T-LEVELS | Institute for Apprenticeships & Technical Education

T Level Technical Qualification in Digital Support Services

Employer set project (ESP)

Core skills

Digital Infrastructure & Network Cabling

Project brief - Task 1

v1.1: Specimen assessment materials
16 November 2023
603/6901/2

NCFE

SAMPLE

T Level Technical Qualification in Digital Support Services
Employer set project (ESP)

Core skills

Project brief

Digital Infrastructure & Network Cabling

Contents

Student instructions **3**
Task 1: 2 hours 30 minutes **6**
Control document A: logical topology diagram of dealership (task 1) **8**
Control document B: call log sheet **9**
Document information **10**

SAMPLE

Student instructions

- read the project brief carefully before starting your work
- you must work independently and make your own decisions as to how to approach the tasks within the employer set project (ESP)
- you must clearly name and date all of the work that you produce during each supervised session
- you must hand over all of your work to your tutor at the end of each supervised session
- you must not work on the assessment in between supervised sessions

Student information

- the ESP will assess your knowledge, understanding and skills from across the core content of the qualification
- in order to achieve a grade for the core component, you must attempt both of the external examinations and the ESP
- the combined marks from these assessments will be aggregated to form the overall core component grade (A* to E and U) – if you do not attempt one of the assessments, or fail to reach the minimum standard across all assessments, you will receive a U grade
- the maximum time you will have to complete all tasks for the employer set project is 12 hours 10 minutes:
    - your tutor will explain how this time is broken down per task and will confirm with you if individual tasks need to be completed across multiple sessions
    - at the end of each supervised session, your tutor will collect all employer set project assessment materials before you leave the room
    - you must not take any assessment material outside of the room (for example, via a physical memory device)
    - you must not upload any work produced to any platform that will allow you to access materials outside of the supervised sessions (including email)
- you can fail to achieve marks if you do not fully meet the requirements of the task, or equally if you are not able to efficiently meet the requirements of the task
- the project is assessed out of a total of 76 marks (this includes 2 marks for your use of maths in task 3, and 4 marks for your use of English throughout tasks 2, 3 and 4) – the individual task marks are also shown throughout the project brief booklet at the start of each task

Plagiarism

Plagiarism may result in the external assessment task being awarded a U grade.

.

SAMPLE

Presentation of work

- all of your work should be completed electronically using black font, Arial size 12pt unless otherwise specified
- any work not produced electronically must be agreed with your tutor, in which case the evidence you produce should be scanned and submitted electronically
- all your work should be clearly labelled with the relevant task number and your student details and be legible (for example, front page and headers)
- electronic files should be named using the following format – Surname_Initial_student number_evidence reference for example: Smith_J_123456789_Task1 for identification purposes – where evidence reference is shown, this should be replaced with the task number for which the work reflects and saved as a .pdf format
- all pages of your work should be numbered in the format page X of Y, where X is the page number and Y is the total number of pages
- you must complete and sign the external assessment cover sheet (EACS) – declaration of authenticity form and include it at the front of your assessment task evidence
- you must submit your evidence to the supervisor at the end of each session

SAMPLE

Scenario

A major franchise for a leading car company is about to open a new car dealership in your nearest city.

As the IT support technician allocated to the project, you have been asked to support on the implementation of the IT systems into the dealership.

The manufacturer will provide the dealership with access to an internal car ordering and customer management platform. This will be provided via a modern web browser accessed with a secure internet connection as sensitive data will be stored (including customer and payment details).

The sales team members will serve customers from fixed desks. They will also be given tablet computers to enable movement around the dealership during sales process.

The car manufacturer has stipulated that customers should be provided with free WiFi.

Some issues have been happening during the testing of the new networks, with some slow response times and issues with connectivity.

Brief

Your line manager has asked you to help troubleshoot and propose potential solutions for the connectivity issues.

One of the tablets cannot connect to the WiFi. It completes an initial connection but then it is disconnected from the network. Currently, only a single unsecured WiFi network is available in the dealership during the initial installation and testing.

SAMPLE

Task 1: 2 hours 30 minutes

You must read the information on all pages provided for this task before starting your response.

(22 marks)

Scenario

You have been asked to troubleshoot the problem with the tablet connection using the supporting documentation to assist you. You have been provided with the network topology diagram (control document A) showing devices and IP addresses to aid troubleshooting.

Instructions for students

Use the information provided and the topology document to investigate and identify the root cause of the issue. Add your required steps to resolve the fault to the call log (6 marks).

Design a test plan that could be followed by a colleague to check that changes made now allow all the tablets to connect to the WiFi.

You should consider:

- use of troubleshooting frameworks
- tools used during the troubleshooting process

Your test plan document (16 marks) should include:

- user details
- test dates
- computer specification and software
- proposed tests
- expected outcomes of tests
- ability to record changes based on test outcomes
- record of diagnosis
- user acceptance of work completed

Evidence required for submission to NCFE

- IT call log document with details of the solution and troubleshooting undertaken in .pdf format
- test plan document to be submitted at the end of task 1 in .pdf format

When you have completed this task, you should save in a .pdf format, and name your file:

- Surname_Initial_student number_evidence reference for example: Smith_J_123456789_Task1

SAMPLE

Additional guidance

For this task you will be issued with control documents A and B

You will have access to a word processing application or other suitable software to enable you to complete this task.

Access to the internet is permitted.

Access to any online cloud storage is not permitted.

Use of online chat or emails is not permitted.

Access to previous class notes/teaching materials is not permitted.

SAMPLE

Control document A: logical topology diagram of dealership (task 1)

Test Tablet
<No IP Addressed Issued>
Mac Address: 00-0C-29-F9-71-50

DHCP Scope Reservation: Access Points

Start Address:	192.168.10.20
End Address:	192.168.10.35
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.10.254

DHCP Scope Reservation: Tablets

Start Address:	192.168.10.211
End Address:	192.168.10.225
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.10.254

AP Rules
2.4GHz: Enabled
5GHz: Disabled
SSID: Test_Network
2.4GHz Wireless Security: OFF
Channel: Auto

Mac Filtering:
00-0C-29-F9-71-50 (Block)
FC:01:7D:4F:40:1D (Enabled)

SA

Control document B: call log sheet

Call no.	12	**Date of call**:	/ /	**Time of call**:	:	**Recorded by**:	JSW
Initial call details:							
The problem is that one of the tablets cannot connect to the WiFi. It completes an initial connection but then it disconnects from the network. Currently, only a single unsecured WiFi network is available in the dealership during the initial installation and testing.							
Troubleshooting activities:							
Solution:							
Closed by:							

SAMPLE

Document information

Copyright in this document belongs to, and is used under licence from, the Institute for Apprenticeships and Technical Education, © 2022–2023.

'T-LEVELS' is a registered trade mark of the Department for Education.

'T Level' is a registered trade mark of the Institute for Apprenticeships and Technical Education.

The T Level Technical Qualification is a qualification approved and managed by the Institute for Apprenticeships and Technical Education. NCFE is currently authorised by the Institute to develop and deliver the Technical Qualification in Digital Support Services.

'Institute for Apprenticeships & Technical Education' and logo are registered trade marks of the Institute for Apprenticeships and Technical Education.

Owner: Head of Assessment Design

Change History Record

Version	Description of change	Approval	Date of Issue
v1.0	Published		September 2022
v1.1	Sample added as a watermark	November 2023	16 November 2023

SAMPLE