T Level Technical Qualification in Digital Support Services

Occupational specialism assessment (OSA)

Digital Infrastructure

All assignments

Provider guide

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

Digital Infrastructure

Provider guide

All assignments

Contents

About this document

This guidance has been produced in order to support with the delivery of the T Level in Digital Support Services Digital Infrastructure occupational specialism. In particular, with the elements of the course where tutors have requested additional support during the first full series of the specifications. It is not intended to replace the specification documents but should be used in conjunction with them.

This document addresses all assessments for the Digital Infrastructure occupational specialism.

Introduction

The aim of the assessments is for students to have the opportunity to use their knowledge gained from the specialist components to demonstrate the knowledge and skills they have gained. The assessment methods vary across the assessments to allow students to express their knowledge and skills gained in a valid and reliable way and for them to be able to demonstrate threshold competency.

NCFE provides instructions for each of the assessments and providers should follow them. Providers must purchase essential resources prior to the assessments taking place. A full equipment list can be found in the qualification specification.

General information

The occupational specialism (OS) assessments are a set of synoptic assessments which are either externally set and externally marked, or externally set, internally marked and externally moderated.

The term 'synoptic assessment' refers to the combination of the 3 assignments in this OS component.

The term 'assessment' is used in the same way as 'assignment' but will often refer to specific properties of the assignment.

Accessibility and fairness

To promote accessibility and fairness for all students and to ensure diversity and equality, we expect providers to be aware of and meet the requirements of relevant NCFE policies and government legislation. You must ensure that:

- all of your processes concerned with assessment are carried out in a fair and objective manner

- you continue to adhere to current equal opportunities legislation

- you continue to operate an effective diversity and equality policy, with which students are familiar and which applies to all students using our products and services

Plagiarism

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

For further guidance, refer to the student handbook, plagiarism in external assessment and the maladministration and malpractice policy located on the NCFE website.

Access arrangements

Access arrangements enable students with special educational needs, disabilities, or temporary injuries to take our exams and assessments. Any of the listed tasks may be adapted to suit different needs, but the way in which they are adapted depends on the individual need or disability.

It is important that any adaptation or adjustment does not compromise the rigour and validity of the assessment; in most cases extra time (which should be applied for) or a change of recording mode (for example changing to handwritten submissions) are appropriate modifications.

We can make arrangements for disabled students and those with special needs to help them access the assessments, as long as the competences being tested are not changed. Access arrangements must be agreed with us before the assessment by using our online application service. All access requests will be considered individually, and your application should outline what the student can do and how the activities will be adapted in order to meet the assessment criteria.

Adapted activities will not be accepted for assessment unless approved by NCFE.

Providers can apply online on the NCFE website.

Malpractice/maladministration

Students **must not** share the details of the assessment or details of their ongoing assessment evidence with peers in their or other providers once completed or during the completion of assessments within the set assessment windows. Provider staff should regularly remind their students about potential repercussions of breaches of security by referring to the NCFE guidance and regulations available on our website.

If at any time during an assessment there is a violation of these regulations, the designated person has the right to stop the assessment immediately; this decision must only be made in exceptional circumstances where malpractice is irrefutable. Once stopped, no allowance can be given retrospectively if the decision is deemed invalid.

If malpractice occurs during an assessment, providers should inform NCFE immediately with a report of what occurred – please see the notification if malpractice form available on our website.

If any of the regulations are breached by a student or other persons involved in the conduct of the assessment, then NCFE may declare the assessment void.

In the event of a suspected or actual breach of these regulations by students:

- the work completed by the students concerned and any unauthorised materials (if applicable) must be confiscated from the students and given to the relevant persons as noted in the guidance and regulations document

- all students suspected of breaching these regulations should be instructed to leave the supervised/assessment environment immediately, if appropriate to do so, causing the least amount of disruption to other students

- NCFE should be informed immediately of any irregularity via a phone call or email

- the provider should conduct its own investigation into the incident and report the incident and their findings to us using the NCFE notification of malpractice document on our website

NCFE reserves the right to investigate each case of alleged or actual malpractice/maladministration committed by a student, provider or other persons involved in the conduct of the assessment in order to establish all of the facts and circumstances surrounding the case. The investigation will be carried out in accordance with NCFE's maladministration and malpractice policy.

About this assessment

The Digital Infrastructure OS is assessed synoptically with a suite of 3 assignments. The assignments require the student to independently apply an appropriate selection of knowledge, understanding, skills and techniques developed throughout the full course of study, in response to briefs and/or tasks. This will allow the student to demonstrate that they have met a level of threshold competence across the performance outcomes (POs) of the OS.

The assessment methods vary across the assignments to allow students to demonstrate the knowledge and skills they have acquired throughout their learning and experience.

The assessments validly and reliably allow the student to be able to demonstrate, at the end of the qualification, the threshold competency gained in order to progress into employment or into higher education.

NCFE provides instructions for each of the assessments, and these must be followed by T Level providers.

Essential resources for each assessment, where applicable, must be purchased by the provider prior to the assessments taking place. The resources required for each assessment will be taken from the exemplar/broader range of resource requirements outlined in the qualification specification however, attention should be given to any particular resource specific requirement within this document.

The synoptic assessment for this OS is graded pass, merit or distinction, and the final grade will contribute 50% of the overall technical qualification grade, so it is important that students have the opportunity to produce work of the highest standard they can. The assignments within this synoptic assessment are designed to allow the student to do this in a way that is as occupationally authentic to the roles that they may take on in future employment.

What is threshold competence?

'Threshold competence' is defined as a level of competence that:

- signifies that a student is well placed to develop full occupational competence, with further support and development, once in employment

- is as close to full occupational competence as can be reasonably expected of a student studying the technical qualification in a college-based setting with a substantial industry placement

- signifies that a student has achieved the level for a pass in relation to the relevant OS component

What is synoptic assessment?

A synoptic assessment is a form of assessment in which students are required to demonstrate that they can identify and use in an integrated way an appropriate selection of skills, techniques, concepts, theories, and knowledge from across the technical area, relevant to the tasks.

Synoptic assessment is integral to high quality technical qualifications to allow students to demonstrate a holistic understanding of the sector, making effective connections between different aspects of the subject content.

The assignments and tasks in this assessment are designed to be synoptic in a way that is as occupationally realistic as possible.

What will students be assessed on?

Students will be assessed against the following set of performance outcomes (POs) that describe what the student should be able to do:

Digital Infrastructure POs	
PO1	Apply procedures and controls to maintain the digital security of an organisation and its data
PO2	Explain, install, configure, test and manage both physical and virtual infrastructure
PO3	Discover, evaluate and apply reliable sources of knowledge

Assessment structure

The following synoptic assessment, comprised of 3 assignments, has been designed to test to what extent a student can meet the skills and underpinning knowledge required to achieve threshold competence in Digital Infrastructure

The technical qualification (TQ) will comprise of the following assessments, which will assess the knowledge and skills gained from the occupational specialist component:

	Sub-component	Assessment time	% weighting	Raw marks	Assessment conditions	Marking
Occupational specialism	Assignment 1	13 hours	35%	76	Supervised	External
	Assignment 2	6 hours	35%	53	Supervised	External
	Assignment 3	5 hours 30 minutes	39%	56	Supervised	External
	Component total	**24 hours and 30 minutes**	**100%**	185		

The guidance below explains the nature of this assessment and should be used alongside the general guidance provided in this document, the qualification specification and live assessment materials (once available).

The synoptic assessment consists of 3 assignments covering the following areas:

1. Problem solving in relation to a given occupationally relevant brief

2. Practical tasks targeting knowledge and skills

3. Digital security, risk assessment and demonstrating appropriate actions to protect resources

Assignments are broken down into tasks where necessary. The assignments, tasks, and further guidance (within this document) are for students and tutors to show how the assignments are expected to be delivered.

Evidence produced by students for the assignments will be sent to NCFE for marking or moderation where applicable. Assessment judgements, including overall judgement of the performance required at each of the grade boundaries, will be made by NCFE and results released to the provider at the appropriate time.

This assessment consists of:

- assignment 1: problem solving in relation to a given occupationally relevant brief (13 hours)

    o task 1: 3 hours

    o task 2: 5 hours

    o task 3: 5 hours

- assignment 2: practical tasks targeting knowledge and skills (6 hours)

    o task 1: 45 minutes

    o task 2: 30 minutes

- assignment 3: digital security, risk assessment and actions to protect resources (5 hours and 30 minutes)

- o task 1: 2 hours

- o task 2: 45 minutes

- o task 3: 45 minutes

- o task 4: 2 hours

This synoptic assessment must be completed for a student to achieve the T Level Technical Qualification in Digital Support Services with the Digital Infrastructure occupational specialism (OS).

Marks

Marks available for each assignment are detailed below.

Assignment		Marks*	Weightings (%)**
1	Problem solving in relation to a given occupationally relevant brief	76	35
2	Practical tasks targeting knowledge and skills	53	35
3	Digital security, risk assessment and demonstrating appropriate actions to protect resources	56	30
Total		185 marks	100%

*The raw marks will be scaled to ensure that the intended weightings of each assignment are met. The scaling factors for each assignment can be found in the qualification specification.

**The weightings shown represent the weighted value of each assignment and are not a reflection of the number of marks per assignment as a percentage of the total marks available.

Assessment timings

Assessment delivery guidance can be found for each assignment in the assignment and task specific guidance section.

Assessment windows and dates

Assignment 1 will be available as a dated assessment, set between April and May each year at a time set by NCFE. All students must sit the assignment on this date at the same time. Assignment 1 is externally assessed. Evidence for assignment 1 must be returned to NCFE for marking after completion.

Assignment 2 will be delivered within a set 1-week window, specified by NCFE. Assignment 2 will be available to the provider as an assessment sat during a window, set in May each year. Assignment 2 is externally assessed. Evidence for assignment 2 must be returned to NCFE for marking after completion.

Assignment 3 will be delivered over 2 days, on the dates and times in May each year at a time set by NCFE. All students must sit the assignment on this date at the same time. Assignment 3 is externally assessed. Evidence for assignment 3 must be returned to NCFE for marking after completion.

A submission deadline for the evidence for assignments 1 to 3 will be set for each academic year to allow NCFE to carry out remote moderation and awarding before the release of results in August of that year.

All evidence created, generated and recorded for these assignments is subject to data protection rules and information should be anonymised to protect the rights of individuals where relevant.

All assignments are **unseen**. All assessment materials or knowledge of any assessment materials should not be provided to the student until the specified day and start time of each assessment.

Assessment conditions

The Digital Infrastructure OS consists of 3 separate assignments.

The assignments are set by NCFE and administered by you, the provider, and externally marked by NCFE examiners (unless stated otherwise).

