

**DEPARTMENT OF INFORMATION TECHNOLOGY**

ICT50220 Diploma of Information Technology

Assessment

**ICTNWK562 Configure Internet Gateways**

Assessment Task 3

2022

Name: WangYiZhuo\_\_ Student ID:S1554654

**Course:** ICT50220 Diploma of Information Technology

**Unit of competency:** ICTNWK562 Configure Internet Gateways



Prepared by: Curriculum Unit, Melbourne Polytechnic

Document creation date: Nov. 2022

Document review date: Nov. 2022

Version: 1.0

**© Melbourne Polytechnic 2022**

**National Provider no. 3075**

**Acknowledgments**

ICT - Information and Communications Technology Training Package . National training packages attributed as ***‘© Commonwealth of Australia 2013’***

and Victorian Registration & Qualifications Authority (VRQA) training packages are attributed as ***‘© State of Victoria (Department of Education and Training) 2018’***. Training packages are copied and communicated under [Creative Commons Attribution-Non Derivative 3.0 Australia](https://creativecommons.org/licenses/by-nd/3.0/au/) ([CC BY-ND 3.0 AUS](https://creativecommons.org/licenses/by-nd/3.0/au/)) license.

**For information regarding material in this document, contact:**

Uday Vaidya

UdayVaidya @melbournepolytechnic.edu.au

Melbourne Polytechnic

Assessment Task 3: Short Answer Questions

|  |  |
| --- | --- |
| Course code and name | ICT50120 Diploma of Information Technology |
| Unit code and name | ICTNWK562 Configure Internet Gateways |
| Due date | ….. / ….. / ……Week 3 (Students have 1 week to complete this task) |
| Resources required | * Learner resource ICTNWK562 * Access to computer and internet |
| Decision making rules | All questions must be answered satisfactorily to achieve a satisfactory result for this task. |
| Instructions | **Common Instructions**   * This assessment will be conducted using written question method. * It is to be completed in your own time. * You have one week to complete this task. * All questions must be answered. * Sufficient time is provided in class for you to read and review the assessment task and seek clarification on key points prior to undertaking the assessment task. * At this time if you require reasonable adjustments discuss it with the assessor. It is important to ensure the integrity of the assessment is maintained and the intent is not compromised (e.g. extension of time, oral questions and answers etc.). * You must complete the answers electronically and save it as Assessment Task 3 Short Answer Questions Student ID.docx (where Student ID is your student number i.e. s1234567). * Please include Full Name and Student ID in the footer of the answer document. * Submit the saved file in the Assessment Task 3 folder Melbourne Polytechnic Learning Management System. * You must agree (via an ‘I confirm’ radio button) with the assessment submission terms and condition in Melbourne Polytechnic LMS prior to the submission. |

## Questions & Answers

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | List 2 methods to conduct ISP network security and speed tests. [50 -60 words] | | |
|  | Answer | Satisfactory | Unsatisfactory |
| 1 | 2 methods to conduct ISP network security and speed tests |  |  |
| 2 methods to conduct ISP network security and speed tests   1. Conduct a scan using Nessus Professional vulnerability scanning software 2. Conduct a scan using the OpenVAS vulnerability scanner 3. Use a speed test website for testing, such as the University of Science and Technology of China speed test site at <http://test.ustc.edu.cn/> 4. Use an app for speed testing, such as "One-Click Speed Test.APP" | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| 2 | What are the functions and features of security practices for ISP network protection? [50–60 words] | | |
|  | Answer | Satisfactory | Unsatisfactory |
|  | Functions and features of security practices for ISP network protection |  |  |
| 1. China Telecom employs multiple measures to protect local network operations such as information reading and writing, preventing threats like viruses, unauthorized access, denial of service attacks, and illegal occupation of network resources, ensuring the reliability of network installation. 2. China Telecom possesses mature technology that is safe, stable, and reliable. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| 3 | What are the troubleshooting procedures for logical gateway and network router connection? [80–100 words] | | |
|  | Answer | Satisfactory | Unsatisfactory |
|  | Troubleshooting procedures for logical gateway and network router connection |  |  |
| 1. To troubleshoot hardware issues, you can check the logs: the router can detect hardware faults during startup and will record them in the system startup log for future reference. 2. Check if the system has been subjected to network attacks, such as DOS attacks, which could cause the router to become unresponsive. 3. Unexpected errors made by engineers during network configuration can lead to network failures under certain conditions. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| 4 | What are the key security maintenance procedures, including ethical hacking? [50–100 words] | | |
|  | Answer | Satisfactory | Unsatisfactory |
|  | Key security maintenance procedures |  |  |
| 1. Ensuring physical security is crucial, and it may require engineers to manage the physical security of server rooms and network equipment. 2. Additionally, setting up whitelists can enhance access filtering. 3. Implement security measures such as installing antivirus software, monitoring programs, and anti-tampering programs, and closing ports on services that might pose a threat. | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| 5 | What are the organisational policies and procedures and legislative requirements relating to work tasks in China? [50–100 words] | | |
|  | Answer | Satisfactory | Unsatisfactory |
|  | Organisational policies and procedures and legislative requirements relating to work tasks in China |  |  |
| 1. The state implements measures to monitor, defend, and address cybersecurity risks and threats originating from within and outside the People's Republic of China. It aims to protect critical information infrastructure from attacks, intrusions, disruptions, and destruction, while legally punishing cybercriminal activities and maintaining cybersecurity and order in cyberspace. 2. Network operators conducting business and service activities must comply with laws and administrative regulations, respect social ethics, adhere to commercial ethics, maintain honesty and integrity, fulfill cybersecurity obligations, accept government and social supervision, and assume social responsibility. 3. When building, operating networks, or providing services through networks, entities must follow the provisions of laws, administrative regulations, and mandatory national standards. They should adopt technical and other necessary measures to ensure network security and stable operation, effectively respond to cybersecurity incidents, prevent cybercriminal activities, and maintain the integrity, confidentiality, and availability of network data. | | | |

## Student Declaration

|  |  |  |  |
| --- | --- | --- | --- |
| Please read, tick and sign below | | | |
| * I declare that the attached assessment I have submitted is my own original work and any contributions from and references to other authors are clearly acknowledged and noted. * This document has been created for the purpose of this assessment only and has not been submitted as another form of assessment at Melbourne Polytechnic or any other tertiary institute. * I have retained a copy of this work for my reference in the event that this application is lost or damaged. * I give permission for Melbourne Polytechnic to keep, make copies of and communicate my work for the purpose of investigating plagiarism and/or review by internal and external assessors. * I understand that plagiarism is the act of using another person’s idea or work and presenting it as my own. This is a serious offence and I will accept that penalties will be imposed on me should I breach Melbourne Polytechnic’s plagiarism policy. | | | |
| Student Signature | WangYiZhuo | Date | 9\_8\_2024 |
| Please note that your assignment will not be accepted unless you have:   * Completed all sections of the assignment * Acknowledged all sources of other people’s contributions including references and Students’ names for group work assessments * Completed all areas of this Student assignment cover sheet. | | | |