# **Unit Assessment Pack (UAP) – Cover Sheet**

## **Student and Trainer/Assessor Details**

| **Student ID** |  |
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| **Student name** |  |
| **Contact number** |  |
| **Email address** |  |
| **Trainer/Assessor name** |  |

## **Course and Unit Details**

| **Course code** |  |
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| **Course name** |  |
| **Unit code** | ICTNWK503 |
| **Unit name** | Install and maintain valid authentication processes |

## **Assessment Submission Method**

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| ☐ By hand to trainer/assessor | ☐ By email to trainer/assessor | ☐Online submission via Learning Management System (LMS) |
| ☐ By Australia Post to RTO | ☐ Any other method \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  (Please mention here) | |

**Student Declaration**

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| * I certify that the work submitted for this assessment pack is my own. I have clearly referenced any sources used in my submission. I understand that a false declaration is a form of malpractice; * I have kept a copy of this assessment pack and all relevant notes, attachments, and reference material that I used in the production of the assessment pack; * For the purposes of assessment, I give the trainer/assessor of this assessment the permission to:   + Reproduce this assessment and provide a copy to another member of staff; and   + Take steps to authenticate the assessment, including communicating a copy of this assessment to a checking service (which may retain a copy of the assessment on its database for future plagiarism checking).   Student signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Date: \_\_\_\_/\_\_\_\_\_/\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

## **Assessment Plan**

To demonstrate competence in this unit, you must be assessed as satisfactory in each of the following assessment tasks.

| **Evidence recorded** | **Evidence Type/ Method of assessment** | | | **Sufficient evidence recorded/Outcome** |
| --- | --- | --- | --- | --- |
| **Unit Assessment Task 1** | Unit Knowledge Test (UKT) | | | S / NS (First Attempt)  S / NS (Second Attempt) |
| **Unit Assessment Task 2** | Unit Project (UP) | | | S / NS (First Attempt)  S / NS (Second Attempt) |
| **Unit Assessment Task 3** | Unit Project (UP) | | | S / NS (First Attempt)  S / NS (Second Attempt) |
| **Final result** | C/NYC | **Date assessed** |  | |
| **Trainer/Assessor Signature** |  | |

## **Assessment Conditions**

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| **Unit purpose/application** |

This unit describes the skills and knowledge required to design, develop, install and maintain authentication processes to reduce the vulnerability of the system.

It applies to individuals working as middle managers such as information security managers, network engineers or security analysts, who are responsible for implementing and monitoring the organisational security management system.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

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| **What the student can expect to learn by studying this unit of competency** |

* Determine authentication requirements
* Configure authentication software or tools
* Apply authentication methods
* Monitor authentication system

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| **Training and assessment resources required for this unit of competency** |

The student will have access to the following:

* Learner guide
* PowerPoint presentation
* Unit Assessment Pack (UAP)
* Access to other learning materials such as textbooks

The resources required for these assessment tasks also included:

* Access to a computer, the Internet and word-processing system such as MS Word.
* A site where encryption installation may be conducted
* A live network
* Servers
* Encryption software
* Encryption tools.
* Simulated assessment environments must simulate the real-life working environment where these skills and knowledge would be performed, with all the relevant equipment and resources of that working environment.

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| **Submission instructions** |

Yourtrainer/assessor will confirm assessment submission details for each assessment task.

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| **Academic integrity, plagiarism and collusion** |

**Academic Integrity**

Academic Integrity is about the honest presentation of your academic work. It means acknowledging the work of others while developing your own insights, knowledge and ideas.

As a student, youare required to:

* undertake studies and research responsibly and with honesty and integrity
* ensure that academic work is in no way falsified
* seek permission to use the work of others, where required
* acknowledge the work of others appropriately
* take reasonable steps to ensure other students cannot copy or misuse your work.

**Plagiarism**

Plagiarism means to take and use another person's ideas and or manner of expressing them and to pass them off as your own by failing to give appropriate acknowledgement. This includes material sourced from the internet, RTO staff, other students, and from published and unpublished work.

Plagiarism occurs when you fail to acknowledge that the ideas or work of others arebeing used, which includes:

* Paraphrasing and presenting work or ideas without a reference
* Copying work either in whole or in part
* Presenting designs, codes or images as yourown work
* Using phrases and passages verbatim without quotation marks or referencing the author or web page
* Reproducing lecture notes without proper acknowledgement.

**Collusion**

Collusion means unauthorised collaboration on assessable work (written, oral or practical) with other people. This occurs when a student presents group work as their own or as the work of someone else.

Collusion may be with another RTO student or with individuals or students external to the RTO. This applies to work assessed by any educational and training body in Australia or overseas.

Collusion occurs when youwork without the authorisation of the teaching staff to:

* Work with one or more people to prepare and produce work
* Allow others to copy your work or share your answer to an assessment task
* Allow someone else to write or edit yourwork (without rto approval)
* Write or edit work for another student
* Offer to complete work or seek payment for completing academic work for other students.

Both collusion and plagiarism can occur in group work. For examples of plagiarism, collusion and academic misconduct in group work please refer to the RTO’s policy on Academic integrity, plagiarism and collusion.

Plagiarism and collusion constitute cheating. Disciplinary action will be taken against students who engage in plagiarism and collusion as outlined in RTO’s policy.

Proven involvement in plagiarism or collusion may be recorded on students’ academic file and could lead to disciplinary action.

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| **Other Important unit specific Information** |

N/A

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| **Unit outcome** |

* This unit is not graded and the student must complete and submit all requirements for the assessment task for this cluster or unit of competency to be deemed competent.
* Students will receive a 'satisfactorily completed' (S) or 'not yet satisfactorily completed (NS) result for each individual unit assessment task (UAT).
* Final unit result will be recorded as competency achieved/competent (C) or competency not yet achieved/not yet competent (NYC).

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| **Prerequisite/s** |

Nil

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| **Co-requisite/s** |

Nil

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| **Foundation Skills** |

The Foundation Skills describe those required skills (learning, oral communication, reading, writing, numeracy, digital technology and employment skills) that are essential to performance. Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

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| **Relevant Legislation** |

* Australian Human Rights Commission Act 1986
* Age Discrimination Act 2004
* Disability Discrimination Act 1992
* Racial Discrimination Act 1975
* Sex Discrimination Act 1984
* The Privacy Act 1988 (Privacy Act) and Australian Privacy Principles (APPs)
* Occupational Health and Safety Act 2004
* Work Health and Safety Act 2011

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| **Principles of assessment and rules of evidence** |

All assessment tasks will ensure that the principles of assessment and rules of evidence are adhered to.

The principles of assessment are that assessment must be valid, fair, flexible, reliable and consistent. The rules of evidence state that evidence must be sufficient, valid, current and authentic.

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| **AQF Level** |

AQF levels and the AQF levels criteria are an indication of the relative complexity and/or depth of achievement and the autonomy required to demonstrate that achievement.

All assessment tasks must ensure compliance with the requirements of AQF level and the AQF level criteria. For more information, please visit <http://www.aqf.edu.au/>

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| **Further Information** |

For further information about this unit go to[https://training.gov.au/Training/Details/ICTNWK50](https://training.gov.au/Training/Details/ICTNWK502)3

## **Additional Information**

* This information will be managed by the provisions of the Privacy Act and the Freedom of Information Act.)
* Students are required to satisfactorily complete and submit all assessment tasks that contribute to the assessment for a unit.
* Students will be provided with one more attempt to complete this Unit assessment pack (UAP) if trainer/assessor deems them not satisfactorily completed (NS) in any Unit assessment task (UAT).
* Unit Pre-Assessment Checklist (UPAC) will be reviewed by the trainer/assessor to ensure the student is ready for the assessment.
* Feedback regarding this Unit Assessment Pack (UAP) can be emailed to the [compliance](mailto:info@caqa.online) and quality assurance department/administration department in your RTO for continuously improving our assessment and student resources.

## **Feedback to student**

Feedback on students’ assessment performance is a vital element in their learning. Its purpose is to justify to students how their competency was assessed, as well as to identify and reward specific qualities in their work, to recommend aspects needing improvement, and to guide students on what steps to take.

Feedback defines for students what their trainer/assessor thinks is important for a topic or a subject. At its best, feedback should:

* Be provided for each Unit Assessment Task (UAT)
* Guide students to adapt and adjust their learning strategies
* Guide trainers/assessors to adapt and adjust teaching to accommodate students’ learning needs
* Be a pivotal feature of learning and assessment design, not an add-on ritual
* Focus on course and unit learning outcomes
* Guide students to become independent and self-reflective learners and their own critics
* Acknowledge the developmental nature of learning.

