

Institute for Apprenticeships & Technical Education



Occupational specialism assessment (OSA)

Cyber Security

Assignment 1

Assignment brief

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T Level Technical Qualification in Digital Support Services Occupational specialism assessment (OSA)

Cyber Security

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Assignment 1

Contents

About this assignment	3
Introduction	3
Task 1: project proposal	6
Task 2: set-up – devices, network and access	7
Document information	8
Change History Record	8

About this assignment

Introduction

This assignment is set by NCFE and administered by your provider over 2 days. The times and dates will be specified by NCFE.

The assignment will be completed under supervised conditions.

You must complete all tasks in this assignment independently. You are required to sign a declaration of authenticity to confirm that the work is your own. This is to ensure authenticity and to prevent potential malpractice and maladministration. If any evidence was found not to be your own work, it could impact your overall grade.

Internet access is allowed for tasks 1 and 2.

Ensure all print screens have been labelled with a brief description of what is being shown.

Save your work regularly as you work through the assessment.

Submit the written work as a single .pdf file at the end of the assessment. Any video evidence submitted should be clearly labelled.

Electronic files should be named using the following format for identification purposes – Surname_Initial_student number_evidence reference

For example, 'Smith_J_123456789_Task1'.

Timing

You have 11 hours to complete all tasks within this assignment.

Each task has the following number of hours:

Task 1 – 5 hours 30 minutes (this will be completed in 1 day)

Task 2 - 5 hours 30 minutes (this will be completed in 1 day)

Individual tasks must be completed within the timescales stated for each task, but it is up to you how long you spend on each part of the task, therefore be careful to manage your time appropriately.

Marks available

Across all assignment 1 tasks: 50 marks.

Details on the marks available are provided in each task.

You should attempt to complete all of the tasks.

Read the instructions provided carefully.

Performance outcomes (POs)

Marks will be awarded against the skills and knowledge performance outcomes (POs) as follows:

Task 1

PO1: Apply procedures and controls to maintain the digital security of an organisation and its data (10 marks)

PO3: Discover, evaluate and apply reliable sources of knowledge (20 marks)

(30 marks)

Task 2

PO1: Apply procedures and controls to maintain the digital security of an organisation and its data (5 marks)

- PO2: Propose remediation advice for a security risk assessment (10 marks)
- PO3: Discover, evaluate and apply reliable sources of knowledge (5 marks)

(20 marks)

Brief

Willow Technology are aware of the continuous technological improvements and updates that are currently available and have asked you to research the current market and create a project proposal for how Willow Technology could improve the security of their current systems and software. This proposal will be submitted to the board and will be addressed in the budget for next year.

Additionally, at the beginning of next week, a new colleague will be joining the team. You have been asked to set up a device so that they are able to work remotely most of the time and will be able to log in when working in the office, which uses hot desks if the need arises. In addition to configuring the laptop, you will also have to install any software agreed to by your line manager, as well as set up an administrative account for yourself and one for the new colleague.

Task 1: project proposal

Time limit

5 hours 30 minutes

You can use the time how you want, but all parts of task 1 must be completed within the time limit.

(30 marks)

Instructions for students

You are required to complete a project proposal that compares 2 available security products (for example, comparing 2 different vendor-based firewalls) and recommend which would be best for the company. Additionally, you will need to recommend the most appropriate method for user access solutions.

You will provide a rationale to justify any recommendations you make, stating why you feel the product/solution chosen is better than any other available whilst considering price, reviewer feedback from other users and certification.

You should create a project proposal that includes:

- your research into the following three secure software solutions:
 - \circ firewall
 - o anti-virus
 - o virtual private network (VPN) to ensure that any internet connection remains secure and private
- for each one of these you should compare 2 similar products and recommend the best solution based on price, user reviews, technical specification and if applicable, certification
- · references to sources used for validating the credibility of the software chosen
- any legal/security requirements that need to be addressed when considering the software chosen and how this software may be used
- recommendations for the most appropriate methods to implement user access control for the device either locally, remotely, or both

Evidence required for submission to NCFE

The following evidence should be submitted:

a project proposal

Task 2: set-up – devices, network and access

Time limit

5 hours 30 minutes

You can use the time how you want, but all parts of task 2 must be completed within the time limit.

(20 marks)

Instructions for students

Install the supplied OS on the device that has been provided to you (laptop/computer/ virtual machine) and configure a local administration account and a local user account.

Secure the device through the installation of the supplied software:

- firewall
- anti-virus
- virtual private network (VPN) to ensure the user has a private and secure internet connection
- · demonstrate your ability to complete the installation by correctly configuring the supplied software
- run a scan to check everything works and if any software programs have not been successfully installed and configured, undertake remedial action to rectify the issue

Whilst doing this task, you must create a log that demonstrates:

- the steps followed for the installation of all software programs that have been installed
- evidence of the supplied software functioning correctly
- results of any scans you have run, and all remedial action undertaken if problems are identified

The log may include screenshots as appropriate.

Resources

For this task, you will have access to the following:

- device (this may be a virtual machine/laptop/computer)
- internet access

Note: Where internet access is not available your tutor will provide an alternative solution for the installation of software

Evidence required for submission to NCFE

You will submit evidence including but not limited to:

• a log

Document information

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Change History Record

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