The assignments will be released to providers for planning, preparation and set up only, in advance of the windows and not for teaching and learning purposes, or to be given to the students to prepare:

- assignment 1 will be delivered over 3 days, on the dates and times specified by NCFE

  o this assessment is externally marked

  o evidence for assignment 1 must be returned to NCFE for marking after completion

- assignment 2 will be delivered within a set 1 week window, specified by NCFE after the assessment window for assignment 1

  o this assessment is externally marked

  o evidence for assignment 2 must be returned to NCFE for marking after completion

- assignment 3 will be delivered over 2 days, on the dates and times specified by NCFE after the assessment window for assignment 2

  o this assessment is externally marked

  o evidence for assignment 3 must be returned to NCFE for marking after completion.

Assessment conditions guidance can be found for each assignment in the assignment and task specific guidance section.

Students must complete the OS assessments independently and under supervised conditions, as per the guidance within the assignment and task specific instructions section.

Students and tutors are required to sign one declaration of authenticity to confirm that the work is their/the student's own. A single declaration form is sufficient for the whole project. The declaration forms can be found at the NCFE website. This is to ensure authenticity and to prevent potential malpractice and maladministration. Students must be made aware of the importance of this declaration and the impact this could have on their overall grade if the evidence was found not to be the student's own work. Tutors must be aware that by signing the declaration, they are validating it is the student's own work.

Where appropriate. tutors must retain students' research materials at the end of each supervised session, alongside all materials and/or evidence produced by students within the supervised assessment.

At the end of each supervised session, the tutor must collect all evidence and any other materials, including students' research materials, before students leave the room to ensure that no student takes any external assessment material or assessment evidence out of the room. This also includes sufficient monitoring and checks to ensure that students have not made materials available to themselves or anyone else electronically via the intranet or internet.

Students will be asked not to share the details of the assessment with peers at their own or with other providers. Inevitably there may be some advantage to students who take the assessment at the end of the assessment window, but this is considered to be minimal given the narrow window. Staff and students will be regularly reminded about potential repercussions of breaches of security as per the NCFE Regulations for the Conduct of External Assessment.

External assessment materials should be securely stored between supervised sessions. Students must not have access to this area between the supervised sessions, including electronic files.

Work such as formative assessment and/or work done with sample assessment materials must not be used again as part of the external assessment task submission to NCFE.

Students are not allowed to bring any prepared materials into the supervised sessions unless otherwise stated in the assessment specific instructions. This **must** be monitored by providers.

Appendices should not be included and will not be marked unless specifically required from the task instructions.

Students are not allowed access to any online cloud storage or email and chat services during the assessment, this should be monitored by the providers.

NCFE recognises that some providers deliver to very large cohorts, in such cases staff and physical resources will similarly have been scaled up during teaching and learning to cope with a large cohort. On balance, we consider this option to be both sensible in terms of security of assessment and manageable for providers.

Digitally produced work, such as audio recordings, need to be securely stored using a file naming convention framework including provider name, provider number, student name, student number, assignment number and task number.

Plagiarism

Plagiarism may result in the external assessment task being awarded a U grade. For further guidance, refer to the maladministration page on the NCFE website.

Accessibility and fairness

To promote accessibility and fairness for all students and to ensure diversity and equality, we expect providers to be aware of and meet the requirements of relevant NCFE policies and government legislation. You must ensure that:

- all of your processes concerned with assessment are carried out in a fair and objective manner

- you continue to adhere to current equal opportunities legislation

- you continue to operate an effective diversity and equality policy, with which students are familiar and which applies to all students using our products and services

Assessment delivery

Assessment delivery guidance can be found for each assignment in the assignment and task specific guidance section.

Resources and equipment

The resources required for each assessment will be available in the specific guidance for each assignment in this document. These requirements will be in line with the resources specified in the qualification specification and as such, students should be familiar with these as they should be used during the delivery of the qualification.

Assignment 1

There are 3 tasks in this assessment. Tasks will be completed over 3 days, on the dates and times specified by NCFE.

Timing

13 hours

Marks available

The maximum number of marks available for this assignment is 76 marks.

Task 1: planning

Timings

3 hours (this will be completed in 1 session on day 1)

Marks available

The maximum number of marks available for this task is 20.

Essential equipment and resources

The following essential equipment is required to support the delivery of this assessment task. Centres may provide additional equipment not listed below to allow the student to complete the assessment task:

- word processing software

- Visio, Packet Tracer or another diagramming tool

- project planning tool that can produce a project plan and Gantt chart, for example Microsoft Project

Assessment conditions

Students must work independently and under supervised conditions. Students must be given a separate user account that is locked at the end of each assessment session. Internet access is **not** allowed for task 1. Students must use the electronic workbook to record all evidence against each task; the workbook is included in the assignment 1 materials provided by NCFE. All print screens must be numbered and linked to the task as stated in electronic workbook. Evidence must be returned to NCFE by the date specified and will be marked by NCFE.

At the end of the time limit for this task, the tutor must collect all evidence and any other materials, including students' research materials, before students leave the room to ensure that no student takes any external assessment material or assessment evidence out of the room.

Students must:

- remain at their desk for the duration of the assessment, with all materials made available

- work in silence and ask permission discreetly to leave the room for essential comfort activities only, keeping distraction of other students to a minimum

- only leave the assessment room individually during the assignment

Evidence requirements

The following evidence should be recorded in the workbook:

- both a project plan and Gantt chart

- explanation of legal requirements

- risk assessment

- annotated floor plans

Assessment delivery guidance

Students must be given a separate user account that is locked at the end of each assessment session.

Internet access is **not** allowed for this task.

Students must use the electronic workbook to record all evidence against each task; the workbook is included in the assignment 1 materials provided by NCFE.

All print screens must be numbered and linked to the task as stated in electronic workbook.

Evidence must be returned to NCFE by the date specified and will be marked by NCFE.

Task 2: design - servers and storage

Timings

5 hours (this will be provided after completion of task 1 and be completed in 2 sessions on day 2)

Marks available

The maximum number of marks available for this task is 28.

Essential equipment and resources

The following essential equipment is required to support the delivery of this assessment task. Centres may provide additional equipment not listed below to allow the student to complete the assessment task:

- internet (privacy mode must be disabled, and policies applied to prevent deletion of browsing history)

- word processing software

- Visio, Packet Tracer or another diagramming tool

- project planning tool that can produce a project plan and Gantt chart, for example Microsoft Project

Assessment conditions

Students must work independently and under supervised conditions. Students must be given a separate user account that is locked at the end of each assessment session. Internet access is allowed for this task. Students must use the electronic workbook to record all evidence against each task; the workbook is included in the assignment 1 materials provided by NCFE. All print screens must be numbered and linked to the task as stated in electronic workbook. Evidence must be returned to NCFE by the date specified and will be marked by NCFE.

At the end of the time limit for this task, the tutor must collect all evidence and any other materials, including students' research materials, before students leave the room to ensure that no student takes any external assessment material or assessment evidence out of the room.

Students must:

- remain at their simulated design studio desk for the duration of the assessment, with all materials made available

- work in silence and ask permission discreetly to leave the room for essential comfort activities only, keeping distraction of other students to a minimum

- only leave the assessment room individually during the assignment

Evidence requirements

The following evidence should be recorded in the workbook:

- technical proposal

- print screens of all online sources clearly showing the URL – print screens must be accompanied by your written evaluation of the sources

- discussion with justification of planned network architecture

- network diagram

Assessment delivery guidance

Students must be given a separate user account that is locked at the end of each assessment session.

Internet access is allowed for this task.

Students must use the electronic workbook to record all evidence against each task; the workbook is included in the assignment 1 materials provided by NCFE.

All print screens must be numbered and linked to the task as stated in electronic workbook.

Evidence must be returned to NCFE by the date specified and will be marked by NCFE.

Task 3: design - communication equipment

Timings

5 hours (this will be provided after completion of task 2 and be completed in 2 sessions on day 3)

Marks available

The maximum number of marks available for this task is 28.

Essential equipment and resources

The following essential equipment is required to support the delivery of this assessment task. Centres may provide additional equipment not listed below to allow the student to complete the assessment task:

- internet (privacy mode must be disabled, and policies applied to prevent deletion of browsing history)

- word processing software

- Visio, Packet Tracer or another diagramming tool

- project planning tool that can produce a project plan and Gantt chart, for example Microsoft Project

Assessment conditions

Students must work independently and under supervised conditions. Students must be given a separate user account that is locked at the end of each assessment session. Internet access is allowed for this task. Students must use the electronic workbook to record all evidence against each task; the workbook is included in the assignment 1 materials provided by NCFE. All print screens must be numbered and linked to the task as stated in electronic workbook. Evidence must be returned to NCFE by the date specified and will be marked by NCFE.

At the end of the time limit for this task, the tutor must collect all evidence and any other materials, including students' research materials, before students leave the room to ensure that no student takes any external assessment material or assessment evidence out of the room.

Students must:

- remain at their simulated design studio desk for the duration of the assessment, with all materials made available

- work in silence and ask permission discreetly to leave the room for essential comfort activities only, keeping distraction of other students to a minimum

- only leave the assessment room individually during the assignment

Evidence requirements

The following evidence should be recorded in the workbook:

- annotated floor plans - this can be one floor plan showing all elements or separate floor plans focusing on different infrastructure elements

- technical documentation

- justification for your approach to the problem

- print screens of all online sources used clearly showing the URL - the print screens must be accompanied by your written evaluation of the source

Assessment delivery guidance

Students must be given a separate user account that is locked at the end of each assessment session.

Internet access is allowed for this task.

Students must use the electronic workbook to record all evidence against each task; the workbook is included in the assignment 1 materials provided by NCFE.

All print screens must be numbered and linked to the task as stated in electronic workbook.

Evidence must be returned to NCFE by the date specified and will be marked by NCFE.

Assignment 2

There are 2 tasks in this assessment.

Timing

6 hours

Marks available

The maximum number of marks available for this assignment is 53 marks.

Task 1

Timings

20 minutes

Marks available

The maximum number of marks available for this task is 4.

Essential equipment and resources

The following essential equipment is required to support the delivery of this assessment task. Centres may provide additional equipment not listed below to allow the student to complete the assessment task:

- a 1m length of Cat5e ethernet cable

- four RJ45 connectors

- cable creation tools – crimping tool, cable cutter

- network cable tester

- digital camera

- word processing software

Assessment conditions

The assignment will be delivered within a set 1 week window, specified by NCFE. Students have 6 hours to complete all tasks within this assignment. Providers must schedule 2 sessions, each lasting for 3 hours, to ensure that all students complete all tasks by the end of the window.

Students must work independently and under supervised conditions. Students must be given a separate user account that is locked at the end of each assessment session. Internet access is **not** allowed.

Students must use the electronic workbook to record all evidence against each task; the workbook is included in the assignment 2 materials provided by NCFE.

All print screens and photographs must be numbered and linked to the task as stated in electronic workbooks. Students must take all photographs on a digital camera provided by the provider. Students are **not** allowed to use their mobile phones.

Evidence must be returned to NCFE by the date specified and will be marked by NCFE.