*If students have not received proper feedback, they must speak to compliance and quality assurance department/administration department in the RTO/person responsible for looking after the quality and compliance services of the RTO.*

*For more information, please refer to RTO Student Handbook.*

# **Unit Pre-Assessment Checklist (UPAC)**

# **UAT 1 – Unit Knowledge Test (UKT)**

## **Purpose of the checklist**

The pre-assessment checklist helps students determine if they are ready for assessment. The trainer/assessor must review the checklist with the student before the student attempts the assessment task. If any items of the checklist are incomplete or not clear to the student, the trainer/assessor must provide relevant information to the student to ensure they understand the requirements of the assessment task. The student must ensure they are ready for the assessment task before undertaking it.

**Section 1: Information for Students**

* Please make sure you have completed the necessary prior learning before attempting this assessment.
* Please make sure your trainer/assessor clearly explained the assessment process and tasks to be completed.
* Please make sure you understand what evidence is required to be collected and how.
* Please make sure you know your rights and the Complaints and Appeal process.
* Please make sure you discuss any special needs or reasonable adjustments to be considered during the assessment (refer to the Reasonable Adjustments Strategy Matrix and negotiate these with your trainer/assessor).
* Please make sure that you have access to a computer and the internet (if you prefer to type the answers).
* Please ensure that you have all the required resources needed to complete this Unit Assessment Task (UAT).
* Due date of this assessment task is according to your timetable.
* In exceptional (compelling and compassionate) circumstances, an extension to submit an assessment can be granted by the trainer/assessor.
* Evidence of the compelling and compassionate circumstances must be provided together with your request for an extension to submit your assessment work.
* Request for an extension to submit your assessment work must be made before the due date of this assessment task.

## **Section 2: Reasonable adjustments**

* Students with carer responsibilities, cultural or religious obligations, English as an additional language, disabilityetc. can request for reasonable adjustments.
* Please note, academic standards of the unit/course will not be lowered to accommodate the needs of any student, but there is a requirement to be flexible about the way in which it is delivered or assessed.
* The Disability Standards for Education requires institutions to take reasonable steps to enable the student with a disability to participate in education on the same basis as a student without a disability.
* Trainer/Assessor must complete the section below “Reasonable Adjustment Strategies Matrix” to ensure the explanation and correct strategy have been recorded and implemented.
* Trainer/Assessor must notify the administration/compliance and quality assurance department for any reasonable adjustments made.
* All evidence and supplementary documentation must be submitted with the assessment pack to the administration/compliance and quality assurance department.

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| **Reasonable Adjustment Strategies Matrix (Trainer/Assessor to complete)** | | |
| **Category** | **Possible Issue** | **Reasonable Adjustment Strategy**  **(select as applicable)** |
| 🞎 LLN | 🞎 Speaking  🞎 Reading  🞎 Writing  🞎 Confidence | 🞎 Verbal assessment  🞎 Presentations  🞎 Demonstration of a skill  🞎 Use of diagrams  🞎 Use of supporting documents such as wordlists |
| 🞎Non-English Speaking Background | 🞎 Speaking  🞎 Reading  🞎 Writing  🞎 Cultural background  🞎 Confidence | 🞎 Discuss with the student and supervisor (if applicable) whether language, literacy and numeracy are likely to impact on the assessment process  🞎 Use methods that do not require a higher level of language or literacy than is required to perform the job role  🞎 Use short sentences that do not contain large amounts of information  🞎 Clarify information by rephrasing, confirm understanding  🞎 Read any printed information to the student  🞎 Use graphics, pictures and colour coding instead of, or to support, text  🞎 Offer to write down, or have someone else write, oral responses given by the student  🞎 Ensure that the time available to complete the assessment, while meeting enterprise requirements, takes account of the student’s needs |
| 🞎Indigenous | 🞎 Knowledge and understanding  🞎 Flexibility  🞎 Services  🞎 Inappropriate training and assessment | 🞎 Culturally appropriate training  🞎 Explore understanding of concepts and practical application through oral assessment  🞎 Flexible delivery  🞎 Using group rather than individual assessments  🞎 Assessment through completion of practical tasks in the field after demonstration of skills and knowledge. |
| 🞎Age | 🞎 Educational background  🞎 Limited study skills | 🞎 Make sure font size is not too small  🞎Trainer/Assessor should refer to the student’s experience  🞎 Ensure that the time available to complete the assessment takes account of the student’s needs  🞎Provision of information or course materials in accessible format.  🞎Changes in teaching practices, e.g. wearing an FM microphone to enable a student to hear lectures  🞎Supply of specialised equipment or services, e.g. a note-taker for a student who cannot write  🞎Changes in lecture schedules and arrangements, e.g. relocating classes to an accessible venue  🞎Changes to course design, e.g. substituting an assessment task  🞎Modifications to physical environment, e.g. installing lever taps, building ramps, installing a lift |
| 🞎Educational background | 🞎 Reading  🞎 Writing  🞎 Numeracy  🞎 Limited study skills and/or learning strategies | 🞎 Discuss with the Student previous learning experience  🞎 Ensure learning and assessment methods meet the student’s individual need |
| 🞎Disability | 🞎 Speaking  🞎 Reading  🞎 Writing  🞎 Numeracy  🞎 Limited study skills and/or learning strategies | 🞎 Identify the issues  🞎 Create a climate of support  🞎 Ensure access to support that the student has agreed to  🞎 Appropriately structure the assessment  🞎Provide information or course materials in accessible format, e.g. a textbook in braille  🞎 Changes in teaching practices, e.g. wearing an FM microphone to enable a student to hear lectures  🞎 Supply of specialised equipment or services, e.g. a note- taker for a student who cannot write  🞎 Changes in lecture schedules and arrangements, e.g. relocating classes to an accessible venue  🞎Changes to course design, e.g. substituting an assessment task  🞎Modifications to physical environment, e.g. installing lever taps, building ramps, installing a lift |
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| **Explanation of reasonable adjustments strategy used (If required)** |
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# **Unit Assessment Task (UAT)**

## **Assessment Task 1 - Unit Knowledge Test (UKT)**

**Assessment type:**

* Written Questions

**Assessment task description:**

* This is the first (1) unit assessment task you have to successfully complete to be deemed competent in this unit of competency.
* The Unit Knowledge Test is comprised of twenty-one(21)written questions
* You must respond to all questions and submit them to your Trainer/Assessor.
* You must answer all questions to the required level, e.g. provide the number of points, to be deemed satisfactory in this task
* You will receive your feedback within two weeks - you will be notified byyour Trainer/Assessor when results are available.

**Applicable conditions:**

* All knowledge tests are untimed and are conducted as open book tests (this means you are able to refer to your textbook during the test).
* You must read and respond to all questions.
* You may handwrite/use computers to answer the questions.
* You must complete the task independently.
* No marks or grades are allocated for this assessment task. The outcome of the task will be Satisfactory or Not Satisfactory.
* As you complete this assessment taskyou are predominately demonstrating your written skills and knowledge to your trainer/assessor.
* The trainer/assessor may ask you relevant questions on this assessment task to ensure that this is yourown work.

**Resubmissions and reattempts:**

* Where a student’s answers are deemed not satisfactory after the first attempt, a resubmission attempt will be allowed.
* You must speak to your Trainer/Assessor if you have any difficulty in completing this task and require reasonable adjustments (e.g. can be given as an oral assessment)
* For more information, please refer to your RTO Student Handbook.

**Location:**

* This assessment task may be completed in a learning management system (i.e. Moodle) or independent learning environment.
* Yourtrainer/assessor will provide you further information regarding the location for completing this assessment task.

**Instructions for answering written questions:**

* Complete a written assessment consisting of a series of questions.
* You will be required to correctly answer all the questions.
* Do not start answering questions without understanding what is required from you. Read the questions carefully and critically analyse them for a few seconds, this will help you to identify what is really needed.
* Your answers must demonstrate an understanding and application of relevant concepts, critical thinking, and good writing skills.
* Be concise to the point and write answers according to the given word-limit to each question and do not provide irrelevant information. Be careful, quantity is not quality.
* Be careful to use non-discriminatory language. The language used should not devalue, demean, or exclude individuals or groups on the basis of attributes such as gender, disability, culture, race, religion, sexual preference or age. Gender inclusive language should be used.
* When you quote, paraphrase, summarise or copy information from the sources you are using to write your answers/research yourwork, you must always acknowledge the source.

