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



www.cityandguilds.com **September 2017** Version 4.0

Systems and Principles Assignment guide for Candidates

Assignment B



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)2072942850 or faxing +44 (0)207294387.

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)

Assi	ignment	В

Introduction – Information for Candidates	2
Candidate Instructions	3

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

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 **8 hours**.

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

Candidate Instructions

Time allowance: 8 hours

Assignment set up:

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

- Task A Construct a network from given components
- Task B Connect a network to another network
- Task C Write a report

Scenario

A client company currently has two stand-alone workstations in separate offices. There is an increasing requirement for users to share files and facilities and to communicate internally via email. There will also be a requirement to expand the system in the future. You have been asked to convert the current installation to a small client-server system with a shared printer.

Note: You should record details of all installations, configurations, users, tests and results for use in Task C. Produce screen-prints throughout the tasks as evidence where appropriate.

Task A – Construct a network from given components

Your Assessor will provide information to be used in relation to this task.

- Carry out an audit of the **two** stand-alone machines using auditing software provided by your Assessor. Enter details on the Hardware Audit Report. Use a separate sheet for **each** machine.
- 2 Prior to carrying out the next task perform a risk assessment of your working environment, and record your findings, highlight any issues that do not comply with current legislation.

Make any recommendations to your assessor on changes you would make to the working environment documenting these changes on the Installation records.

Prepare the **two** stand-alone machines for networking operations using appropriate hardware and software provided by your Assessor.

Also determine suitable configuration options for the intended additional components.

Test the configured computer systems.

Resolve any problems encountered.

Created records of all your installations in this task.

- 3 Complete the details on the System Installation Plan.
- 4 Connect and configure the network using hardware and cables provided.
- 5 Test the network connectivity using diagnostic software and take a screen print of the software used.
- 6 Set up the user accounts with home directories, appropriate rights and passwords using the data files provided by your assessor.
- 7 Configure **two** maintenance routines for access policies and passwords.
- 8 Test to ensure the security of the server including the home directories and take **one** screen print of the server and **each** directory tested.
- 9 Connect the printer to the network and configure the server to manage the printer and the client machines to use the printer.
- 10 Check the media given and then Install the supplied email program on the network.
- 11 Configure and test the email program to ensure that all users on both machines can send and receive messages. Print copies of emails sent and received for all users.
- 12 Install and configure virus protection software on the network and take a screen print of the configuration.
- 13 Install and configure a firewall on the network and take a screen print of the configuration.

Task B – Connect a network to another network

- Select and configure hardware and software necessary to connect Network A, to a similar neighbouring network (Network B) as directed by your Assessor.
- 2 Ensure the appropriate protocols are installed in **each** network.
- 3 Physically connect the **two** networks together.
- 4 Test network connectivity using diagnostic software and take a screen print of the software being used.
- 5 Configure Network A to allow limited access by nominated users on Network B, including printer access and a take screen print identifying **each** user's access.
- 6 Configure and test the email program to allow email communication between all users on both networks. Print copies of emails sent and received for all users.

Design and carry out a test regime to test the correct operation of the **five** user accounts across the combined networks.

Task C – Write a report

- 1 Using the details recorded in the previous tasks, compile a short installation report to include
 - details of hardware and software installed
 - a logical and physical interconnection diagram
 - a list of user profiles user names and passwords, permissions, etc
 - the tests used to confirm system functionality at each stage, including results.

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