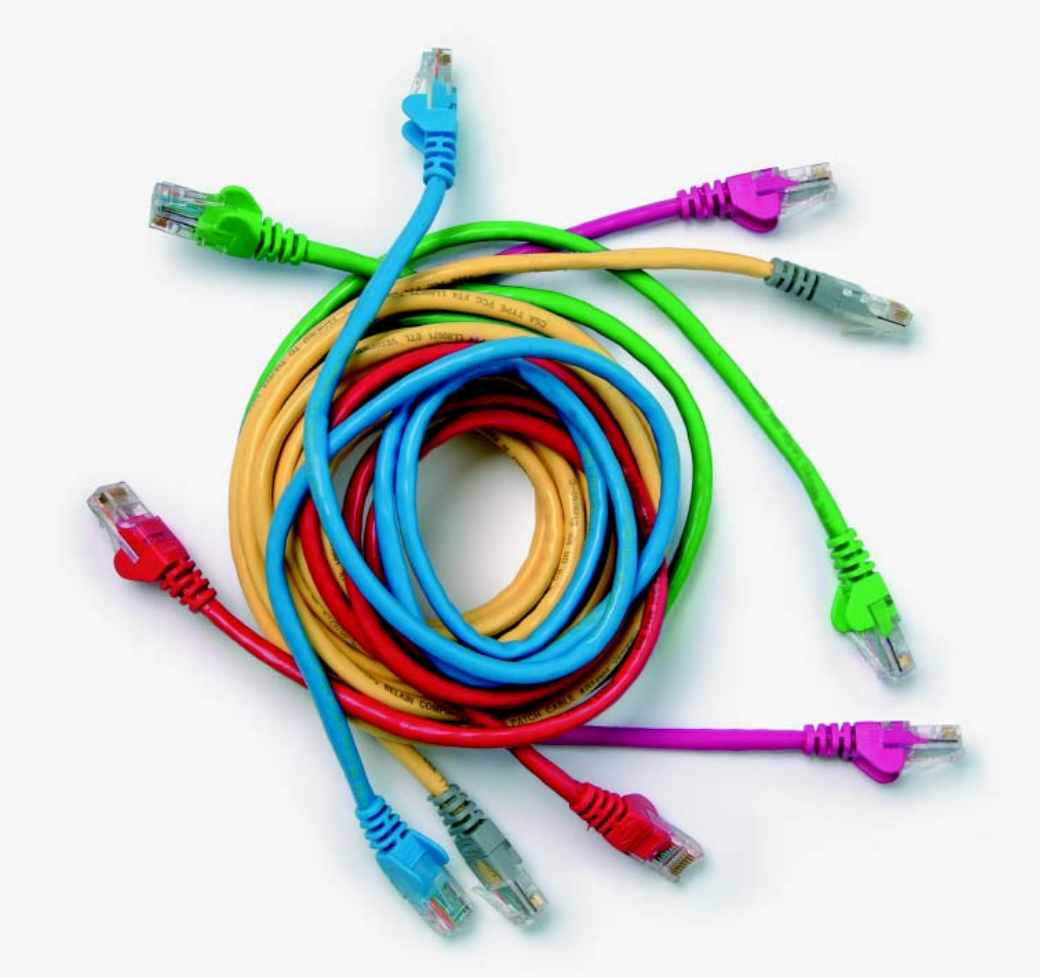
Systems and Principles (QCF)
Assignment guide for Candidates
Assignment D



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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 (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 **4 hours**.

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Candidate Instructions

Time allowance: 4 hours

Assignment set up:

This assignment is made up of **four** tasks:

- Task A – Undertake a Site Survey prior to installation.
- Task B – Carry out a risk assessment.
- Task C – Install and configure systems hardware and software
- Task D – Expand an existing system to allow for additional facilities.

