

ASSESSMENT 1 BRIEF	
Subject Code and Title	MIS102 Data and Networking
Assessment	Research Report
Individual/Group	Individual
Length	1200 words
Learning Outcomes	<p>The Subject Learning Outcomes demonstrated by successful completion of the task below include:</p> <ul style="list-style-type: none"> a) Describe and analyses the architecture and distribution of data. b) Compare and review communication protocol stacks and generate recommendations.
Submission	Due by 11:55pm AEST Sunday end of Module 3.1 (Week 5)
Weighting	25%
Total Marks	100 marks

Task Summary

Data has become an important asset for companies and the way how they operate. Moreover, data transmission and networks have enabled enterprises to improve their businesses, foster collaboration, increase their efficiency, enhance customer engagement and so on.

Based on the knowledge gained in the first five weeks in this subject, as well as your own research, you need to come up with a report describing the network in the chosen company, and its main characteristics, as required in the brief.

Select an Australian company that you have recently interacted with, which is basing some of its operations on network and data. You need to be familiar with some of their activities in the digital space, based on your own experience and/or your own research. The company can be a medical center, the public transport company you are using every week, your insurance company, etc. Alternatively, you may use the list below to choose a suitable option:

<https://brandirectory.com/rankings/australia/table>

A full network diagram with all the adequate network devices has to be created to support your discussion.

Context

This assessment gives you the opportunity to apply the knowledge and theories you've learnt in this subject. In doing so, you are required to analyze the chosen company's data distribution. Provide reviews and recommendations of the data flows and network communication protocols.

Task Instructions

1. Once you have chosen your company, **create a Network Diagram representing its network**, and describe it briefly.
 - What are the main devices for the network? Consider networking devices, internet access, connections, data storage, data access devices, etc.
 - The diagram has to be your authentic work and you need to create it using tools such as MS Visio/Lucidchart/etc. Please save your draft in the application you have used. Diagrams from the web, won't be accepted.
 - The diagram has to reflect the chosen company. For instance, if the company has different branches, departments or warehouses, you should include those characteristics there. Or, if the company is using specific devices (e.g. self-checkout machines, IoT devices, sensors, scanning devices, etc.), you should include them.
 - You may make reasonable assumptions for the inclusion of certain devices in the network.
 - All the diagram/pictures used must be referenced according to APA 7 referencing style.
 - This is **not** a business diagram, logical diagram, or flowchart. Instead this is a Network Diagram.
2. Choose **one specific interaction** between you and the company, *or* between you and an employee, *or* between the employee of the company and its system, where data is transmitted over the network. Think about the flow of data (data trail).
 - What are the devices involved from the data creation, transmission and storage?
 - What type of media communications are utilized throughout the end to end data transmission? Please list a couple.
 - What are some of the protocols used in various steps? Why are they used? Provide at least 3 relevant protocols. Please support your discussion with external references.
3. Provide **3 recommendations** to the company, in relation to data distribution and data safety, that you as an IS professional think (from your research) that the company should action. The recommendations should be around the network technology used, protocols, network architecture, etc. The recommendations should be short, sharp and actionable. Please support your discussion with external references.

The suggested format:

- Cover page
- AI declaration form (on a separate page)
- Table of Contents (on a separate page; The ToC should be created through MS Word)
- Introduction – provide an overview of the company
 - Not more than 3 sentences about the chosen company
 - In brief – what is your work about
 - What the reader can expect to find in the body of the report
- Discussion – *The three sections provided in the “Task Instructions” above.*
 - Use proper headings to identify **each** of the sections.
- Conclusion – a summary of your findings. Do not introduce any new material in your conclusion.
- References list – this starts in a new page. Please refer to APA 7th edition. **All** the references in the list must match with **in-text references**.

Referencing

- Please use between 5-7 references including textbooks or academic journals.
- It is essential that you use appropriate APA 7 style for citing and referencing research. Please see more information on referencing in the <https://library.torrens.edu.au/academicskills/apa/tool>.

Submission Instructions

Please submit the report via the Assessment link within Assessment 1. The Learning Facilitator will provide feedback via the Grade Centre in the LMS portal. Feedback can be viewed in My Grades.

You have to submit just one single word document (.doc/.docx), and not a .pdf, .rtf, etc.

Academic Integrity



When submitting their assessment task, students will be asked to declare the academic integrity of their assessment by completing and signing an assignment cover sheet. You can find the assignment cover sheet [here](#)

All students are responsible for ensuring that all work submitted is their own and is appropriately referenced and academically written according to the Academic Writing Guide. Students also need to have read and be aware of Torrens University Australia Academic Integrity Policy and Procedure and subsequent penalties for academic misconduct.

These are available at <https://www.torrens.edu.au/policies-and-forms>.

Students also must keep a copy of all submitted material and any assessment drafts.

Academic Integrity Declaration

I declare that except where I have referenced, the work I am submitting for this assessment task is my own work. I have read and am aware of Torrens University Australia Academic Integrity Policy and Procedure viewable online at <http://www.torrens.edu.au/policies-and-forms>

I am aware that I need to keep a copy of all submitted material and their drafts, and I will do so accordingly.

Signed by:

Date:

Special Consideration

To apply for special consideration for a modification to an assessment or exam due to unexpected or extenuating circumstances, please consult the Assessment Policy for Higher Education Coursework and ELICOS and, if applicable to your circumstance, submit a completed Application for Assessment Special Consideration Form to your Learning Facilitator. These documents are available at <https://www.torrens.edu.au/policies-and-forms>.