Students must:

- remain at their assigned desk for the duration of the assessment, with all materials made available

- work in silence and ask permission discreetly to leave the room for essential comfort activities only, keeping distraction of other students to a minimum

- only leave the assessment room individually during the assignment

Evidence requirements

Annotated photographic evidence of the following stages of cable creation should be provided:

- both RJ45 ends have the strands of cable in the correct order and forming a good connection

- an image of each cable strand being tested on the cable tester to verify connection

Note: this will require 8 or 9 images depending on the cable testing device used.

Assessment delivery guidance

Providers may schedule multiple sittings where it is not manageable for all students to complete the assignment at the same time. This will not affect the integrity of the assessment as there is no inherent advantage in knowing in advance the skills that need to be performed. Tasks will be issued together on day 1.

It is recommended that you allocate time to the tasks as follows:

- task 1 = 20 minutes

- task 2 = 5 hours 40 minutes

It is up to students how long they spend on each task; therefore, they need to be careful to manage their time appropriately. They are advised to spend the last 15 minutes reviewing the evidence before submission.

Task 2:

Timings

5 hours 40 minutes

Marks available

The maximum number of marks available for this task is 49.

Essential equipment and resources

Students should be provided with 4 computers. These might be 4 physical machines or 1 machine with 4 virtual machines.

They are required to develop the test system based on the specification. The servers must provide the following services:

- document storage

- authentication services

- data back-up and recovery

- web services

The following information regarding the implementation of the network has been provided:

Server01

- Domain Controller and run DNS and DHCP services, no operating system currently installed

Server02

- web server, no operating system currently installed

PC01

- desktop machine, no operating system installed

PC02

- desktop machine, Windows 10 operating system pre-installed

In addition, students should have access to:

- a digital camera
- word processing software

Network information

The following information outlines the settings students will need to use when configuring the network:

- Subnet – 192.168.1.0/24
- Server01 IP address –192.168.1.1
- Server02 IP address – 192.168.1.2
- DHCP scope – 192.168.1.11-192.168.1.20
- DNS Address – 192.168.1.1
- default gateway – 192.168.1.254 (no internet access provided)

Assessment conditions

Students must complete this task independently and under supervised conditions.

At the end of the time limit for this task, the tutor must collect all evidence and any other materials, including students' research materials, before students leave the room to ensure that no student takes any external assessment material or assessment evidence out of the room.

Students must:

- remain at their assigned desk for the duration of the assessment, with all materials made available
- work in silence and ask permission discreetly to leave the room for essential comfort activities only, keeping distraction of other students to a minimum
- only leave the assessment room individually during the assignment

Evidence requirements

- you must take print screens and/or photographs of the processes you have carried out
- use the tick box ☐ in the evidence required column to ensure that all the required print screens and/or photographs have been provided.

Assessment delivery guidance

Providers may schedule multiple sittings where it is not manageable for all students to complete the assignment at the same time. This will not affect the integrity of the assessment as there is no inherent advantage in knowing in advance the skills that need to be performed. Tasks will be issued together on Day 1.

It is recommended that you allocate time to the tasks as follows:

- Task 1 = 20 minutes

- Task 2 = 5 hours 40 minutes

It is up to students how long they spend on each task; therefore, they need to be careful to manage their time appropriately. They are advised to spend the last 15 minutes reviewing the evidence before submission.

The task can be carried out using either virtualisation software or physical computers. The following information will help when creating and managing the test environment. Whichever approach is used, it is the provider's responsibility to test and configure the equipment prior to the assessment.

Minimum system requirements

If you decide to run the assessment using virtualisation, then the following system requirements should serve as a guide:

- processor (Quad Core CPU, minimum specification i5 3GHz, i7 recommended or equivalent)

- memory (minimum 16GB DDR3 memory)

- storage (dedicated hard disk or SSD for the storage of the VMs)

- operating system: Windows 10, Windows Server 2016, Windows Server 2019 (Hyper-V must be installed and available)

For the physical installation:

- a 4 port network switch

- four physical PCs:

  o processor (Dual Core CPU, minimum specification i3 2.5GHz)

  o memory (minimum 2GB DDR3 memory)

  o storage (60GB minimum)

- Server02 should have 2 physical hard disks

- PC02 should be pre-installed and configured with an operating system, local user account and password

Virtualisation Approach

The use of the virtualisation software is not assessed; this means that if a student has any questions or issues regarding the VM application, guidance can be given by the provider. Any assistance regarding the guest operating system, for example Server01, is **not** permitted.

A sample sets of VMs have been provided using Hyper-V.

Virtual Machines Server01, Server02 and PC01, are empty starter VMs with no operating system installed.

Virtual Machine PC02 **will** require the installation and configuration of the guest operating system before distribution to students. This is to facilitate the provider's own software used for the assessment, for example Windows 10 or Ubuntu.

If you decide to use an alternative product, this must be set up in accordance with the following guidance:

- Server01 - 2 CPU cores, 2gb memory, with minimum 60GB disk

- Server02 - 2 CPU cores, 2gb memory, 2 hard disks with minimum 60GB per disk

- PC01 - 2 CPU cores, 1gb memory, one hard disk with minimum 60GB per disk

- PC02 - 2 CPU cores, 1gb memory, one hard disk with minimum 60GB per disk

- all machines set for host-only network

Assignment 3

There are 4 tasks in this assessment. The tasks for this assignment will be delivered over 2 days, on the dates and times specified by NCFE.

Timing

5 hours and 30 minutes

Marks available

The maximum number of marks available for this assignment is 56 marks.

Task 1:

Timings

2 hours (in one session)

Marks available

The maximum number of marks available for this task is 20.

Essential equipment and resources

The following essential equipment is required to support the delivery of this assessment task. Centres may provide additional equipment not listed below to allow the student to complete the assessment task:

- office floor plan (appendix 3)
- risk assessment template
- virtual server, client and network configuration files (the virtual network files must be copied and tested as working prior to the start of the assessment)
- word processing software

Providers need to ensure that students have access to the following resources:

- a computer capable of running virtual machines via a hypervisor
- processor (Quad Core CPU, minimum specification i5 3GHz, i7 recommended or equivalent)
- memory (minimum 8GB DDR3 memory)
- storage (dedicated hard disk or SSD for the storage of the VMs)
- specimen virtual machines set up on each student PC prior to the assessment commencing (see Appendix 4)

Assessment conditions

Students must complete this task independently and under supervised conditions. Students must be given a separate user account that is locked at the end of each assessment session. Students must use the electronic workbook to record all evidence against each task; the workbook is included in the assignment 3 materials

provided by NCFE. All print screens must be numbered and linked to the task as stated in electronic workbook. Evidence must be returned to NCFE by the date specified and will be marked by NCFE.

At the end of the time limit for this task, the tutor must collect all evidence and any other materials, including students' research materials, before students leave the room to ensure that no student takes any external assessment material or assessment evidence out of the room.

Students must:

- remain at their desk for the duration of the assessment, with all materials made available

- work in silence and ask permission discreetly to leave the room for essential comfort activities only, keeping distraction of other students to a minimum

- only leave the assessment room individually during the assignment

Evidence requirements

- completed risk assessment document (appendix 3)
- annotated floor plan

Assessment delivery guidance

Individual tasks must be completed within the timescales stated for each task. It is up to students how long they spend on each part of the task, therefore they should be encouraged to manage their time appropriately.

This task should be completed in one session.

Task 2:

Timings

45 minutes (in one session)

Marks available

The maximum number of marks available for this task is 8.

Essential equipment and resources

The following essential equipment is required to support the delivery of this assessment task. Centres may provide additional equipment not listed below to allow the student to complete the assessment task:

- word processing software

Assessment conditions

Students must complete this task independently and under supervised conditions. Students must be given a separate user account that is locked at the end of each assessment session. Students must use the electronic workbook to record all evidence against each task; the workbook is included in the assignment 3 materials provided by NCFE. All print screens must be numbered and linked to the task as stated in electronic workbook. Evidence must be returned to NCFE by the date specified and will be marked by NCFE.

At the end of the time limit for this task, the tutor must collect all evidence and any other materials, including students' research materials, before students leave the room to ensure that no student takes any external assessment material or assessment evidence out of the room.

Students must:

- remain at their desk for the duration of the assessment, with all materials made available

- work in silence and ask permission discreetly to leave the room for essential comfort activities only, keeping distraction of other students to a minimum

- only leave the assessment room individually during the assignment

Evidence requirements

- report

Assessment delivery guidance

Individual tasks must be completed within the timescales stated for each task. It is up to students how long they spend on each part of the task, therefore they should be encouraged to manage their time appropriately.

This task should be completed in one session.

Task 3:

Timings

45 minutes

Marks available

The maximum number of marks available for this task is 8.

Essential equipment and resources

- word processing software

Assessment conditions

Students must complete this task independently and under supervised conditions. Students must be given a separate user account that is locked at the end of each assessment session. Students must use the electronic workbook to record all evidence against each task; the workbook is included in the assignment 3 materials provided by NCFE. All print screens must be numbered and linked to the task as stated in electronic workbook. Evidence must be returned to NCFE by the date specified and will be marked by NCFE.

At the end of the time limit for this task, the tutor must collect all evidence and any other materials, including students' research materials, before students leave the room to ensure that no student takes any external assessment material or assessment evidence out of the room.

Students must:

- remain at their desk for the duration of the assessment, with all materials made available

- work in silence and ask permission discreetly to leave the room for essential comfort activities only, keeping distraction of other students to a minimum

- only leave the assessment room individually during the assignment

Evidence requirements

The following evidence should be recorded in the workbook:

- business continuity recommendations document

- disaster recovery recommendations document

Assessment delivery guidance

Individual tasks must be completed within the timescales stated for each task. It is up to students how long they spend on each part of the task, therefore they should be encouraged to manage their time appropriately.

This task should be completed in one session.

Task 4:

Timings

2 hours

Marks available

The maximum number of marks available for this task is 20.

Essential equipment and resources

- word processing software

- virtual server and client PC

Assessment conditions

Students must complete this task independently and under supervised conditions. Students must be given a separate user account that is locked at the end of each assessment session. Students must use the electronic workbook to record all evidence against each task; the workbook is included in the assignment 3 materials provided by NCFE. All print screens must be numbered and linked to the task as stated in electronic workbook. Evidence must be returned to NCFE by the date specified and will be marked by NCFE.

At the end of the time limit for this task, the tutor must collect all evidence and any other materials, including students' research materials, before students leave the room to ensure that no student takes any external assessment material or assessment evidence out of the room.

Students must:

- remain at their desk for the duration of the assessment, with all materials made available

- work in silence and ask permission discreetly to leave the room for essential comfort activities only, keeping distraction of other students to a minimum

- only leave the assessment room individually during the assignment

Evidence requirements

For each action students need to submit evidence of:

- the action they have chosen to implement
- print screens of server and/or client before the configuration change, during the change and after the change (the reconfigured system)
- a note of any unexpected results
- an explanation of how the action they have taken will better protect the system
- a copy of their browsing history showing the websites they have accessed

All print screens should be numbered and linked to the task as stated in the electronic workbook.