**How your trainer/assessor will assess yourwork?**

* This assessment task requires the student to answer all the questions.
* Answers must demonstrate the student’s understanding and knowledge of the unit.
* If all assessment tasks are deemed Satisfactory (S), then the unit outcome is Competent (C).
* If at least one of the assessment task is deemedNot Satisfactory (NS), then the unit outcome is Not Yet Competent (NYC).
* Once all assessment tasks allocated to this Unit of Competency have been undertaken, trainer/assessor will complete an Assessment plan to record the unit outcome. The outcome will be either Competent (C) or Not Yet Competent (NYC).
* The “Assessment Plan” is available with the Unit Assessment Pack (UAP) – Cover Sheet.

**Purpose of the assessment task:**

* The purpose of this assessment task is to assess the students’ knowledge required for the determination of the authentication requirements, its configurations, and application and monitoring on a computer network or local environment.

## **Assessment Task 1 - Unit Knowledge Test (UKT)**

**Instructions:**

* This is an individual assessment.

The purpose of this assessment task is to assess the students’ knowledge required to ensure secure file encryption is selected, implemented and monitored on a computer network or local environment.

* To make full and satisfactory responses you should consult a range of learning resources, other information such as handouts and textbooks, learners’ resources and slides.
* All questions must be answeredin order to gain competency for this assessment.
* You may attach a separate sheet if required.
* You must include the following particulars in the footer section of each page of the attached sheets:
  + Student ID or Student Name
  + Unit ID or Unit Code
  + Course ID or Course Code
  + Trainer and assessor name
  + Page numbers
* You must staple the loose sheets together along with the cover page.
* You must attach the loose sheets chronologically as per the page numbers.
* Correction fluid and tape are not permitted. Please do any corrections by striking through the incorrect words with one or two lines and rewriting the correct words.

Resources required to complete the assessment task:

* Learner guide
* PowerPoint presentation
* Unit Assessment Pack (UAP)
* Access to other learning materials such as textbooks
* Access to a computer, the Internet and word-processing system such as MS Word.

1. Explain the problems and challenges associated with the following organisational authentication issues. Write your response in 100-150 words for each.
2. Passwords
3. Smartcards
4. Biometrics
5. Resource Accounting

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| 1. ***Passwords***   ***Password-based authentication is one of the most popular approaches to authenticate a user in various enterprise applications. But there are many problems associated with the password based authentication systems and the risks associated with using passwords as an authentication mechanism for enterprise applications is not completely secure. Considering all the risks associated with password based authentication systems, there is a strong need for enterprises to switch to a stronger authentication system which provides security against the various hacking attacks and also which is more convenient and easier to the end user of the system***  ***Challenges with Password based Authentication:***   * ***Easy Password can be cracked*** * ***Random passwords can’t be remembered*** * ***Remembering multiple passwords*** * ***Problems with passwords that needs to be continuously changed*** * ***Security vs Easy of use for passwords*** * ***Shoulder Surfing Attack***   ***Reference:*** www.cioandleader.com. 2020. *Risks Of Password Based Authentication*. [online] Available at: <https://www.cioandleader.com/articles/9361/risks-of-password-based-authentication> [Accessed 7 November 2020].   1. ***Smartcards***   ***The biggest problem facing smart cards is security and the problem is two fold. The first issue is that not all smart cards are in fact secure. VISA and MasterCard developed a new standard, SET, in early 1996 in an attempt to get the entire industry on a standard of encryption. Additionally, there are standards such as DES which have been around for years, usable in all forms of encryption which are being used in smart cards. But still some smart cards are not inviolate. Mondex, a maker of banking smart cards, solves this problem by making its transactions possible only between Mondex cards. But in order for smart cards to reach their full potential, they must be able to interact with a host of interfaces. And they must do so securely.***  ***The second issue with security involves public perception of the technology. People must believe that the cards are secure. This depends to a great extent upon actual security, but people must also be convinced of it. And once people are comfortable that the card is secure, they must still be confident that Big Brother isn't somewhere collecting and analyzing all of the information gleaned from the smart cards' use.***  ***A third issue concerns who holds responsibility for the card. If the cash balance is wiped clean by a memory failure, who is liable, the person or the bank? If a transaction is not recorded, where are the lines drawn? Currently companies have begun to write out agreements in order to draw boundaries, but these will have to be ones which consumers are comfortable with in order for people to begin to use smart cards.***  ***Reference:*** Web.mit.edu. 2020. *Smart Cards: Disadvantages*. [online] Available at: <http://web.mit.edu/ecom/Spring1997/gr12/4DISADV.HTM> [Accessed 8 November 2020].   1. ***Biometrics***   ***Biometric identification is a technology that identifies and authenticates individuals based on physical characteristics. A biometric identification system includes fingerprint identification, iris and retina, facial recognition, gait, or voice. There are some problems associated with biometircs which are listed below as :***   * ***Biometrics aren’t private***   ***Biometrics seem secure on the surface. After all, you’re the only one with your ears, eyes, and fingerprint. But that doesn’t necessarily make it more secure than passwords. A password is inherently private because you are the only one who knows it. Of course hackers can acquire it by brute force attacks or phishing, but generally, people can’t access it. On the other hand, biometrics are inherently public.***   * ***Biometrics are Hackable***   ***Once a hacker has a picture of someone’s ear, eye, or finger, they can easily gain access to their accounts. While Apple’s TouchID was widely accepted as a biometric advancement, famous hacker Jan Krissler was able to beat the technology just a day after the iPhone was released. Likewise, researchers from the Chaos Computer Club created fake fingers to unlock iPhones.***   * ***Biometrics hacks may have greater Consequences***   ***Since a biometric reveals part of a user’s identity, if stolen, it can be used to falsify legal documents, passports, or criminal records, which can do more damage than a stolen credit card number.***  ***Reference:*** Howell, K., 2020. *3 Problems With Biometric Security, Including Fingerprint ID*. [online] Blog.ipswitch.com. Available at: <https://blog.ipswitch.com/3-reasons-biometrics-are-not-secure> [Accessed 8 November 2020].   1. ***Resource Accounting*** |

1. Summarise the following Virtual Private Network issues. Write your response in 100-150 words for each issue.
2. Quality of service (QoS) considerations
3. Bandwidth
4. Dynamic security environment
5. Function and operation of VPN concepts

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1. Explain the adapter based authentication and use a diagram to illustrate the adapter based authentication implementation process. Write your response in 150-200 words.

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1. Explain biometric authentication adapters and list the six (6) types of biometric authentication. Write your answer in 150-200 words.

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1. Summarise the following terms associated with digital certificates.
2. VeriSign
3. SSL
4. X.509

Write your answer in 100-150 words for each blow.

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1. What are the functions and operations of the following authentication controls? Write your response in 100-150 words for each of the following.
2. Passwords
3. Personal identification numbers (PINs)
4. Smart Cards
5. Biometric devices

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1. Explain the function and operation of the following authentication protocols. Explain each in 100-150 words.
2. Secure Remote Password protocol
3. Protocol for Carrying Authentication for Network Access
4. Password-authenticated key agreement

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1. Explain the following network authentication services each in 150-200 words.
2. Kerberos
3. NTLM - NT LAN Manager

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1. Summarise the features of the following protocols using 150-200 words for each protocol.
2. CHAP- Challenge-Handshake Authentication Protocol
3. Challenge–Phrase authentication
4. Password Authentication Protocol (PAP)
5. RADIUS (Remote Authentication Dial-In User Service)

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1. What are the principles of security tokens? Write your response in 150-200 words.

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1. Briefly explain five (5) authentication options that can be analysed as per the user and enterprise requirements? Write 30-70 words for each option.

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1. What is the difference between the authentication and the authorisation process? Write your response in 100-150 words for each.

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1. What is authentication realm? Write your response in 100-150 words.

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1. Explain the creation of the authentication realm including the process of adding the users and defining the rules of the realm. Write your response in 200-250 words.

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1. What is user attributes? Summarise the setup of user attributes.

Write your response in 150-200 words.

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1. What is meant by authentication filters and what is the process for setting one up? Write your response in 50-100 words.

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1. Explain three (3) different types of authentication methods to be developed and distributed to users as per the business requirements? Write your response in 200-250 words.

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1. What are the responsibilities of the users on the authentication system relevant to the enterprise security plan? Write your response in 100-150 words.

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1. Summarise three (3) benefits of recording and storing permission and configuration information in a secure central location. Write your response in 150-250 words.

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1. List five (5) tools for ongoing network monitoring using incident management and reporting processes.

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1. List four (4) basic security requirements in relationto an enterprise security plan.