Scenario

You are employed as an IT Technician at Danwell University, where you are a member of the team that has been allocated to support the University Conference Centre. You have been asked to install and configure wireless access to cover certain rooms in the building, along with a wireless enabled workstation. The Conference Centre has an up-to-date Ethernet network already installed and you will be required to attach the wireless equipment to this network. Before installing any equipment, you need to plan and undertake a site survey of the Conference Centre area as well as conduct a risk assessment of the area that has been allocated to your team as a workshop.

Task A – Undertake a Site Survey prior to installation

Use the Answer sheet provided to complete Task A.

1 Using the information contained in the floor plans and data rack layout provided by the Assessor, prepare a Site Survey for the installation of a Wireless Access Point (WAP) to provide wireless network connection in rooms 1.15, 1.16, 1.26, 1.27 of the Conference Centre.

2 Sketch / identify the following information on the floor plans:

- location of Wireless Access Point
- cable routes to the WAP from the existing cabinet
- power supply to the WAP.

3 Create a report on your survey which includes:
- potential problems
- factors affecting the installation
- an installation plan, including system configuration
- an installation schedule
- ways to minimise disruption to users.

Attach the floor plans with your sketches on and any other diagrams to this report

Task B – Carry out a risk assessment.

1 Use the Answer Sheet provided to complete Task B1.
Carry out a risk assessment of the new workshop area your team have been allocated.
This should include:
- identifying any areas that do not comply with Health & Safety Legislation
- recommendations for changes to policies / procedures where appropriate.

2 Design and create a Health & Safety Log sheet for use in the workshop.

Task C – Install and configure systems hardware and software

Using the equipment provided by the Assessor:

1 Check the integrity of the Operating System installation media

2 Please use the Answer Sheet provided to complete Task C2.
Maintain a record of your installation and all configuration settings used in Task C and Task D.

3 Install a network capable operating system on the workstation provided and:
- set the workstation 'Administrator account' password to: DAnweLL_!77CC
- ensure all required drivers are installed.
- create a second (non-bootable) partition of at least **20MB** set as **Drive:X**

4 Create the following user accounts and passwords:
- Account Type: Administrator; Name: Conference_Admin; password: Pa$$Word
- Account Type: Power User; Name: technician01; password: &mUppettS91
- Account Type: User; Name: Conference_Guest; password: Visitor33
- Account Type: User; Name: technician02; password: &mUppettS91

5 Create a shared folder on Drive:X "**Temp_Store**". Allow read / write access for all users
Create a shared folder on Drive:X "**Admin_Store**". Allow only administrators full access.
Hide this folder from other users.

6 Install and configure an Anti-Virus programme.
Schedule Daily update checks
Schedule full system scans to take place weekly

7 Install a wireless network card (NIC) into the workstation, ensuring all appropriate drivers and protocols are also installed.

8 Install and configure the Wireless Access Point (WAP), connecting it via Ethernet to the network router – including the following settings:
- SSID: Conference_Centre
- channel 11 (infrastructure)
- WPA / WPA2 authentication
- AES encryption (if available)
- "Danwell_ConfC_101" as the network key / passphrase

9 Configure the workstation to use ONLY wireless networking

10 Test the installation and configuration of the workstation and the WAP.
Record all tests and results in your installation record.

11 Please use the Answer Sheet provided to complete Task C11.
Identify, investigate and resolve any problems encountered.
Record any problems and the associated resolution in your installation record.

Task D – Expand an existing system to allow for additional facilities

1 Please use the Answer Sheet provided to complete Task D1.
Assess the impact of installing a printer on the wireless network.
Identify the following:
- the most suitable method for installing a printer on the wireless network
- the most suitable configuration options for installing the printer
- any compatibility issues with installing the printer on the wireless network
- any actions needed to preserve the integrity of existing systems or data

2 Install the printer on the wireless network.
Configure the printer to allow guest users of the wireless network to print.
Test the installation and the configuration.

3 Please use the Answer Sheet provided to complete Task D3.
Produce a brief guide to advise 'guest users' how to configure their device's wireless connection, to enable access to the Conference Centre wireless network and to print on the newly installed printer.

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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