Assessment delivery guidance

Individual tasks must be completed within the timescales stated for each task. It is up to students how long they spend on each part of the task, therefore they should be encouraged to manage their time appropriately.

This task should be completed in one session.

Appendix 1: Floor plan: KJ eLearning

Public Park

Room 1
(Planned Classroom)

Air-conditioned Room

(4 rows of banks of desks – 2 desks then 3 desks.)

W/C (Unisex) – larger one is for disabled users

Classroom 1

Server

Room 2
(Planned Classroom)

Room 3
(Planned Classroom)

Reception

Public Waiting Area

Administration Office

(seats 10 currently, room for 30)

Meeting Room

Car Park

Car Park

Key:
— Fire Exit
⬛ Student Desk
☐ Seating
⌐ Door (no access control)
☐ Teacher Desk
◯ Table

Appendix 2: Assignment 2

Step A Installing and Configuring Servers

(5 marks)

Processes	Settings	Marks	Evidence required
Install the provided server operating system on Server01 and Server02 Use suitable configurations that match your current time zone and provide evidence of the successful installation of the server operating system on both Server01 and Server02	Installation of each server must include the graphical user interface After installation, each server should be given a suitable name (for example Server01 and the disk drive should be partitioned as Drive C and F)	1 1	Provide print screen or photographic evidence of the following: ☐ Server01 with name set ☐ Server01 with 2 disk partitions
Connect server machines to a switch (this may be virtual)	Show each server is connected to the switch	1	☐ Image/video showing cable connection from switch to server(s) **OR** ☐ Print screen of Hyper-V setup showing each server connected to a virtual switch
Provide each server with an appropriate IP address	Server01 and Server02 should have fixed IP addresses	1	☐ Server01 and Server02 configured with appropriate IP addresses
Confirm network connectivity between Server01 and Server02 **Note:** Default firewall settings do not allow this	Connectivity demonstrated between Server01 and Server02	1	☐ Print screen/image of successful Ping/Test-NetConnection command

Step B Domain Setup

(6 marks)

Processes	Settings	Marks	Evidence required
Install and configure a directory service on Server01	Install a directory service with an appropriate domain name	1	☐ Print screen showing that the directory service has been installed and configured
Install and configure DNS on Server01 **Note:** This step is completed when the server is promoted to a domain controller	Create a new forest: Kjelearning.local	1	☐ Print screen showing DNS has been installed
Install DHCP service on Server01	Ensure the DHCP post install configuration is completed	1	☐ Print screen showing the DHCP service installed
Implement a DHCP scope using the IP range provided earlier	As provided in the scenario	1	☐ Print screen showing the DHCP scope configured
Join Server02 to the domain		1	☐ Print screen showing Server02 domain joined
Confirm a reverse DNS lookup works on Server02 using Nslookup	Nslookup Server01	1	☐ Print screen showing Server02 successfully completed a reverse lookup
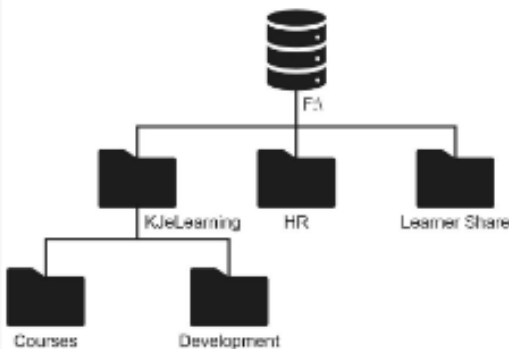
Step C User and Group Setup

(4 marks)

Processes	Settings	Marks	Evidence required
Create the following groups in your directory service	**Managers** **Staff** **Learners** **Teachers** **IT**	1	☐ Print screen showing the 5 groups created in the directory service
Create users in the directory service	**User** **Username** **Password** Sebastian Jones SJones Password1 John Richardson JRichardson Password1 Ayesha Dunn ADunn Password1 Bhindi Hussain BHussain Password1 Natalia Sobbah NSobbah Password1 Ensure all users' passwords do not expire and the password does not need to be changed at login	1	☐ Print screen showing a user has been set up with the correct settings
Assign users to groups	**User** **Group** Sebastian Jones Managers, IT, Domain Admins John Richardson Managers Ayesha Dunn IT Bhindi Hussain Learners Natalia Sobbah Teachers	1	☐ Print screen showing the **Managers** group
Add groups to the **Staff** group	Add the following groups to the **Staff** group: • **Managers** • **IT** • **Teachers**	1	☐ Print screen showing the three groups have been added to the **Staff** group

Step D Shared Folder Setup

(6 marks)

Processes	Settings	Marks	Evidence required
On Server01, create the following folder structure:	On the F:\ drive, create the 5 folders as shown in the diagram. Make sure the folders are created using the same hierarchical structure: • **KJeLearning** folder containing folders for **Courses** and **Development** • **HR** folder • **Learner Share** folder	1	☐ Print screen showing the F:\ drive has been used for file structure
		1	☐ Print screen showing folder(s) have been created
		1	☐ Print screen(s) confirming the hierarchical folder structure has been created as requested
Apply appropriate permissions to the **KJeLearning** folder to ensure access is only available to those authorised	Managers and Teachers should have 'change' access to this folder IT should have 'full control' access to this folder Learners should not be able to access this folder	1	☐ Print screen(s) showing relevant permissions provided on shared folder
Apply appropriate permissions to the **HR** folder to ensure access is only available to those authorised	Only Managers should have access to the **HR** folder, all other users should have no access	1	☐ Print screen(s) showing relevant permissions provided on shared folder
Apply appropriate permissions to the **Learner Share** folder to ensure access is only available to those authorised	Learners should have 'change' access to this folder Teachers should have 'full control' access to this folder	1	☐ Print screen(s) showing relevant permissions provided on shared folder

Step E Client Computer Setup and Test

(10 marks)

Processes	Settings	Marks	Evidence required
Install the provided operating system on PC01 Use suitable configurations that match your current time zone and region and provide evidence of the successful installation of the operating system on PC01	After installation, the computer should be given a suitable name (for example PC01) and the disk drive should be partitioned as Drive C and F	1	☐ Print screen/photographic evidence showing PC01 with name set
		1	☐ Print screen/photographic evidence showing PC01 with 2 disk partitions
(DHCP address) Configure and confirm network settings on PC01 to ensure the computer is on the domain	Connect PC01 to the switch that Server01 and Server02 are connected to Join PC01 to the **KJeLearning** domain Confirm the network address has been provided by DHCP and is within the expected range	1	☐ Print screen or photograph showing PC01 is connected to virtual switch/switch
		1	☐ Print screen showing PC01 is connected to the domain
		1	☐ Print screen showing network configuration to confirm IP address is in the expected range
Log in to PC01 as user John Richardson and confirm that user can access all shared folders on the network	Connect to the server \\server01\ through file explorer and ensure shared folders are shown and can be accessed Create a document in the **HR** folder to confirm user can access and use the shared folder	1	☐ Print screen(s) showing selected user has access to shared folders
		1	☐ Print screen(s) showing selected user can access specified folder
Log in to PC01 as Bhindi Hussain and confirm access to **Learner Share** folder	Connect to the server \\server01\ through file explorer and ensure shared folders are shown and can be accessed Create a folder in the **Learner Share** folder called 'Bhindi' and a document within called 'Notes'	1	☐ Print screen(s) showing selected user can access specific folder
Log in to PC01 as Natalia Sobbah and confirm appropriate access to shared folders **Note:** This final step requires an understanding of the importance of inheritable permissions	Connect to the server \\server01\ through file explorer and ensure shared folders are shown and can be accessed. Confirm if Natalia can access the **HR** folder Confirm Natalia can access the **Learner Share** folder and can delete the folder 'Bhindi'	1	☐ Print screen(s) showing selected user cannot access specified folder
		1	☐ Print screen(s) showing selected user can access and delete the specified folder

Step F Configuring Server Back-up

(7 marks)

Processes	Settings	Marks	Evidence required
Add a second hard disk drive to Server02 **Note**: This may be a physical or virtual hard disk depending on the resources being used	Safely install the disk in the computer/virtual machine	1	☐ Print screen(s) or photograph showing disk being added
	Initialise, format and partition the disk using Disk Management	1	☐ Print screen(s) showing new disk being setup in Disk Management
Install Windows Server Backup feature on Server01	Install using the Roles and Features installation wizard	1	☐ Print screen(s) showing completed feature is installed
Configure Windows Server Backup to run on agreed schedule	Create a new back-up Schedule Custom Backup Add the following items: System State, Data Drive (F:) Hourly between 8am and 6pm Back-up to a shared network folder: \\Server02\Backup Share\	1	☐ Print screen(s) showing completed configuration
Confirm back-up has been successfully completed **Note**: You may need to wait for the next scheduled time (for example on the hour)		1	☐ Print screen(s) showing completed configuration
Confirm restore process works correctly	Delete all files in the **KJeLearning** folder	1	☐ Print screen(s) showing empty folder
	Restore the back-up Confirm that the files have been replaced	1	☐ Print screen(s) showing files are now restored

Step G Setting up and Testing Web Services

(4 marks)

Processes	Settings	Marks	Evidence required
On Server02 install the Internet Information Services (IIS) service	Steps to be completed: Install web server (IIS) role on Server02 Add the recommended features Complete install	1	☐ Print screen(s) showing service has been installed
Configure the role/feature	Steps to be completed: Open **Inetpub** folder Replace index.htm in folder with simple web page	1	☐ Print screen(s) showing Internet Information Services (IIS) has been configured
Add the DNS record for the web server (including Server02 IP address) www.kjelearning.com	Add relevant DNS records for the KJeLearning website	1	☐ Print screen(s) showing DNS record being added for web server
Test the website works on PC01	Load web browser and navigate to the web link that has been set up	1	☐ Print screen(s) showing website tested on PC01

Step H Remote Connection

(4 marks)

Scenario for this step:

You are working from home and receive a call that a member of staff (Natalia Sobbah) has been relieved of her duties and her account needs to be secured.