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# **Unit Assessment Result Sheet (UARS)**

## **Assessment Task 1 – Unit Knowledge Test (UKT)**

## **Student and Trainer/Assessor Details**

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| **Unit code** | ICTNWK503 |
| **Unit name** | Install and maintain valid authentication processes |
| **Outcome of Unit Assessment Task (UAT)** | |  | | --- | | **First attempt:** |   Outcome (please make sure to tick the correct checkbox):  Satisfactory (S) ☐ or Not Satisfactory (NS) ☐  Date: \_\_\_\_\_\_\_(day)/ \_\_\_\_\_\_\_(month)/ \_\_\_\_\_\_\_\_\_\_\_\_(year)   |  | | --- | | **Second attempt:** |   Outcome (please make sure to tick the correct checkbox):  Satisfactory (S) ☐ or Not Satisfactory (NS) ☐  Date: \_\_\_\_\_\_\_(day)/ \_\_\_\_\_\_\_(month)/ \_\_\_\_\_\_\_\_\_\_\_\_(year) |
| **Feedback to Student** | |  | | --- | | * **First attempt:** |  |  | | --- | | * **Second attempt:** | |
| **Student Declaration** | * I declare that the answers I have provided are my own work. Where I have accessed information from other sources,I have provided references and or links to my sources. * I have kept a copy of all relevant notes and reference material that I used as part of my submission. * I have provided references for all sources where the information is not my own. I understand the consequences of falsifying documentation and plagiarism. I understand how the assessment is structured. I accept that all work I submit must be verifiable as my own. * I understand that if I disagree with the assessment outcome, I can appeal the assessment process, and either re-submit additional evidence undertake gap training and or have my submission re-assessed. * All appeal options have been explained to me. |
| **Student Signature** |  |
| **Date** |  |
| **Trainer/Assessor Name** |  |
| **Trainer/Assessor Declaration** | I hold:  🗹 Vocational competencies at least to the level being delivered  🗹 Current relevant industry skills  🗹 Current knowledge and skills in VET, *and undertake*  🗹 Ongoing professional development in VET  *I declare that I have conducted an assessment of this candidate’s submission. The assessment tasks were deemed current, sufficient, valid and reliable. I declare that I have conducted a fair, valid, reliable, and flexible assessment. I have provided feedback to the above-named candidate.* |
| **Trainer/Assessor Signature** |  |
| **Date** |  |
| **Office Use Only** | Outcome of Assessment has been entered onto the Student Management System on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (insert date)  by (insert Name) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Unit Pre-Assessment Checklist (UPAC)**

# **UAT 2 – Unit Project (UP)**

## **Purpose of the checklist**

The pre-assessment checklist helps students determine if they are ready for assessment. The trainer/assessor must review the checklist with the student before the student attempts the assessment task. If any items of the checklist are incomplete or not clear to the student, the trainer/assessor must provide relevant information to the student to ensure they understand the requirements of the assessment task. The student must ensure they are ready for the assessment task before undertaking it.**Section 1: Information for Students**

* Please make sure you have completed the necessary prior learning before attempting this assessment.
* Please make sure your trainer/assessor clearly explained the assessment process and tasks to be completed.
* Please make sure you understand what evidence is required to be collected and how.
* Please make sure you know your rights and the Complaints and Appeal process.
* Please make sure you discuss any special needs or reasonable adjustments to be considered during the assessment (refer to the Reasonable Adjustments Strategy Matrix and negotiate these with your trainer/assessor).
* Please make sure that you have access to a computer and the internet (if you prefer to type the answers).
* Please ensure that you have all the required resources needed to complete this Unit Assessment Task (UAT).
* Due date of this assessment task is according to your timetable.
* In exceptional (compelling and compassionate) circumstances, an extensionto submit an assessment can be granted by the trainer/assessor.
* Evidence of the compelling and compassionate circumstances must be provided together with your request for an extension to submit your assessment work.
* Request for an extension to submit your assessment work must be made before the due date of this assessment task.

## **Section 2: Reasonable adjustments**

* Students with carer responsibilities, cultural or religious obligations, English as an additional language, disabilityetc. can request for reasonable adjustments.
* Please note, academic standards of the unit/course will not be lowered to accommodate the needs of any student, but there is a requirement to be flexible about the way in which it is delivered or assessed.
* The Disability Standards for Education requires institutions to take reasonable steps to enable the student with a disability to participate in education on the same basis as a student without a disability.
* Trainer/Assessor must complete the section below “Reasonable Adjustment Strategies Matrix” to ensure the explanation and correct strategy have been recorded and implemented.
* Trainer/Assessor must notify the administration/compliance and quality assurance department for any reasonable adjustments made.
* All evidence and supplementary documentation must be submitted with the assessment pack to the administration/compliance and quality assurance department.

|  |  |  |
| --- | --- | --- |
| **Reasonable Adjustment Strategies Matrix (Trainer/Assessor to complete)** | | |
| **Category** | **Possible Issue** | **Reasonable Adjustment Strategy**  **(select as applicable)** |
| 🞎 LLN | 🞎 Speaking  🞎 Reading  🞎 Writing  🞎 Confidence | 🞎 Verbal assessment  🞎 Presentations  🞎 Demonstration of a skill  🞎 Use of diagrams  🞎 Use of supporting documents such as wordlists |
| 🞎Non-English Speaking Background | 🞎 Speaking  🞎 Reading  🞎 Writing  🞎 Cultural background  🞎 Confidence | 🞎 Discuss with the student and supervisor (if applicable) whether language, literacy and numeracy are likely to impact on the assessment process  🞎 Use methods that do not require a higher level of language or literacy than is required to perform the job role  🞎 Use short sentences that do not contain large amounts of information  🞎 Clarify information by rephrasing, confirm understanding  🞎 Read any printed information to the student  🞎 Use graphics, pictures and colour coding instead of, or to support, text  🞎 Offer to write down, or have someone else write, oral responses given by the student  🞎 Ensure that the time available to complete the assessment, while meeting enterprise requirements, takes account of the student’s needs |
| 🞎Indigenous | 🞎 Knowledge and understanding  🞎 Flexibility  🞎 Services  🞎 Inappropriate training and assessment | 🞎 Culturally appropriate training  🞎 Explore understanding of concepts and practical application through oral assessment  🞎 Flexible delivery  🞎 Using group rather than individual assessments  🞎 Assessment through completion of practical tasks in the field after demonstration of skills and knowledge. |
| 🞎Age | 🞎 Educational background  🞎 Limited study skills | 🞎 Make sure font size is not too small  🞎 Trainer/Assessor should refer to the student’s experience  🞎 Ensure that the time available to complete the assessment takes account of the student’s needs  🞎 Provision of information or course materials in accessible format.  🞎 Changes in teaching practices, e.g. wearing an FM microphone to enable a student to hear lectures  🞎 Supply of specialised equipment or services, e.g. a note-taker for a student who cannot write  🞎 Changes in lecture schedules and arrangements, e.g. relocating classes to an accessible venue  🞎 Changes to course design, e.g. substituting an assessment task  🞎 Modifications to physical environment, e.g. installing lever taps, building ramps, installing a lift |
| 🞎Educational background | 🞎 Reading  🞎 Writing  🞎 Numeracy  🞎 Limited study skills and/or learning strategies | 🞎 Discuss with the Student previous learning experience  🞎 Ensure learning and assessment methods meet the student’s individual need |
| 🞎Disability | 🞎 Speaking  🞎 Reading  🞎 Writing  🞎 Numeracy  🞎 Limited study skills and/or learning strategies | 🞎 Identify the issues  🞎 Create a climate of support  🞎 Ensure access to support that the student has agreed to  🞎 Appropriately structure the assessment  🞎 provision of information or course materials in accessible format, e.g. a text book in braille  🞎 Changes in teaching practices, e.g. wearing an FM microphone to enable a student to hear lectures  🞎 Supply of specialised equipment or services, e.g. a note taker for a student who cannot write  🞎 Changes in lecture schedules and arrangements, e.g. relocating classes to an accessible venue  🞎 Changes to course design, e.g. substituting an assessment task  🞎 Modifications to physical environment, e.g. installing lever taps, building ramps, installing a lift |

| **Explanation of reasonable adjustments strategy used (If required)** |
| --- |
|  |

# **Unit Assessment Task (UAT)**

## **Assessment Task 2 – Unit Project (UP)**

**Assessment type:**

Unit Project (UP)

**Assessment task description:**

* This is the second (2) assessment task you have to successfully complete to be deemed competent in this unit of competency.
* This assessment task requires you to complete a project.
* You will receive your feedback within two weeks - you will be notified by your trainer/assessor when results are available.
* You must attempt all activities of the project for your trainer/assessor to assess your competency in this assessment task.

