Level 3 ICT systems and network management (7540-368)

Systems and Principles
Assignment guide for Candidates

Assignment C

(This assignment can be used as evidence of achievement of 7540-031 Level 3 Networking Principles)

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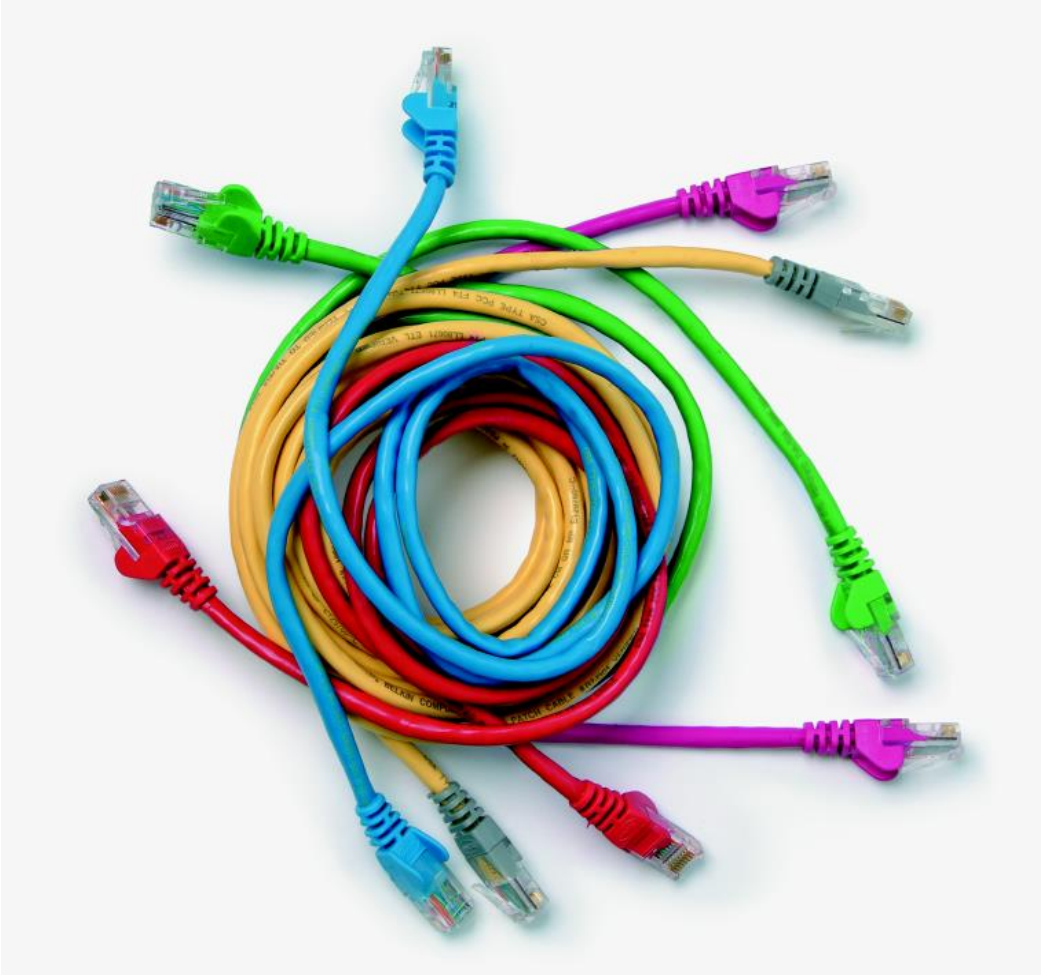

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Introduction – Information for Candidates

About this document
This assignment comprises all of the assessment for Level 3 ICT systems and network management (7540-368).

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 ICT systems and network management (7540-368)

Candidate Instructions

Time allowance: 4 hours

Assignment set up:

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

- Task A – Reconfigure network switch or router to provide improved performance
- Task B – Write a business report on systems security
- Task C – Write a business report on management technologies

Scenario

A network that you are managing has started to run slowly. You suspect it may be caused by the way a switch or router has been configured. The network configuration then impacts upon the performance of the end user devices such as PCs when logging onto the systems.

You need to look at the supplied network performance data and reconfigure the switch or router to allow for better data throughput and for network monitoring and security.

Finally you will need to write a report on system monitoring techniques which can be implemented by the business including issues which may arise if the system is not properly monitored. This will also include a set of recommendations as to how to improve the overall effectiveness of Business ICT within organisations.

Read all of the instructions carefully and complete the tasks in the order given.

Task A – Reconfigure network switch or router to provide improved performance

In this task you will be given an item of network hardware and associated performance data. You must examine this data and use your analysis to reconfigure the network hardware.

1 Initiate the actions required to remedy failures of IT systems to meet operational requirements, by finding out the actual configuration of the device.

2 Reconfigure the device to improve the network performance.

3 Monitor the network performance and record the data using a screen print.

Continued over…

Task B – Write a business report on systems security

1 Explain the importance of controlling user access to system resources.

2 Describe **three** commonly available methods for controlling user access to system resources.

3 Identify **five** methods and reasons for the prevention of unauthorised access to the network system.

Task C – Write a business report on management technologies

1 Identify **six** tools available to monitor the operation and performance of IT systems.

2 Describe **six** common causes of IT systems failing to meet operational requirements and the actions required to correct these.

3 Describe areas of IT system use that may be inefficient, covering:

- hardware
- software
- use of materials
- services.

4 Describe **six** methods of improving the efficiency of hardware and software in a client server LAN.

5 Describe **three** factors contributing to the feasibility or otherwise of potential improvements.

6 Explain the importance of presenting recommendations in a manner suited to the needs of the audience.

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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