Assessment Rubric

Assessment Attributes	Fail (Yet to achieve min. standard) 0-49%	Pass (Functional) 50-64%	Credit (Proficient) 65-74%	Distinction (Advance) 75-84%	High Distinction (Exceptional) 85-100%
<p>Network diagram</p> <p>25 %</p>	<ul style="list-style-type: none"> An inappropriate company is chosen for the assessment. There is no diagram created. A very broad discussion is provided, but there is no relevance with the chosen company. 	<ul style="list-style-type: none"> An appropriate company is chosen for the assessment. A basic diagram is provided, but there are a number of key elements missing. The wrong captioning technique is used for the diagram. There are some wrong symbols used in the diagram. 	<ul style="list-style-type: none"> An appropriate Australian company is chosen. A good and clear diagram is created, with all the basic elements. However, the diagram is not reflecting the chosen company properly. There are some minor errors in the captioning technique used for the diagram. The right symbols were used for the diagram. 	<ul style="list-style-type: none"> A relevant and appropriate Australian company is chosen. The diagram is clear, with all the needed elements. There are unique elements which reflect completely the structure of the chosen company. There are no errors in the captioning technique used for the diagram. The right symbols were used for the diagram. 	<ul style="list-style-type: none"> A relevant and appropriate Australian company is chosen. The diagram is excellent and created professionally with all the needed elements and more. The diagram is highly relevant with the chosen company. There are no errors in the captioning technique used for the diagram. The right symbols were used for the diagram.
<p>Knowledge and understanding of data architecture and the communication protocol stacks</p> <p>25 %</p>	<ul style="list-style-type: none"> There is no transaction identified. Demonstrates a partially developed understanding of the data architecture and the communication protocol stacks. Essential components of the protocol stacks are not mentioned. Basic flow of the information and data networking has not been identified. 	<ul style="list-style-type: none"> A transaction is chosen but it is too broad. Demonstrates a partially functional knowledge of the data architecture and the communication protocol stacks. Only one or two essential components of the network are provided. Basic flow of the information and data networking has been identified, but there are significant errors. 	<ul style="list-style-type: none"> A concrete and relevant transaction is chosen to support the discussion. Demonstrates a proficient knowledge of the data architecture and the communication protocol stacks. Mentions essential components of the networks but there are still important elements missing. Basic flow of the information and data networking has been identified but with some 	<ul style="list-style-type: none"> A specific and concrete transaction is selected to support discussion, and it is relevant to the chosen company. Demonstrates advanced knowledge of the data architecture and the communication protocol stacks. Mentions all essential components of the complete network, and relates them with the diagram provided. Basic flow of the information and data networking has been identified but with some minor errors. 	<ul style="list-style-type: none"> A great and very specific transaction is selected from the company to support discussion. Demonstrates exceptional knowledge of the data architecture and the communication protocol stacks. Mentions all essential components of the complete network, and explain them professionally. The correct and detailed flow of the information

			errors.		and data networking has been identified with no errors.
<p>The recommendations section</p> <p>Evaluation of information such as recommendation based on the case scenario</p> <p>25%</p>	<ul style="list-style-type: none"> Recommendations are not provided. Recommendations are not related to Data & Networking. 	<ul style="list-style-type: none"> Recommendations are provided but they are not supported by external references. Often confuses assertion of personal opinion with information substantiated by evidence from the course materials. The recommendations are too generic and not tailored to the needs and capabilities of the chosen company. 	<ul style="list-style-type: none"> Recommendations are provided and supported partially by external references. External and contemporary resources have been used to write the recommendations. Demonstrates a capacity to explain and apply relevant concepts. 	<ul style="list-style-type: none"> Recommendations are clear, sharp and actionable. Discriminates between assertion of personal opinion and information substantiated by robust evidence from the course materials and extended reading. Well demonstrated capacity to explain and apply relevant concepts. Analysis and evaluation reflect growing judgment, intellectual independence and adaptability. 	<ul style="list-style-type: none"> Recommendations are very clear and tailored to the needs of the chosen company. Information is taken from sources with a high level of interpretation to develop a comprehensive critical analysis. Exhibits intellectual independence, good judgment and adaptability.
<p>Referencing, grammar, and writing</p> <p>Spelling, grammar, sentence construction, appropriate use of credible resources.</p> <p>Correct citation of key resources using APA 7 style</p> <p>25%</p>	<ul style="list-style-type: none"> Demonstrates inconsistent use of good quality, credible and relevant resources to support and develop ideas. Grammar and writing style need improvement. Inappropriate referencing style. No introduction and conclusion. 	<ul style="list-style-type: none"> Demonstrates use of credible resources to support and develop ideas, but they are not always explicit or well developed. Grammar and writing style are satisfactory. There are a lot of mistakes in the referencing style. Introduction and conclusion provided, but they are not clear. 	<ul style="list-style-type: none"> Demonstrates use of credible resources to support and develop ideas. Grammar and writing style are good. There are a few mistakes in using the right referencing style. Introduction and conclusion provided, with some room for improvement. 	<ul style="list-style-type: none"> Demonstrates use of good quality, credible and relevant resources to support and develop arguments and statements. Grammar and writing style are very good. There are some minor mistakes in using the required referencing style. Introduction and conclusion are clear, and interesting for the reader. 	<ul style="list-style-type: none"> Demonstrates use of high quality, credible and relevant resources to support and develop arguments and position statements. Grammar and writing style are excellent. Correct usage of referencing style. Introduction and conclusion are excellent.