**Applicable conditions:**

* Activity 1 is untimed and activity 2 is timed.
* You must read and respond to all criteria of the project.
* You may handwrite/use computers to answer the criteria of the project.
* You must complete the task independently.
* No marks or grades are allocated for this assessment task. The outcome of the task will be Satisfactory or Not Satisfactory.
* As you complete this assessment task you are predominately demonstrating your practical skills, techniques and knowledge to your trainer/assessor.
* The trainer/assessor may ask you relevant questions on this assessment task to ensure that this is your own work.

**Resubmissions and reattempts:**

* Where a student’s answers are deemed not satisfactory after the first attempt, a resubmission attempt will be allowed.
* You must speak to your Trainer/Assessor if you have any difficulty in completing this task and require reasonable adjustments (e.g. can be given as an oral assessment).
* For more information, please refer to your RTO Student Handbook.

**Location:**

* This assessment task may be completed in an independent learning environment or learning management system.
* Your trainer/assessor will provide you further information regarding the location of completing this assessment task.

**General Instructions for attempting the project:**

* You will be analyse enterprise data security requirements create new plan, review encryption technologies and their respective costs in this assessment task.
* You will be required to correctly attempt all activities of this assessment task.

## You must concise to the point and write answers according to the given word-limit to each question and do not provide irrelevant information.

## You must use non-discriminatory language. The language used should not devalue, demean, or exclude individuals or groups on the basis of attributes such as gender, disability, culture, race, religion, sexual preference or age. Gender inclusive language should be used.

**How your trainer/assessor will assess your work?**

* This assessment task requires the student to successfully complete and submit a project.
* Answers must demonstrate the student’s understanding and skills of the unit.
* You will be assessed according to the provided performance checklist/ performance criteria.
* Assessment objectives/ measurable learning outcome(s) are attached as performance checklist/ performance criteria with this assessment task to ensure that you have successfully completed and submitted the assessment task.
* If all assessment tasks are deemed Satisfactory (S), then the unit outcome is Competent (C).
* If at least one of the assessment task is deemed Not Satisfactory (NS), then the unit outcome is Not Yet Competent (NYC).
* Once all assessment tasks allocated to this Unit of Competency have been undertaken, trainer/assessor will complete an Assessment plan to record the unit outcome. The outcome will be either Competent (C) or Not Yet Competent (NYC).
* The “Assessment Plan” is available with the Unit Assessment Pack (UAP) – Cover Sheet.

## **Assessment Task 2 - Unit Project (UP)**

**Instructions to complete this assessment task**:

* Please write your responses in the template provided.
* You may attach a separate sheet if required.
* You must include the following particulars in the footer section of each page of the attached sheets:
  + Student ID or Student Name
  + Unit ID or Unit Code
  + Course ID or Course Code
  + Trainer and assessor name
  + Page numbers
* You must staple the loose sheets together along with the cover page.
* You must attach the loose sheets chronologically as per the page numbers.
* Correction fluid and tape are not permitted. Please do any corrections by striking through the incorrect words with one or two lines and rewriting the correct words.
* The premise of the project must be closely related to the previous assessment task.
* This submission must be well presented and follow the guidelines and instructions provided.
* Please follow the format as indicated in the template section below.
* One of the most important steps that you can take: proofread your project.
* Project must be of 500-800 words in length, using 11-point font, double-spaced, and must include a cover page, table of contents, introduction, body, summary or conclusion, and works cited.
* Appropriate citations are required.
* All RTO policies are in effect, including the plagiarism policy.

**Scenario: -**

“Elegant Technical Education”, is one of the leading colleges in Australia providing opportunities for students to acquire a technical education and offer courses and diplomas in the disciplines of Accounting, Project Management, Automotive, Hospitality and Business. The campus of the college is in the CBD of Melbourne and it has almost 1200 students are enrolled. A staff team consisting of 40 members use the resources of the college. The college has already been transformed into paperless environment and all the proceedings along with the student’s academic progress and evaluations are done on network-based modules.

The online services offered at the college includes:

* Induction and Enrolment System
* Educational Moodle system
* Student progress monitoring system
* Application for Finance
* Email Server
* Data Server

The IT infrastructure includes a computer Lab connected in LAN, Data Server, Proxy Server, attendance machine. It also includes the desktops being provided to th staff members in their offices, staff room and respective classes, which are all connected in a network. A number of users including students, teachers and staff members use mobile and laptops while connecting to the Wi-Fi of the college as guests.

But, it has been observed that often online data is compromised and a better authentication system needs to be implemented on the network. Better authorisation and authentication which will lead to a secure college information system. It has been observed by the IT department that the students using their personal devices including laptops and hand-held devices are the major threats to the information system.

Traditional device-centric IP-based security techniques are inadequate to meet this new reality. The Services of Information Security Manager – Adam has been employed by the college to improve security and access to the college information system. Adam has an extensive experience of more than 10 years of System and Network security including Cloud applications.

David the existing IT Manager of the College will help and assist Adam in order to maintain the college’s security plan.

Roles and responsibilities of Adam:

* Provide security guidance and input to reviews of proposed projects, services and vendors.
* Lead reviews and selection processes for the new information security solutions.
* Administer security controls such as firewalls, security information and event management, remote access, access controls, intrusion detection/prevention, malware protection, data leakage prevention, etc.
* Design, perform and conduct penetration testing to identify system vulnerabilities. ‬‬
* Maintain awareness of emerging information security threats. Provide subject matter expertise to management on a broad range of information security topics and standards.
* Create and present information security awareness training programs for employees.
* Develop security policies, processes, procedures, standards and guides.
* Participate in (and sometimes leads) security incident responses and investigations. Coordinating security plans with outside vendors

Roles and responsibilities of David:

* Identifying and acting on opportunities to improve and update software and systems
* Developing and implementing IT policy and best practice guides for the organisation
* Designing training programs and workshops for staff
* Conducting regular system audits
* Running and sharing regular operation system reports with senior staff
* Overseeing and determining timeframes for major IT projects including system updates, upgrades, migrations and outages
* Managing and reporting on allocation of IT budget
* Providing direction for IT team members
* Identifying opportunities for team training and skills advancement

It has been suggested by the Information Security Manager to apply role-based access control – RBAC as the new unified network security approach. It helps in the following ways:

* Supports multiple user types with multiple access profiles
* Addresses compliance requirements
* Leverages identity to integrate with the network infrastructure directly

Also, following are the terms been defined by Adam in advice with It Manager David:

* Client - Device / user attempting to access the network
* Policy Enforcement Point (PEP) - network device that brokers access request and enforces policy result (i.e. WLAN AP, Firewall, VPN gateway, Ethernet switch)
* Policy Decision Point (PDP) – network device that decides policy for client based on PEP and PIP interaction
* Policy Information Point (PIP) - a source of information in setting policy (i.e. user directory, asset management system)
* Accounting - Audit destination for client access and network usage

**Security policies**

Also, before implementation of the authentication system for the information security of the college network, the following are the security policies related to authentication which have been agreed upon:

**a. General**

i. A suitable method of authentication must be used by all users and systems accessing “Elegant technical Education Systems or Networks”. In most cases this will be a “Elegant Technical Education” issued username and password.

ii. Unauthenticated access will be permitted only in exceptional circumstances and such systems must be explicitly configured for such use.

iii. For general computing devices (e.g. PCs) appropriate accounting information must be kept.

iv. Unused accounts must be disabled and default or blank passwords must be changed.

**b. Passwords**

i. Passwords must be kept secure; they should never be divulged to anyone not authorised to know them.

ii. Passwords should be changed at regular intervals.

iii. Passwords must be protected in use; in particular they should not be passed over unsecure networks in clear text.

iv. The user’s identity must be clearly established before a password is issued to a user.

v. Passwords should not be overused.

* “Elegant Technical Education” usernames and passwords should not be used with non “Elegant Technical Education” systems.
* Separate usernames and passwords should be used for trusted and untrusted systems.

vi. Password should be complex and obscure, such that they are not easily guessed by people or computer systems.

**c. Authentication Data Storage**

i. There is a need to process Authentication Data to manage user accounts and to allow Information Systems to be able to authenticate users.