Processes	Settings	Marks	Evidence required
Create a remote connection from PC02 to Server01 **Note**: You are **not** permitted to domain join the computer	Ensure PC02 is on the same Switch as Server01 Open Remote Desktop Connection and connect to Server01.kjelearning.local or 192.168.1.1 Username: administrator, Pa$$w0rd **Note**: This step will likely fail as Server01 needs to allow remote connectivity	1	☐ Print screen(s) showing remote connection to Server01 is not successful
Configure Server01 to allow remote desktop connections and successfully connect to Server01 from PC02	Allow remote connectivity on Server01 from 'Configure this local server' menu Open remote desktop connection and attempt to connect to Server01	1	☐ Print screen(s) showing successful remote connection to Server01
Open Active Directory Users and Computers (ADUC) and secure the account	Identify the account and reset the password and disable the account Open Active Directory Users and Computers (ADUC) Secure the Natalia Sobbah account by resetting password and disabling	1	☐ Print screen(s) showing specified account password has been reset and account disabled
Confirm user cannot log in from PC01	Confirm Natalia Sobbah cannot log in to the network	1	☐ Print screen(s) showing specified user cannot log on to PC01

Step I Configuring Group Policies

(3 marks)

Processes	Settings	Marks	Evidence required
Using Group Policy Management set the browser home page for all users (staff and learners) to be www.kjelearning.com	Create a Group Policy Object (GPO) for the **KJeLearning** domain and link it GPO Name: Homepage Edit policy and configure setting > User Config > Policies > Admin Templates > Windows Components > Microsoft Edge > Disable changing home page setting	1	☐ Print screen(s) showing browser policy has been configured
Using Group Policy Management, ensure that learners have the **Learner Share** folder as a mapped drive on login	GPO name: Drivemap Edit policy and configure setting > user config > preferences > windows settings > drive maps Add new drive map \\server01\learner share\ Label as: LearnerShare Map as Z:\ Select to item target and target Learner OU	1	☐ Print screen(s) showing drive mapping policy has been configured
Log in to PC01 as Bhindi Hussain and confirm the home page and mapped drives are as set	Test browser home page in Microsoft Edge Confirm drive mapping is present **Note**: You may need to run a GPUpdate/force command if the settings have not updated	1	☐ Print screen(s) showing PC01 has received policies as configured

Appendix 3: Risk assessment template

Threat	Vulnerability	Asset	Impact	Likelihood	Risk	Action	Control type
Example: Passwords cracked by attacker	Example: Lack of password complexity policy	Example: Files or data on file shares High	Example: Critical data could be accessed by a malicious attacker and stolen Critical	Example: Attackers would need access to the network or password hash to attempt this Medium	Example: Data is exfiltrated from the company with potential to damage company reputation, breach GDPR with financial implications and potential for customers becoming victims of identity theft High	Example: Implement complex password policy in directory services	Example: Technical/ preventative

Risk levels:	Business control types:	Mitigating control types:
low | medium | high | critical	physical | administrative | technical	preventative | detective | corrective | deterrent | directive | compensating | acceptance

Office floor plan

Appendix 4: Virtual computer setup

To complete assignment 3 task 1 and task 4, students require access to a computer and a server machine. These should be virtualised computers downloaded from NCFE. The following steps should be run on all student PCs.

Setup the virtual switch

To allow virtual machines to communicate with each other, they must be placed on the same virtual switch. To create the virtual switch, complete the following actions on each computer to be used by students for the assignment.

1. Open PowerShell as an administrator.
2. Run the following PowerShell command:
   New-VMSwitch -name InternalSwitch -SwitchType Internal
3. Close the PowerShell window.

Extracting the Virtual PCs

Once downloaded and extracted the VMs should be imported into Hyper-V on each of the students' PCs.

1. In Hyper-V select "Import Virtual Machine"

2. Browse to locate your extracted server

3. Select the server to import it

4. Select "copy the Virtual Machine" when prompted

5. Choose an appropriate save location or choose the default

6. Choose an appropriate location to save the virtual hard drive or select the default location

7. Select finish to complete the import

8. Virtual machines must be connected to the InternalSwitch. Right click on each virtual machine and select **Settings**

9. In the Settings menu select the **Network Adapter** setting and then select the **InternalSwitch** in the drop down menu and click **OK**.

You should repeat the process for importing the client Desktop PC and Laptop PC.

You should test to ensure you are satisfied the Virtual PCs are running correctly.

If one of the VMs is showing as out of grace period for licensing, the grace period can be reset at the command prompt with the command: **slmgr/rearm**

The VMs have been configured as follows:

Virtual Machine Login Details/Configuration Issues

==

Server

Computer Name: **Serv01**

Local Administrator: **Administrator / Pa$$w0rd**
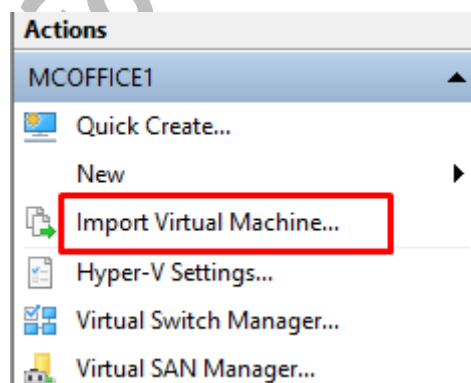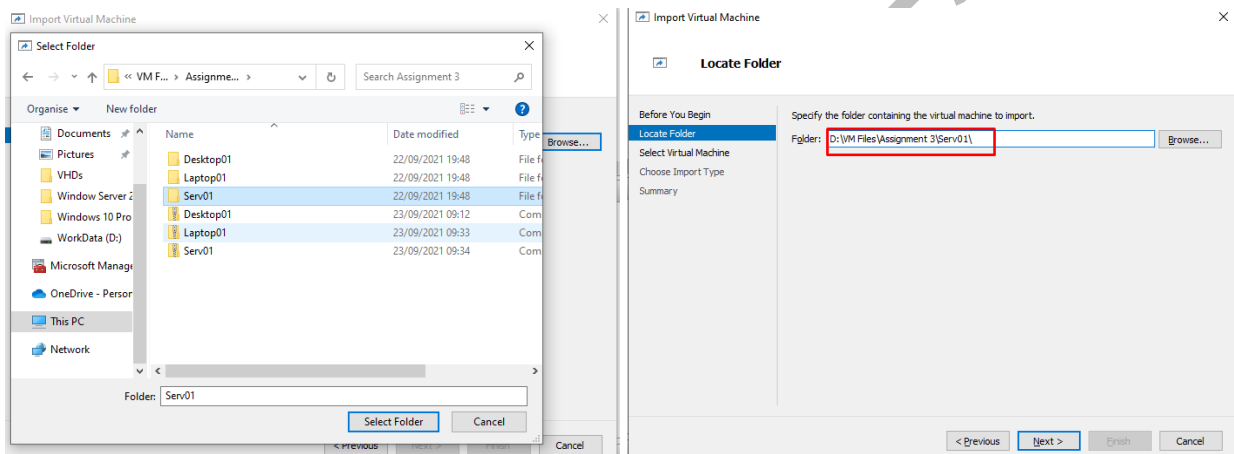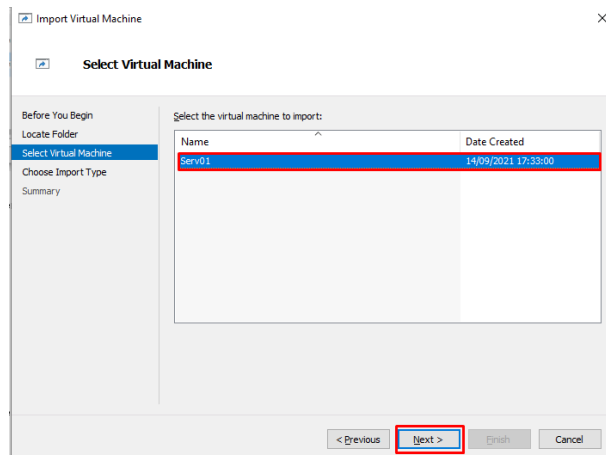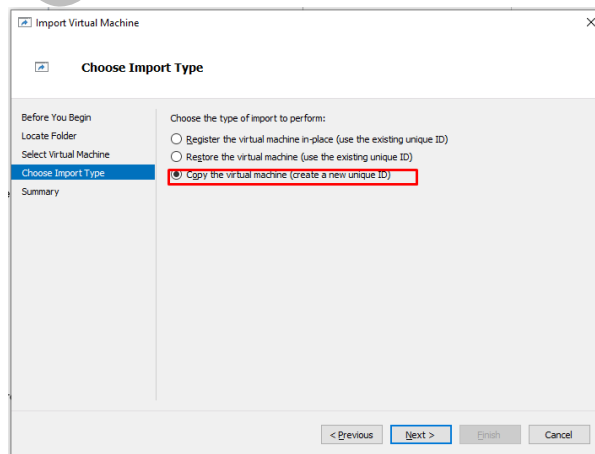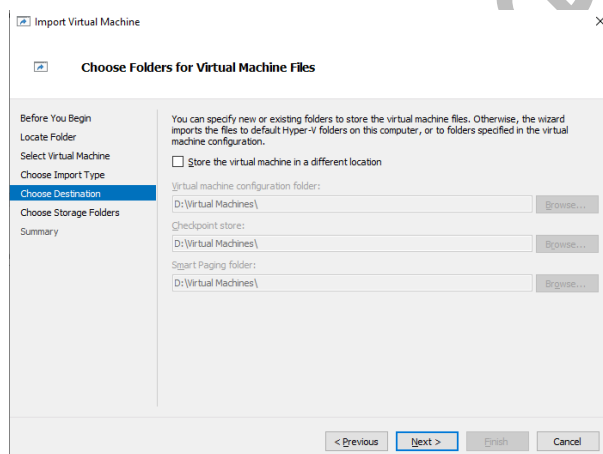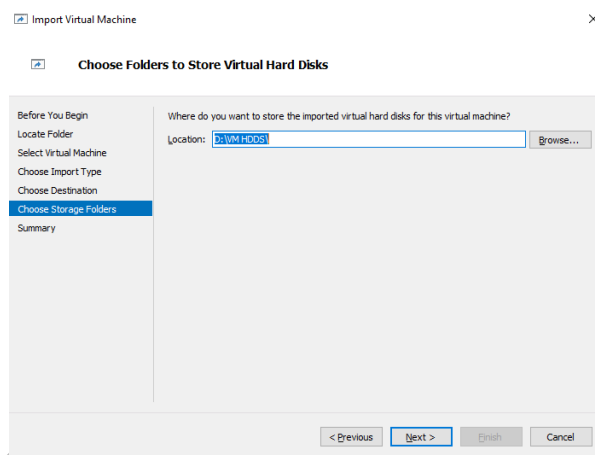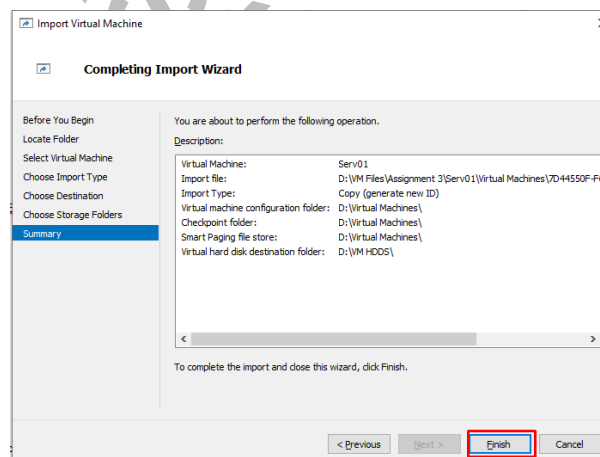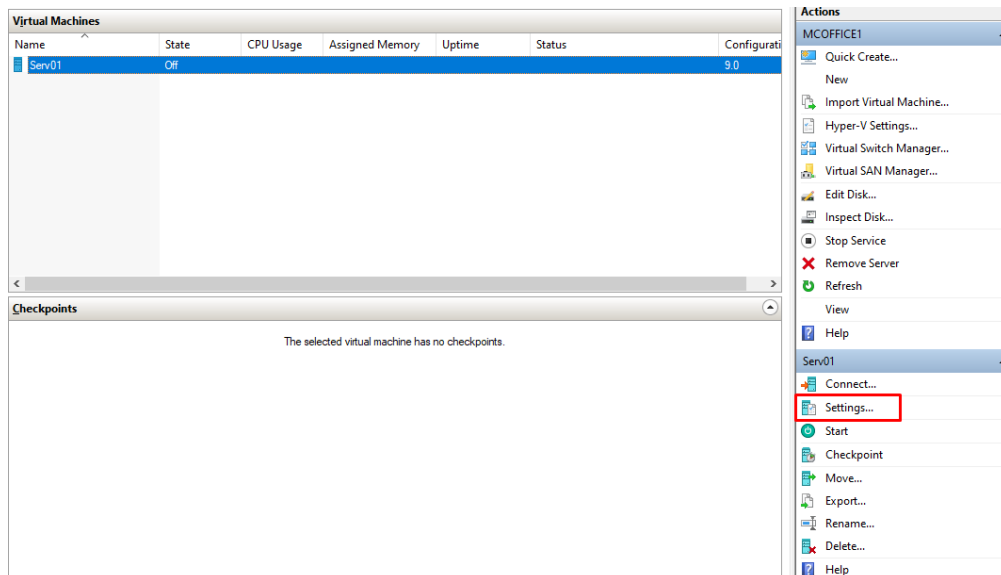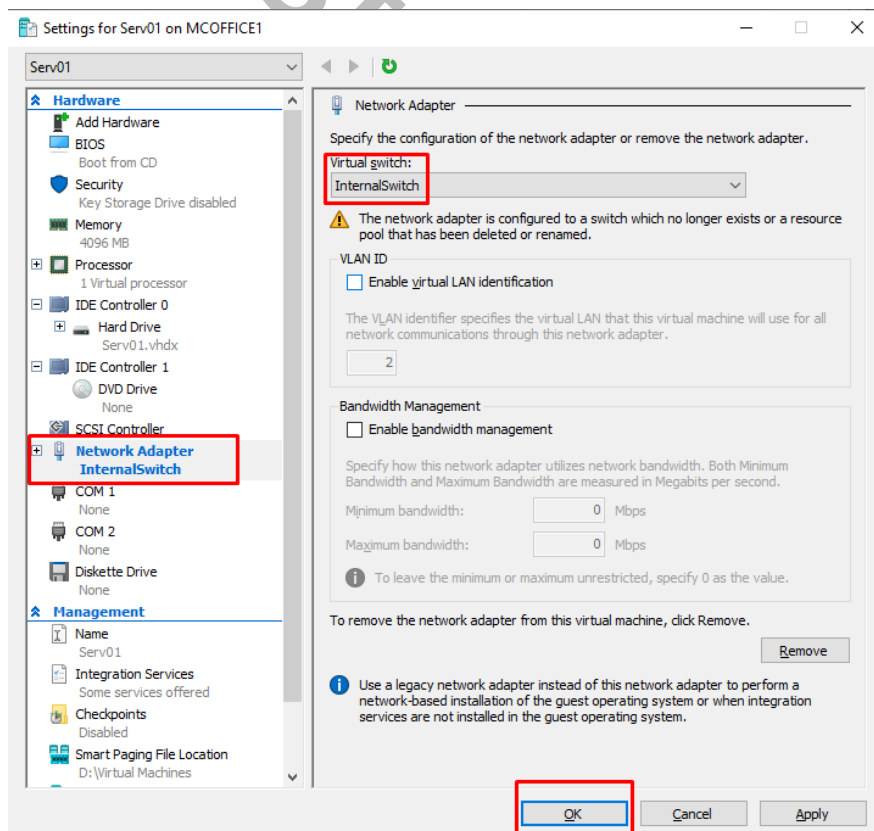
Users:

