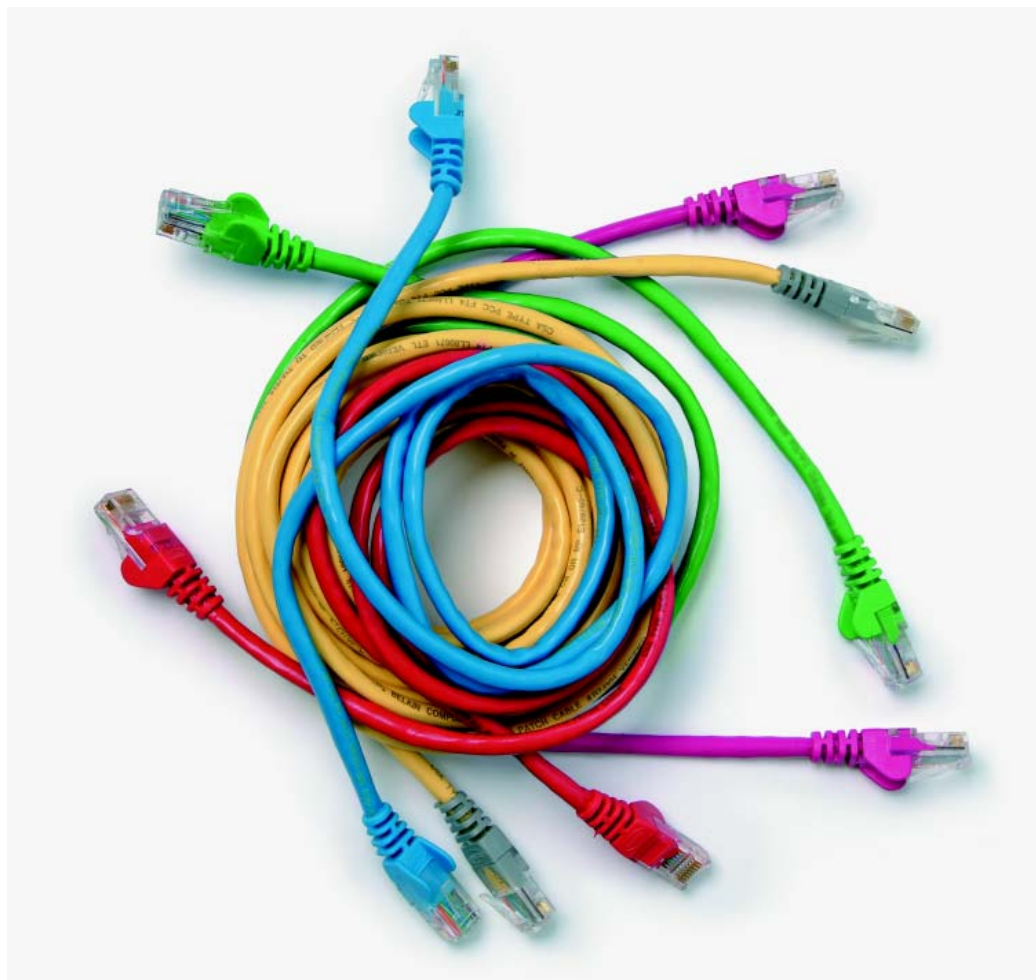


Level 3 Install, configure and integrate networked hardware and software (7540-361)

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



About City & Guilds

City & Guilds is the UK's leading provider of vocational qualifications, offering over 500 awards across a wide range of industries, and progressing from entry level to the highest levels of professional achievement. With over 8500 centres in 100 countries, City & Guilds is recognised by employers worldwide for providing qualifications that offer proof of the skills they need to get the job done.

City & Guilds Group

The City & Guilds Group includes City & Guilds, ILM (the Institute of Leadership & Management) which provides management qualifications, learning materials and membership services, NPTC which offers land-based qualifications and membership services, and HAB (the Hospitality Awarding Body). City & Guilds also manages the Engineering Council Examinations on behalf of the Engineering Council.

Equal opportunities

City & Guilds fully supports the principle of equal opportunities and we are committed to satisfying this principle in all our activities and published material. A copy of our equal opportunities policy statement is available on the City & Guilds website.

Copyright

The content of this document is, unless otherwise indicated, © The City and Guilds of London Institute 2010 and may not be copied, reproduced or distributed without prior written consent.

However, approved City & Guilds centres and learners studying for City & Guilds qualifications may photocopy this document free of charge and/or include a locked PDF version of it on centre intranets on the following conditions:

- centre staff may copy the material only for the purpose of teaching learners working towards a City & Guilds qualification, or for internal administration purposes
- learners may copy the material only for their own use when working towards a City & Guilds qualification

The *Standard Copying Conditions* on the City & Guilds website also apply.

Please note: National Occupational Standards are not © The City and Guilds of London Institute. Please check the conditions upon which they may be copied with the relevant Sector Skills Council.

Publications

City & Guilds publications are available on the City & Guilds website or from our Publications Sales department at the address below or by telephoning +44 (0)20 7294 2850 or faxing +44 (0)20 7294 3387.

Every effort has been made to ensure that the information contained in this publication is true and correct at the time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement and the right is reserved to change products and services from time to time. City & Guilds cannot accept liability for loss or damage arising from the use of information in this publication.

City & Guilds

1 Giltspur Street

London EC1A 9DD

T +44 (0)844 543 0000 (Centres)

T +44 (0)844 543 0033 (Learners)

www.cityandguilds.com

learnersupport@cityandguilds.com

Contents

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

Assignment D

Introduction – Information for Candidates	2
Candidate Instructions	3

Level 3 Install, configure and integrate networked hardware and software (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 (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**.

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

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

Published by City & Guilds
1 Giltspur Street
London
EC1A 9DD
T +44 (0)844 543 0000 (Centres)
T +44 (0)844 543 0033 (Learners)
www.cityandguilds.com

City & Guilds is a registered charity
established to promote education
and training