Typically, Authentication Data is held electronically in directories (e.g. MS Active Directory) or in databases.

ii. The systems holding Authentication Data should be hardened to enhance their security and should not be used for any additional purpose that might compromise their security.

iii. All electronic copies of Authentication data must be encrypted.

iv. Authentication Data must be protected from Brute Force Attacks. (e.g. password guessing).

v. Access to Authentication Data should be restricted such that only the data necessary is available to each member of staff. Particular care is required to restrict access to password files.

vi. Where Authentication Data is available in plain text (e.g. print outs) staff should be aware of its sensitivity, ensuring its protection and secure disposal.

Initially, before commencement of the project, following points are agreed by the Information Security Manager, IT Manager and the Management of the college:

* All WLAN Access is authenticated enabling user audit and differentiated access
* There is an explicit deny rule that will automatically block anything not

permitted by a rule.

* In this way manually create a rule for permitted traffic and everything

else is automatically blocked.

* Design access lists as we need and each group can have their own unique access list.
* Dynamic VLAN assignment segments the traffic with enforcement via ACLs
* Guests can be forced to the Internet only, contractors can be given restricted

Internal access, privileged employees can see sensitive areas

* Guest access is fully audited rather than open

**Activity 1: (Analysing authentication requirement)**

After having the detail look at the scenario given above, you need to analyse the requirements in relation to the enterprise security plan of the college including the following:

* Background of the enterprise security plan
* Issues identified in the network
* Hardware and software required
* Analyses and list different authentication options according to the given scenario
* Different Authentication options
* Authentication Goals using relevant Authentication and authorisation options

You may need to research related to enterprise security plan on the internet. You must complete below enterprise security plan for the college as a part of the activity.

***College Enterprise Security Plan Template***

|  |
| --- |
| Background- |
| Issues identified in the network |
| Hardware and software required |
| Identify user and security requirements |
| Different Authentication options |
| Authentication Goals using relevant authentication and authorisation options |

## **Performance criteria checklist for unit assessment task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Trainer/ Assessor to complete** | | | |
| **Assessment activities to be completed** | * Analysing authentication requirement * For a full project outline, please refer to the student assessment instructions | | |
| **Resources required for the unit assessment task** | * Unit assessment guide template * Access to live or simulated working environment * Interaction with others | | |
| **Does the candidate meet the following criteria** | **Yes** | **No** | **Trainer/Assessor Comments** |
| Understood College’s requirements of security |  |  |  |
| Defined Requirements for security relevant to network security |  |  |  |
| Identified Hardware and software required |  |  |  |
| Identified user and security requirements |  |  |  |
| Defined authentication options and goals relevant to authentication and authorisation processes |  |  |  |

**Activity 2: (Deployment of Authentication solution and configuration of Authentication software)**

**Note: This activity is in continuation of activity 1.**

After the analysis of the college enterprise security plan and requirements for the security/authentication, along with the review of different available authentication options, do the following:

* Design and implement an authentication realm to protect the different servers and applications on the network.
* Add and manage users and apply authorisation rules to the realm. Also, define user’s attributes and their setup.
* Configure authentication filters and authorisation parameters as per the requirement.

This activity is a continuation of activity 1. You are required to participate in a practical demonstration task. You need to complete this activity in 2 to 3 hours.

Note: For This activity your RTO/Assessor will provide you the following:

* A site where deployment of authentication solution may be conducted
* A live network
* Servers
* Authentication software
* Security policies (as per scenario)

You have received a final approval from David to start the configuration of the authentication project, so you must perform the installation and configuration of authentication software and tools along with the creation of authentication realm on the live network.

Assume the you are “Adam” and you configurethe authentication software and manage the authentication realm.

You need to install the authentication software on the Data Server and set permissions on the network relevant to the different users.

Student must follow vendor instruction to install the software. You also need to follow organisation security policies (given in the scenario) during this task.

Your trainer and assessor will observe you during the activity and complete the performance checklist.

**Performance criteria checklist for unit assessment task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Trainer/ Assessor to complete** | | | |
| **Assessment activities to be completed** | * Deployment of Authentication solution and configuration of Authentication software * For a full project outline, please refer to the student assessment instructions | | |
| **Resources required for the unit assessment task** | * Unit assessment guide template | | |
| **Does the candidate meet the following criteria** | **Yes** | **No** | **Trainer/Assessor Comments** |
| Designed and Implemented Authentication Realm   * Student followed the organisational security policies * Followed the vendor instructions * Completed the activity in a given timeframe |  |  |  |
| Installed and configured the authentication software   * Student followed the organisational security policies * Followed the vendor instructions |  |  |  |
| Managed the authentication software as per the authentication realm |  |  |  |

# **Unit Assessment Result Sheet (UARS)**

## **Assessment Task 2 – Unit Project**

## **Student and Trainer/Assessor Details**

|  |  |
| --- | --- |
| **Unit code** | ICTNWK503 |
| **Unit name** | Install and maintain valid authentication processes |
| **Outcome of Unit Assessment Task (UAT)** | |  | | --- | | **First attempt:** |   Outcome (please make sure to tick the correct checkbox):  Satisfactory (S) ☐ or Not Satisfactory (NS) ☐  Date: \_\_\_\_\_\_\_(day)/ \_\_\_\_\_\_\_(month)/ \_\_\_\_\_\_\_\_\_\_\_\_(year)   |  | | --- | | **Second attempt:** |   Outcome (please make sure to tick the correct checkbox):  Satisfactory (S) ☐ or Not Satisfactory (NS) ☐  Date: \_\_\_\_\_\_\_(day)/ \_\_\_\_\_\_\_(month)/ \_\_\_\_\_\_\_\_\_\_\_\_(year) |
| **Feedback to Student** | |  | | --- | | * **First attempt:** |  |  | | --- | | * **Second attempt:** | |
| **Student Declaration** | * I declare that the answers I have provided are my own work. Where I have accessed information from other sources, I have provided references and or links to my sources. * I have kept a copy of all relevant notes and reference material that I used as part of my submission. * I have provided references for all sources where the information is not my own. I understand the consequences of falsifying documentation and plagiarism. I understand how the assessment is structured. I accept that all work I submit must be verifiable as my own. * I understand that if I disagree with the assessment outcome, I can appeal the assessment process, and either re-submit additional evidence undertake gap training and or have my submission re-assessed. * All appeal options have been explained to me. |
| **Student Signature** |  |
| **Date** |  |
| **Trainer/Assessor Name** |  |
| **Trainer/Assessor Declaration** | I hold:  🗹 Vocational competencies at least to the level being delivered  🗹 Current relevant industry skills  🗹 Current knowledge and skills in VET, *and undertake*  🗹 Ongoing professional development in VET  *I declare that I have conducted an assessment of this candidate’s submission. The assessment tasks were deemed current, sufficient, valid and reliable. I declare that I have conducted a fair, valid, reliable, and flexible assessment. I have provided feedback to the above-named candidate.* |
| **Trainer/Assessor Signature** |  |
| **Date** |  |
| **Office Use Only** | Outcome of Assessment has been entered onto the Student Management System on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (insert date)  by (insert Name) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Unit Pre-Assessment Checklist (UPAC)**

# **UAT 3 –Unit Project (UP)**

## **Purpose of the checklist**

The pre-assessment checklist helps students determine if they are ready for assessment. The trainer/assessor must review the checklist with the student before the student attempts the assessment task. If any items of the checklist are incomplete or not clear to the student, the trainer/assessor must provide relevant information to the student to ensure they understand the requirements of the assessment task. The student must ensure they are ready for the assessment task before undertaking it.**Section 1: Information for Students**

* Please make sure you have completed the necessary prior learning before attempting this assessment.
* Please make sure your trainer/assessor clearly explained the assessment process and tasks to be completed.
* Please make sure you understand what evidence is required to be collected and how.
* Please make sure you know your rights and the Complaints and Appeal process.
* Please make sure you discuss any special needs or reasonable adjustments to be considered during the assessment (refer to the Reasonable Adjustments Strategy Matrix and negotiate these with your trainer/assessor).
* Please make sure that you have access to a computer and the internet (if you prefer to type the answers).
* Please ensure that you have all the required resources needed to complete this Unit Assessment Task (UAT).
* Due date of this assessment task is according to your timetable.
* In exceptional (compelling and compassionate) circumstances, an extensionto submit an assessment can be granted by the trainer/assessor.
* Evidence of the compelling and compassionate circumstances must be provided together with your request for an extension to submit your assessment work.
* Request for an extension to submit your assessment work must be made before the due date of this assessment task.