- Paul White (IT Director) PWhite / Password1
- Jenny Verity (HR Manager) JVerity / Jenny123
- Murugay Maya (Teacher) MMaya / Password1
- Student (Student account used by all students) Student / No password

Network Drives

Shared drive - all users can access all files.

Student user account is promoted to Admin without good reason.

Issues

=======

No Antivirus

No Antimalware

Windows Defender definitions outdated

Windows updates not run

Disk encryption would be beneficial

Manual configuration

In the event that the VMs cannot be downloaded, use the following to build the VMs. It is not important what Hypervisor is used.

Server

Sample VMs have been created with Windows Server 2016 Standard Edition.

If required, an evaluation ISO can be downloaded from:

www.microsoft.com/en-us/evalcenter/evaluate-windows-server-2022

Minimum Specification

Memory: 2048 MB RAM to be allocated (4096+ recommended).

Storage: 20GB (120GB recommended)

Network adapter: An internal network adapter should be connected to the internal switch.

In a production environment it would be expected that the server would be specified far higher than this, but this as a minimum will allow the scenario to run without overloading the host computer.

Server Configuration

On installation of Server 2016 Standard Edition the hard drive should be partitioned as follows:

C:\ - 20GB Partition (minimum)

Windows should be installed into the C:\ partition.

For ease of use, all passwords are to be set according to the specifications in the previous section.

Once installed, the server should be configured using the following settings.

Server Name: Serv01

Network IP Address: 192.168.1.1

The server should be promoted to hold the following roles:

DHCP

Configure to use the 192.168.1.0/24 Subnet

Address Pool - 192.168.0.11 to 192.168.0.254

DNS - local DNS server for forward lookup (192.168.1.1)

Active Directory Domain Controller

Domain name: kjelearning.com

All passwords should be set as the configuration guide in the previous section.

