

Specification of Competency Standards for ICT Operation and Support

Unit of Competency

Functional Area: Network Support

Title	Troubleshoot network issues
Code	107884L3
Range	This unit of competency applies to junior IT personnel who are involved with troubleshooting network issues while in a network supporting role. These junior IT personnel is expected to troubleshoot operational wireless and wired network problems, such as device connection issues, software configuration issues, and network component failure issues. For this UoC devices could be: personal computers, notebooks, tablets, smartphones, internetworking components such as routers, switches, etc.
Level	3
Credit	3
Competency	<p>Performance Requirements</p> <p>1. Knowledge to troubleshoot network issues:</p> <ul style="list-style-type: none">• Possess good communication and interpersonal skills• Possess good network troubleshooting skills• Possess basic knowledge of different network technologies• Have good understanding of network components and their functions• Possess good knowledge of how to acquire technical information from manuals, colleagues and Internet• Possess good knowledge in operating network testing equipment

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Competency	<p>2. Troubleshooting network issues</p> <ul style="list-style-type: none">• Acquire details of network issues from problem reports or by communicating with users to understand symptoms of network issues• Attempt to reproduce the network issues on user's client device or network component, if possible• For wired network connection issues<ul style="list-style-type: none">• Inspect for loose cabling on the network devices, network clients, and network components. Reconnect and secure cables• Use cable testing equipment to test cable to ensure it is still functioning• For wireless connection issues<ul style="list-style-type: none">• Determine where the issues lie, at wireless client or Access Point side<ul style="list-style-type: none">• Verify the wireless access point is functioning using other devices or clients• Verify the wireless connection setting and the correct password is used at the client side• For software configuration issues<ul style="list-style-type: none">• Acquire network settings from network administrator• Verify the software configuration setting matched the network settings. Reconfigure if necessary• For network component issues<ul style="list-style-type: none">• Verify the device is receiving power<ul style="list-style-type: none">• Perform visual check if power cable is connected• Verify power adapter of the device is working and securely connected• Verify the device's power is on• Verify the device configuration setting is correct• Verify the device is transmitting and receiving signals• Document all troubleshooting activities and record all findings. Also complete problem report in accordance with the organisation's guidelines and procedures <p>3. Exhibit professionalism</p> <ul style="list-style-type: none">• All troubleshooting activities and preparation of documents were performed in accordance with organisation guidelines and standards• Follow the organisation's occupational health and safety guidelines and procedures when working with network equipment
Assessment Criteria	<p>The integrated outcome requirements of this UoC are the abilities to:</p> <ul style="list-style-type: none">• Prepare sufficiently for the troubleshooting job• Systematically perform troubleshoot tasks and find the network issues• Follow procedures and be able to prepare documents and complete problem reporting in accordance with organisation standard
Remark	