

# Specification of Competency Standards for ICT Operation and Support

## Unit of Competency

### Functional Area: Network Support

Title	Configure WAN connection
Code	107883L3
Range	This unit of competency applies to IT support personnel who are responsible to configure the organisation's internal network to connect and communicate with the external Wide Area Network (WAN) or be connected to the Internet. The configuration will involve configuring the organisation's routers as well of internal hosts. Hosts in this UoC can be user client devices (PCs, mobile devices, tablets, wireless APs, etc.) or servers.
Level	3
Credit	3
Competency	<p>Performance Requirements</p> <ol style="list-style-type: none"> <li>1. Knowledge for configuring WAN connection: <ul style="list-style-type: none"> <li>• Possess good literacy skills to interpret network diagram/plan, technical documents, equipment manuals and specifications</li> <li>• Possess basic network installation and configuration skills</li> <li>• Possess good knowledge of internetworking devices</li> <li>• Possess detailed knowledge of the TCP/IP protocol</li> <li>• Possess good problem solving skill</li> <li>• Possess basic knowledge of organisation guideline and safety procedures for handling electrical devices</li> </ul> </li> <li>2. Configure WAN connection <ul style="list-style-type: none"> <li>• Prepare the readiness of the internal network to connect with the WAN, including the following: <ul style="list-style-type: none"> <li>• Comprehend the organisation network plan and architecture, including: <ul style="list-style-type: none"> <li>• Number of internal subnets</li> <li>• Routing settings of each subnet</li> <li>• De-Militarised Zone (DMZ) information</li> <li>• Load balancing for multi WAN connections</li> </ul> </li> <li>• Acquire and install router as per required by manufacturer</li> <li>• Acquire internal network settings from network administrator and configure into the router</li> </ul> </li> <li>• Liaise with WAN service provider to confirm switch-over date and WAN connection to be installed</li> <li>• Determine connection type (static IP or DHCP assigned) and configure with reference to the organisation's network plan. For static IP address connection to the WAN, acquire the network setting from service provider</li> <li>• Configure and test router with the given WAN IP address</li> <li>• Test the internal and external connection to ensure traffic can flow on both directions</li> <li>• Configure and test host connections</li> <li>• Document the installation and configuration details according to the organisation guideline and standards</li> </ul> </li> <li>3. Exhibit professionalism <ul style="list-style-type: none"> <li>• Adhere to the organisation's occupational safety procedure</li> <li>• Well converse with industry's networking best practices</li> </ul> </li> </ol>

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Assessment Criteria	The integrated outcome requirements of this UoC are the abilities to: <ul style="list-style-type: none"><li>• Liaise with WAN service providers to coordinate the cabling and installation of WAN modems into the premises that conform to the network diagram/plan</li><li>• Configure and test router connection with the WAN connection</li><li>• Configure all hosts of the internal network to enable them to communicate via the WAN connection</li></ul>
Remark	