Server

On the server create a shared folder on the C:\ drive

> This PC > Local Disk (C:) >			
Name ^	Date modified	Type	Size
PerfLogs	16/07/2016 14:23	File folder	
Program Files	14/09/2021 20:32	File folder	
Program Files (x86)	16/07/2016 14:23	File folder	
Shared Folders	19/09/2021 12:49	File folder	
Users	14/09/2021 20:32	File folder	
Windows	18/09/2021 16:16	File folder	
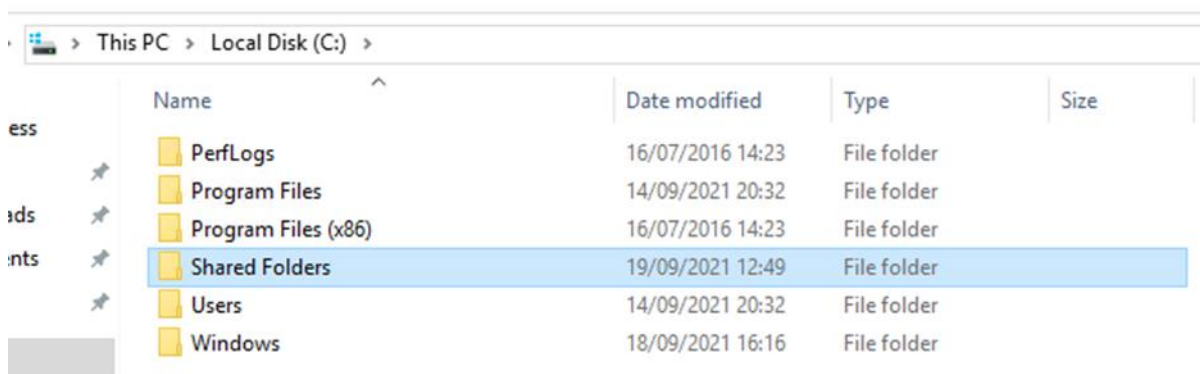
In the shared folder create the following folders; HR, Staff and Students
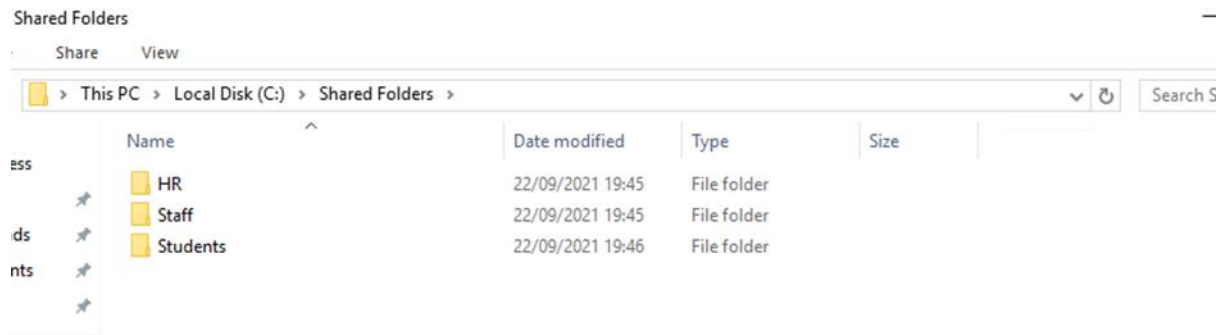
Share permissions for the HR share are as follows:
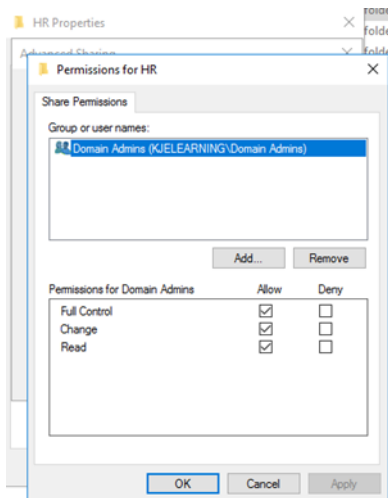
Share permissions for the Staff folder are as below, with Domain Admins having Full Control allow permissions.
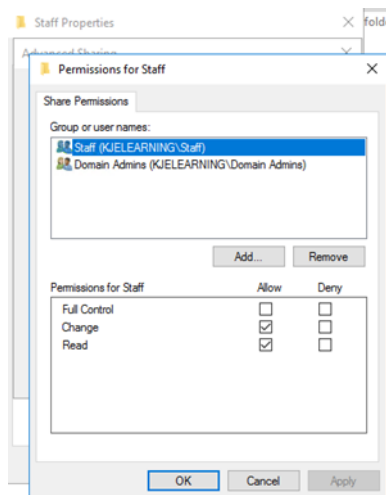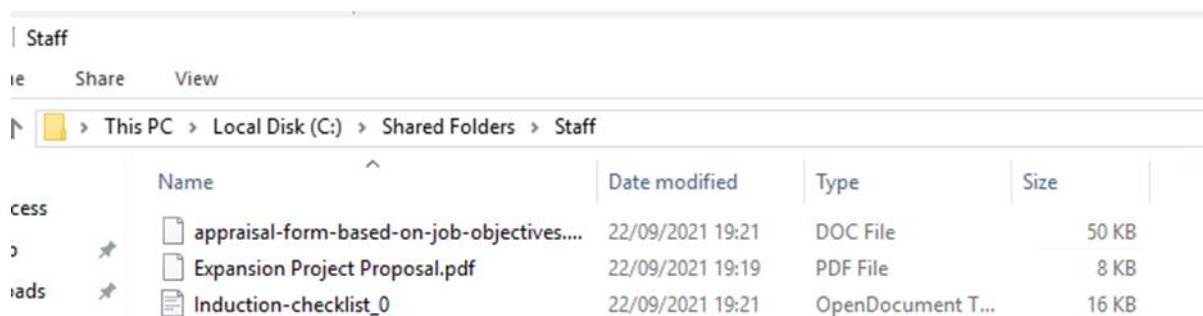
The student share is assigned the following permissions:
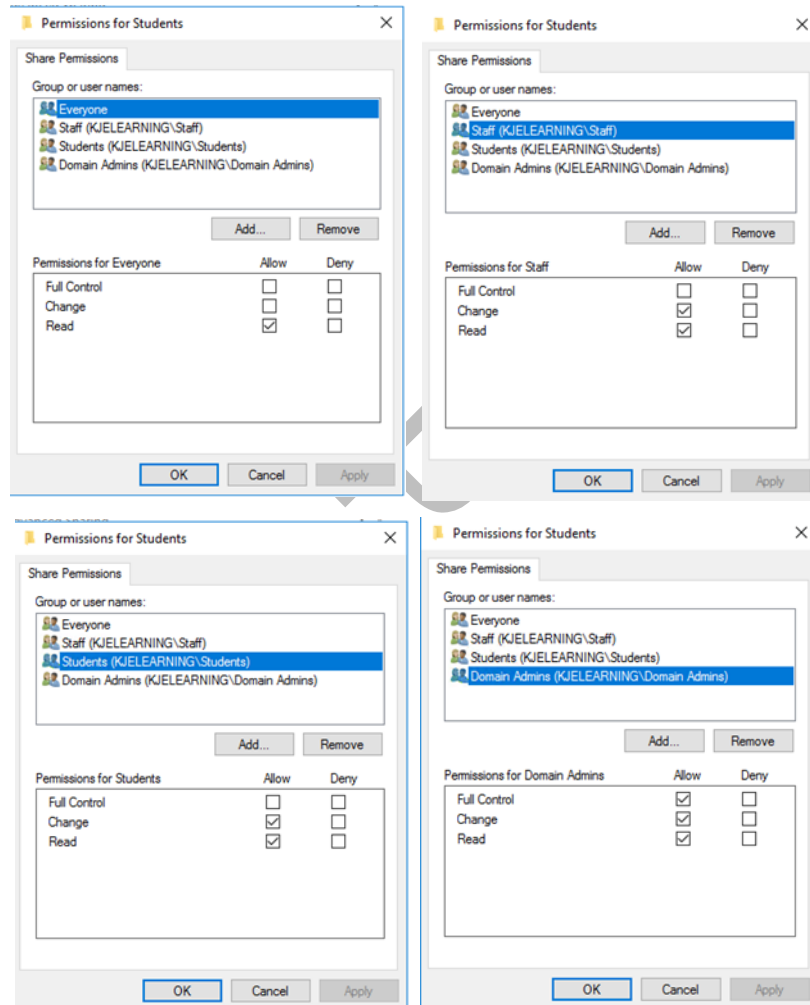
The HR folder should contain documents that look private:
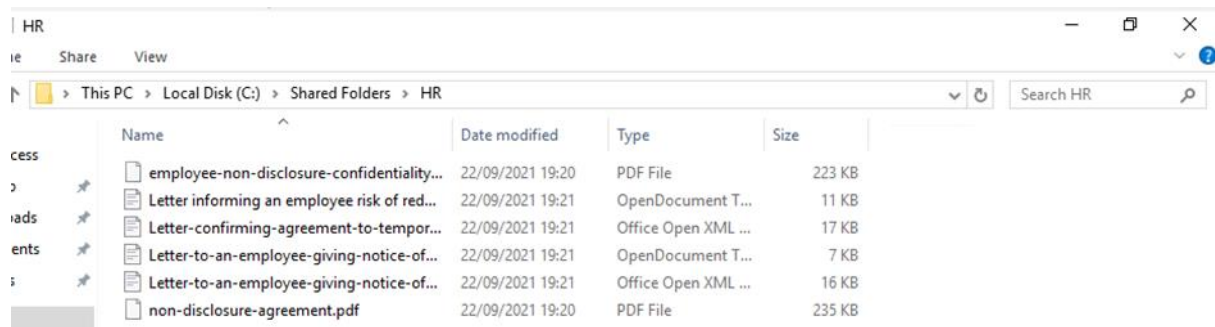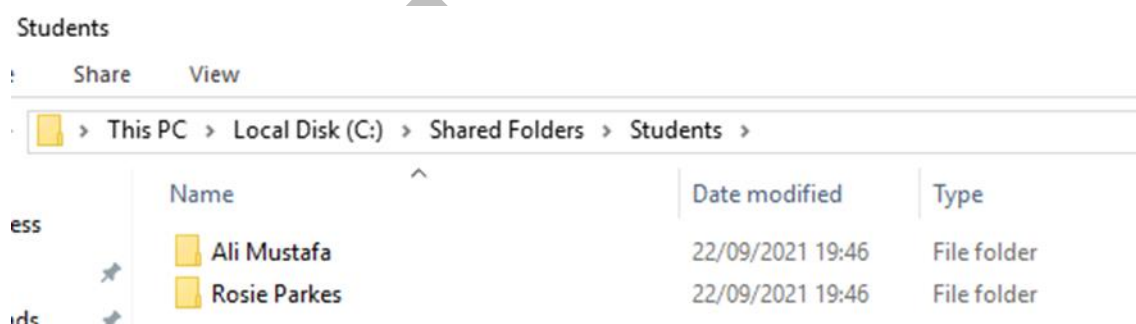
The staff folder should contain relevant documents:
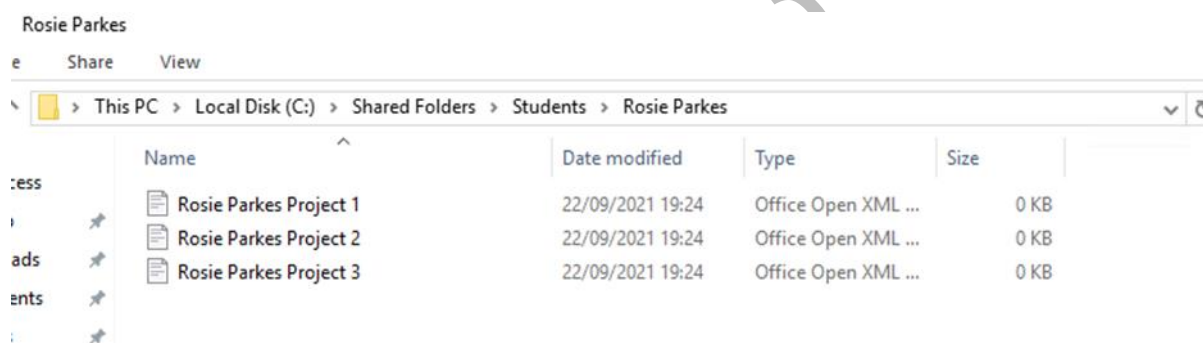
The student folder should contain the following folders:

Each folder contains student work that is clearly complete and could be used by other students:

Insufficient security policies have been configured on the server:
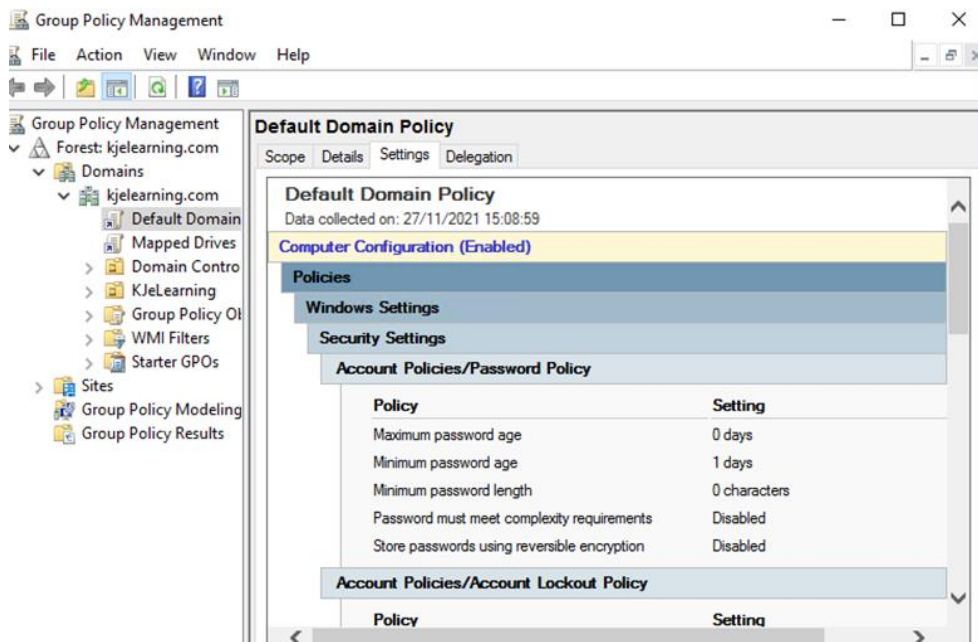
A mapped drive policy is also configured to give students access to the student drive:
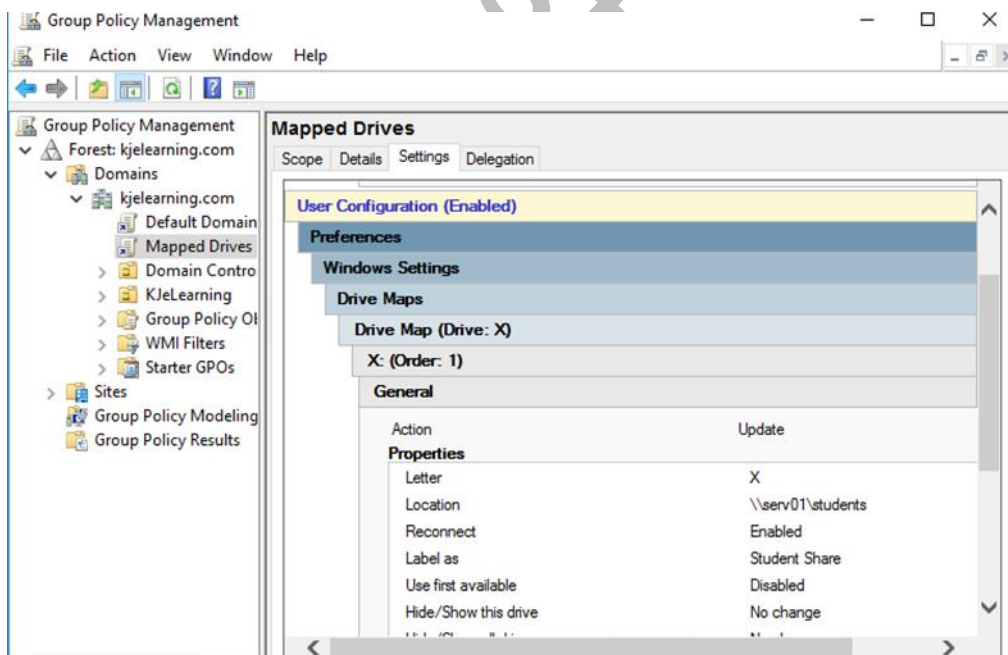
Desktop PC configuration

Sample VMs have been created with Windows 10 Professional Edition.