## **Section 2: Reasonable adjustments**

* Students with carer responsibilities, cultural or religious obligations, English as an additional language, disabilityetc. can request for reasonable adjustments.
* Please note, academic standards of the unit/course will not be lowered to accommodate the needs of any student, but there is a requirement to be flexible about the way in which it is delivered or assessed.
* The Disability Standards for Education requires institutions to take reasonable steps to enable the student with a disability to participate in education on the same basis as a student without a disability.
* Trainer/Assessor must complete the section below “Reasonable Adjustment Strategies Matrix” to ensure the explanation and correct strategy have been recorded and implemented.
* Trainer/Assessor must notify the administration/compliance and quality assurance department for any reasonable adjustments made.
* All evidence and supplementary documentation must be submitted with the assessment pack to the administration/compliance and quality assurance department.

|  |  |  |
| --- | --- | --- |
| **Reasonable Adjustment Strategies Matrix (Trainer/Assessor to complete)** | | |
| **Category** | **Possible Issue** | **Reasonable Adjustment Strategy**  **(select as applicable)** |
| 🞎 LLN | 🞎 Speaking  🞎 Reading  🞎 Writing  🞎 Confidence | 🞎 Verbal assessment  🞎 Presentations  🞎 Demonstration of a skill  🞎 Use of diagrams  🞎 Use of supporting documents such as wordlists |
| 🞎Non-English Speaking Background | 🞎 Speaking  🞎 Reading  🞎 Writing  🞎 Cultural background  🞎 Confidence | 🞎 Discuss with the student and supervisor (if applicable) whether language, literacy and numeracy are likely to impact on the assessment process  🞎 Use methods that do not require a higher level of language or literacy than is required to perform the job role  🞎 Use short sentences that do not contain large amounts of information  🞎 Clarify information by rephrasing, confirm understanding  🞎 Read any printed information to the student  🞎 Use graphics, pictures and colour coding instead of, or to support, text  🞎 Offer to write down, or have someone else write, oral responses given by the student  🞎 Ensure that the time available to complete the assessment, while meeting enterprise requirements, takes account of the student’s needs |
| 🞎Indigenous | 🞎 Knowledge and understanding  🞎 Flexibility  🞎 Services  🞎 Inappropriate training and assessment | 🞎 Culturally appropriate training  🞎 Explore understanding of concepts and practical application through oral assessment  🞎 Flexible delivery  🞎 Using group rather than individual assessments  🞎 Assessment through completion of practical tasks in the field after demonstration of skills and knowledge. |
| 🞎Age | 🞎 Educational background  🞎 Limited study skills | 🞎 Make sure font size is not too small  🞎 Trainer/Assessor should refer to the student’s experience  🞎 Ensure that the time available to complete the assessment takes account of the student’s needs  🞎 Provision of information or course materials in accessible format.  🞎 Changes in teaching practices, e.g. wearing an FM microphone to enable a student to hear lectures  🞎 Supply of specialised equipment or services, e.g. a note-taker for a student who cannot write  🞎 Changes in lecture schedules and arrangements, e.g. relocating classes to an accessible venue  🞎Changes to course design, e.g. substituting an assessment task  🞎 Modifications to physical environment, e.g. installing lever taps, building ramps, installing a lift |
| 🞎Educational background | 🞎 Reading  🞎 Writing  🞎 Numeracy  🞎 Limited study skills and/or learning strategies | 🞎 Discuss with the Student previous learning experience  🞎 Ensure learning and assessment methods meet the student’s individual need |
| 🞎Disability | 🞎 Speaking  🞎 Reading  🞎 Writing  🞎 Numeracy  🞎 Limited study skills and/or learning strategies | 🞎 Identify the issues  🞎 Create a climate of support  🞎 Ensure access to support that the student has agreed to  🞎 Appropriately structure the assessment  🞎 provision of information or course materials in accessible format, e.g. a text book in braille  🞎 Changes in teaching practices, e.g. wearing an FM microphone to enable a student to hear lectures  🞎 Supply of specialised equipment or services, e.g. a note taker for a student who cannot write  🞎 Changes in lecture schedules and arrangements, e.g. relocating classes to an accessible venue  🞎 Changes to course design, e.g. substituting an assessment task  🞎 Modifications to physical environment, e.g. installing lever taps, building ramps, installing a lift |

| **Explanation of reasonable adjustments strategy used (If required)** |
| --- |
|  |

# **Unit Assessment Task (UAT)**

## **Assessment Task 3 – Unit Project (UP)**

**Assessment type:**

Unit Project (UP)

**Assessment task description:**

* This is the third (3) assessment task you have to successfully complete to be deemed competent in this unit of competency.
* This assessment task requires you to complete a project.
* You will receive your feedback within two weeks - you will be notified by your trainer/assessor when results are available.
* You must attempt all activities of the project for your trainer/assessor to assess your competency in this assessment task.

**Applicable conditions:**

* This project is timed.
* You must read and respond to all criteria of the project.
* You may handwrite/use computers to answer the criteria of the project.
* You must complete the task independently.
* No marks or grades are allocated for this assessment task. The outcome of the task will be Satisfactory or Not Satisfactory.
* As you complete this assessment task you are predominately demonstrating your practical skills, techniques and knowledge to your trainer/assessor.
* The trainer/assessor may ask you relevant questions on this assessment task to ensure that this is your own work.

**Resubmissions and reattempts:**

* Where a student’s answers are deemed not satisfactory after the first attempt, a resubmission attempt will be allowed.
* You must speak to your Trainer/Assessor if you have any difficulty in completing this task and require reasonable adjustments (e.g. can be given as an oral assessment).
* For more information, please refer to your RTO Student Handbook.

**Location:**

* This assessment task may be completed in a simulated learning environment.
* Your trainer/assessor will provide you further information regarding the location of completing this assessment task.

**General Instructions for attempting the project:**

* This assessment task is in continuation to the previous task.
* You will be expanding the knowledge and skills acquired during the previous assessment task.

## You must concise to the point and write answers according to the given word-limit to each question and do not provide irrelevant information.

## You must use non-discriminatory language. The language used should not devalue, demean, or exclude individuals or groups on the basis of attributes such as gender, disability, culture, race, religion, sexual preference or age. Gender inclusive language should be used.

## You will be required to correctly attempt all activities of this assessment task.

**How yourtrainer/assessor will assess your work?**

* This assessment task requires the student to successfully complete and submit a project.
* Answers must demonstrate the student’s understanding, knowledge and skill of the unit.
* You will be assessed according to the provided performance checklist/ performance criteria.
* Assessment objectives/ measurable learning outcome(s) are attached as performance checklist/ performance criteria with this assessment task to ensure that you have successfully completed and submitted the assessment task.
* If all assessment tasks are deemed Satisfactory (S), then the unit outcome is Competent (C).
* If at least one of the assessment task is deemed Not Satisfactory (NS), then the unit outcome is Not Yet Competent (NYC).
* Once all assessment tasks allocated to this Unit of Competency have been undertaken, trainer/assessor will complete an Assessment plan to record the unit outcome. The outcome will be either Competent (C) or Not Yet Competent (NYC).
* The “Assessment Plan” is available with the Unit Assessment Pack (UAP) – Cover Sheet.

## **Assessment Task 3 - Unit Project (UP)**

**Instructions to complete this assessment task**:

* Please write your responses in the template provided.
* You may attach a separate sheet if required.
* You must include the following particulars in the footer section of each page of the attached sheets:
  + Student ID or Student Name
  + Unit ID or Unit Code
  + Course ID or Course Code
  + Trainer and assessor name
  + Page numbers
* You must staple the loose sheets together along with the cover page.
* You must attach the loose sheets chronologically as per the page numbers.
* Correction fluid and tape are not permitted. Please do any corrections by striking through the incorrect words with one or two lines and rewriting the correct words.
* The premise of the project must be closely related to the previous assessment task.
* This submission must be well presented and follow the guidelines and instructions provided.
* Please follow the format as indicated in the template section below.
* One of the most important steps that you can take: proofread your project.
* Appropriate citations are required.
* All RTO policies are in effect, including the plagiarism policy.

**Activity 1 (Application of authentication methods)**

This activity is continuation of assessment task 2. You are required to participate in a practical demonstration task. You need to complete this activity in 2 to 3 hours.

Note: For this activity the RTO/Assessor will provide you with the following:

* A site where encryption installation may be conducted
* A live network
* Servers
* Authentication software
* Security policies
* Vender instructions for hardware and software
* Biometric authentication adaptors

After configuring authentication software in assessment task 2, you (Adam) are required to apply relevant authentication methods on the network according to vendor instructions and organisation policies. You need to do the following:

* Develop authentication protocols
* Implement these to the network and user access as per the college enterprise security plan
* Implement the authentication system and users as per the requirements and ensure that it follows current authentication standards
* Includesbiometric authentication adaptors as a part of implementation
* Management of the permissions and configuration information to the central secure location
* Define the Policy Server, Directory Connectivity, Supplicant Management,

Legacy Support, Information Security Administrator, Group or Policy Administrator and User

* Complete the given template 1 relevant to the application of the authentication methods.