If required, an ISO can be downloaded from:

www.microsoft.com/en-gb/software-download/windows10

Memory: 2048 MB RAM to be allocated (4096+ recommended)

Storage: 20GB

Computer Name: Desktop01

Join the PC to the **KJeLearning** Domain

Local administrator details should be set according to the settings in the previous section.

Configure the following:

- Shared drives should be mapped

- Read me file in the documents folder instructing learners about security issues (permission to view all shares and files on network, leaked administrator password)

Desktop01

Default login should be student:
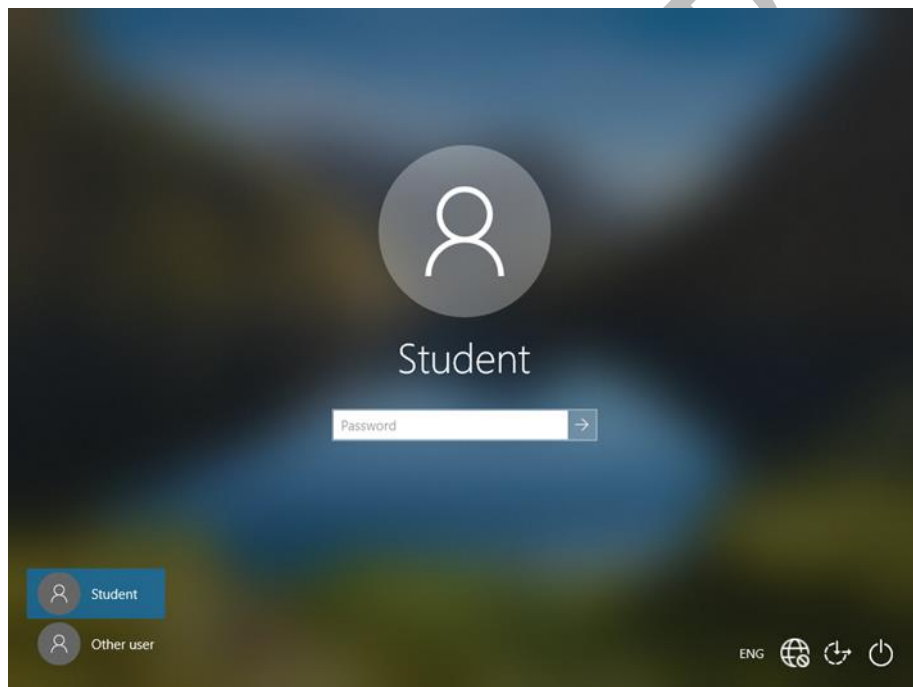
A read me file should be available in the documents folder:
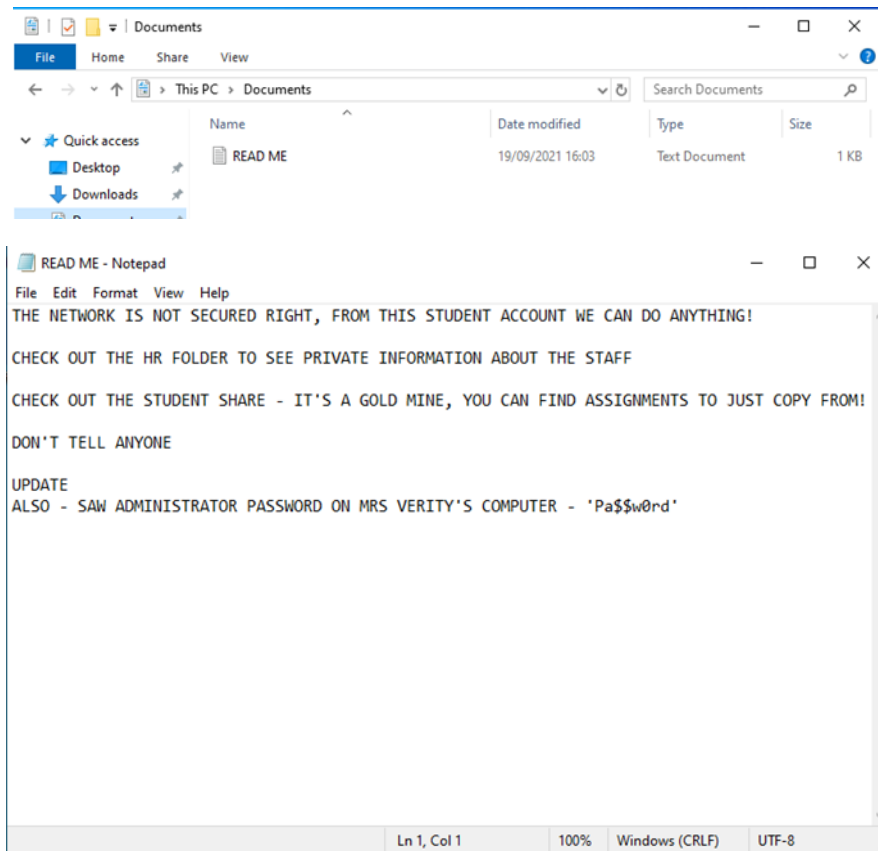
Laptop PC configuration

Sample VMs have been created with Windows 10 Professional Edition.

If required, an ISO can be downloaded from:

www.microsoft.com/en-gb/software-download/windows10

Minimum specification

Memory: 2048 MB RAM to be allocated (4096+ recommended)

Storage: 20GB

**Computer Name**: Laptop01

The laptop **is not** joined to the domain.

Local administrator details should be set according to the settings in the previous section.

Configure the following:

- Shortcut to inappropriate website on desktop (http://www.torrentzworld.com)

- Stick note with administrative username and password on

- No password required for user Jenny

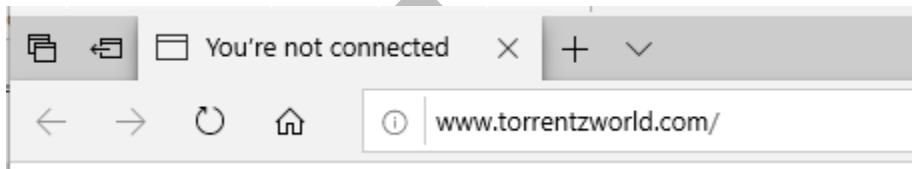**Laptop01**

Default login should be Jenny:
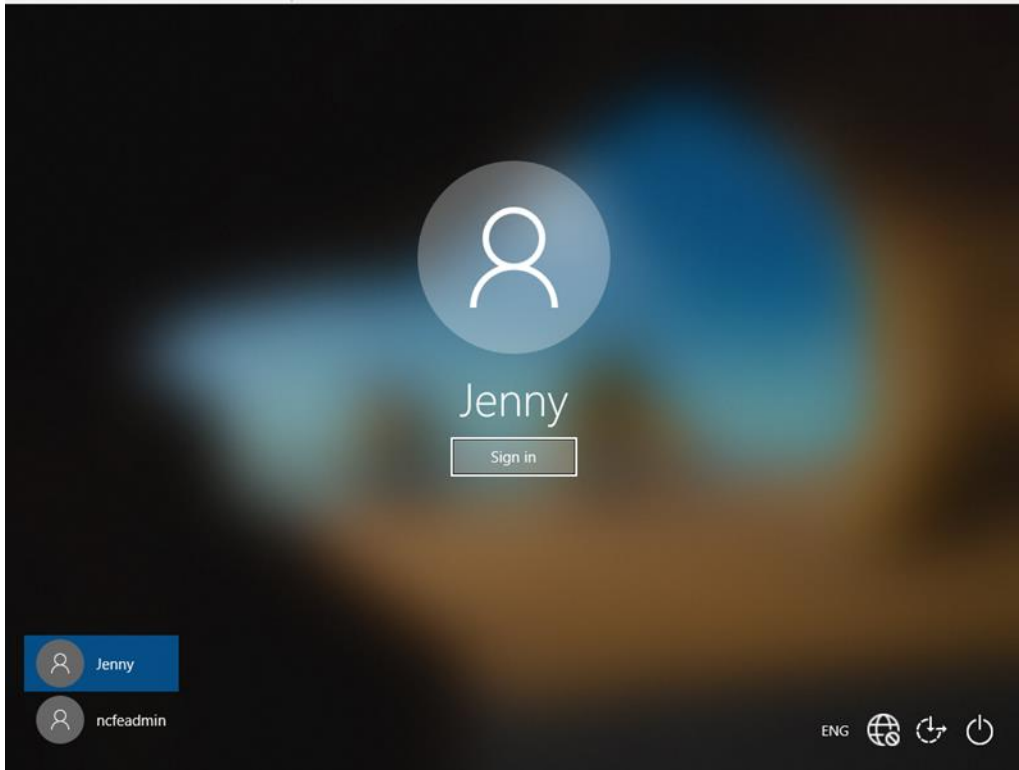
A Sticky Note should be visible on the desktop:
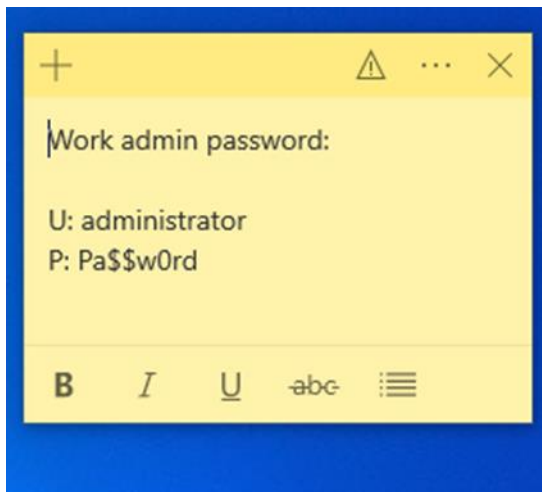
A shortcut to the Internet Browser should be available on the desktop:

When clicked it takes the user to an inappropriate website:

Document information

Owner: Head of Assessment Design.