**Template 1**

|  |
| --- |
| ***PURPOSE***  ***SCOPE***  ***Application to Systems***  ***EXCEPTIONS***  ***ROLES AND RESPONSIBILITIES***  ***POLICY***  ***Authenticator Feedback*** |

## **Performance criteria checklist for unit assessment task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Trainer/ Assessor to complete** | | | |
| **Assessment activities to be completed** | * Application of authentication methods * For a full project outline, please refer to the student assessment instructions | | |
| **Resources required for the unit assessment task** | * Unit assessment guide template * Access to live or simulated working environment * Interaction with others | | |
| **Does the candidate meet the following criteria** | **Yes** | **No** | **Trainer/Assessor Comments** |
| Managed Authentication Protocols |  |  |  |
| Implemented protocols on network |  |  |  |
| Implemented authentication system |  |  |  |
| Ensured authentication system is updated |  |  |  |
| Managed Permissions and configurations to central secure location |  |  |  |
| Defined the Policy Server, Directory Connectivity, Supplicant Management, Legacy Support, Information Security Administrator, Group or Policy Administrator and User |  |  |  |

***Activity 2: (Role Play - Informing users about authentication system and their responsibilities)***

***Note: This activity is in continuation of activity 1.***

* Time allowed for this activity is 10-15 minutes.

Assume that you are still playing the role of Adam and participate in the following role play.

The purpose of the role play is to inform users about the authentication system and their roles and responsibilities as per the college security plan.

* Information Security Manager
* Group or Policy Administrator - IT Manager
* User

You will act as theInformation Security Manager, while the trainer/assessor will act as the IT Manager. Also, a class mate of you will act as the user and you need to brief the user about the authentication system and his responsibilities relevant to the enterprise security plan. You will also discuss suitable authentication protocols.

Your trainer/assessor also participate in the role play discussing the policies and privileges set on the IT resources and network.

Your trainer/assessor will act as IT Manager and will ask you the following questions:

1. Authorisation of the users
2. Responsibilities due to the new authentication system including permissions and privileges while accessing the different sources of information of college

Following the role play, complete minutes of meeting template with details of what was discussed.

|  |  |  |  |
| --- | --- | --- | --- |
| **Minutes of Meeting**  **Meeting Objective:**  **Attendees:**  **Venue:**  **Date:** | | | |
| **No.** | **Points Discussed** | **Actions Suggested** | **Target Date** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| **Signature of attendee 1: Signature of attendee 2:**  **Signature of attendee 3: Signature of attendee 4:** | | | |

**Performance checklist**

|  |  |  |  |
| --- | --- | --- | --- |
| **Trainer/ Assessor to complete** | | | |
| **Assessment activities to be completed** | * Role Play - Informing users about authentication system and their responsibilities * For a full project outline, please refer to the student assessment instructions | | |
| **Resources required for the unit assessment task** | * Unit assessment guide template * Access to live or simulated working environment * Interaction with others | | |
| **Does the candidate meet the following criteria** | **Yes** | **No** | **Trainer/Assessor Comments** |
| Started role-play with greetings |  |  |  |
| Explained the authentication and User responsibilities |  |  |  |
| Used simple language to explain technical terminology |  |  |  |
| Explained the roles to individuals |  |  |  |
| Discussed suitable authentication protocols |  |  |  |
| Body Language during Presentation including:   * Eye contact * Tone * Gesture |  |  |  |

**Activity 3**: **(Monitoring of the Authentication Software)**

As you have implemented the authentication over the network in a live server/network environment in the previous assessment activities, you are required to monitor the authentication system in this activity. You need to complete this task in 1 to 2 hours.

In this activity you need to monitor the functioning of the “Authentication system” by performing the following tasks in a live server/network environment.

* Analysis of the authentication system as per the roles of different users and college security and Quality of Service requirements
  + Use different software’s and techniques to test the authentication system
* To monitor ongoing security, complete below incident ticket and reporting processes template.
* You need to test the authentication system at least two different times for ongoing security monitoring and must complete following template for both occasions.
* You need to report authentication system issues to you trainer and discuss the solutions.
* Make changes to the authentication system if required.

Fill in the template given below for incident records and reporting processes:

|  |
| --- |
| **Executive overview** |
| **Incident record overview**  This document is intended to provide an understanding of the attributes/fields that need to be captured in an incident ticket |

|  |  |  |
| --- | --- | --- |
| Field Description(where necessary) | | |
| IncidentID |  |  |
| Issue/s or System faults |  |  |
| Contactname |  |  |
| Firstname |  |  |
| Last name |  |  |
| Date and time |  |  |
| Incident reported to: |  |  |
| Location: |  |  |

Your trainer will observe you during the activity and complete the performance checklist.

## **PPerformance criteria checklist for unit assessment task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Trainer/ Assessor to complete** | | | |
| **Assessment activities to be completed** | * Monitoring of the Authentication Software * For a full project outline, please refer to the student assessment instructions | | |
| **Resources required for the unit assessment task** | * Unit assessment guide template * Access to live or simulated working environment * Interaction with others | | |
| **Does the candidate meet the following criteria** | **Yes** | **No** | **Trainer/Assessor Comments** |
| Analysed the authentication system as per the roles of different users and college security and Quality of Service requirements including:   * Check that validity of the digital certificates * Check different permissions and privileges being assigned to different users as per their roles and responsibilities * Check overall network performance |  |  |  |
| Monitored security using security monitoring tools |  |  |  |
| Complete the provided monitoring template |  |  |  |
| Discussed the authentication system issues with the trainer and adjust authentication system as required |  |  |  |
| Checked local computer security logs for and submitted to the trainer/assessor |  |  |  |
| Checked logs of permissions and privileges |  |  |  |

# **Unit Assessment Result Sheet (UARS)**

## **Assessment Task 3 – Unit Project**

## **Student and Trainer/Assessor Details**

|  |  |
| --- | --- |
| **Unit code** | ICTNWK503 |
| **Unit name** | Install and maintain valid authentication processes |
| **Outcome of Unit Assessment Task (UAT)** | |  | | --- | | **First attempt:** |   Outcome (please make sure to tick the correct checkbox):  Satisfactory (S) ☐ or Not Satisfactory (NS) ☐  Date: \_\_\_\_\_\_\_(day)/ \_\_\_\_\_\_\_(month)/ \_\_\_\_\_\_\_\_\_\_\_\_(year)   |  | | --- | | **Second attempt:** |   Outcome (please make sure to tick the correct checkbox):  Satisfactory (S) ☐ or Not Satisfactory (NS) ☐  Date: \_\_\_\_\_\_\_(day)/ \_\_\_\_\_\_\_(month)/ \_\_\_\_\_\_\_\_\_\_\_\_(year) |
| **Feedback to Student** | |  | | --- | | * **First attempt:** |  |  | | --- | | * **Second attempt:** | |
| **Student Declaration** | * I declare that the answers I have provided are my own work. Where I have accessed information from other sources, I have provided references and or links to my sources. * I have kept a copy of all relevant notes and reference material that I used as part of my submission. * I have provided references for all sources where the information is not my own. I understand the consequences of falsifying documentation and plagiarism. I understand how the assessment is structured. I accept that all work I submit must be verifiable as my own. * I understand that if I disagree with the assessment outcome, I can appeal the assessment process, and either re-submit additional evidence undertake gap training and or have my submission re-assessed. * All appeal options have been explained to me. |
| **Student Signature** |  |
| **Date** |  |
| **Trainer/Assessor Name** |  |
| **Trainer/Assessor Declaration** | I hold:  🗹 Vocational competencies at least to the level being delivered  🗹 Current relevant industry skills  🗹 Current knowledge and skills in VET, *and undertake*  🗹 Ongoing professional development in VET  *I declare that I have conducted an assessment of this candidate’s submission. The assessment tasks were deemed current, sufficient, valid and reliable. I declare that I have conducted a fair, valid, reliable, and flexible assessment. I have provided feedback to the above-named candidate.* |
| **Trainer/Assessor Signature** |  |
| **Date** |  |
| **Office Use Only** | Outcome of Assessment has been entered onto the Student Management System on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (insert date)  by (insert Name) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |