



Australian Government

Department of Education, Employment and Workplace Relations

ICANWK304A Administer network peripherals

Release: 1

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Modification History

Release	Comments
Release 1	This Unit first released with <i>ICAI1 Information and Communications Technology Training Package version 1.0</i>

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to manage an environment of networked peripheral devices, in order to provide services to client users.

Application of the Unit

This unit applies to frontline technical support personnel responsible for connecting, maintaining and administering peripheral devices attached to networks.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Element	Performance Criteria
<i>Elements describe the essential outcomes of a unit of competency.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.</i>

Elements and Performance Criteria

<p>1. Install peripherals to a network</p>	<p>Plan the location of <i>peripherals</i> to provide appropriate services to <i>users</i> and to take into consideration <i>OHS standards</i></p> <p>Connect peripherals to <i>network</i>, using vendor-approved method and technology</p> <p>Connect peripherals to computers in the network using parallel, serial or other direct connection methods</p> <p>Add peripheral accessories or upgrades to <i>printer</i>, such as memory or high-volume paper trays</p> <p>Test peripherals for correct operation</p>
<p>2. Configure peripheral services to manage peripherals</p>	<p>Install <i>software</i> required to manage local and network-connected peripherals</p> <p>Use meaningful names for peripherals and control queues</p> <p>Configure security and access to allow appropriate users to make use of peripherals</p> <p>Configure workstation for peripherals to allow <i>applications</i> to work with peripherals</p>
<p>3. Administer and support peripheral services</p>	<p>Assign priority to control queues</p> <p>Use peripheral management software supplied as part of the <i>network operating system</i> (NOS) or by third parties</p> <p>Create templates for use on the network</p> <p>Configure settings on the network to create maintenance schedules, usage logs, and cost-centre usage statistics</p> <p>Demonstrate to the user the methods for using peripheral services from their application or workstation</p>
<p>4. Maintain peripherals and fix common problems</p>	<p>Establish and follow a regular maintenance schedule as recommended by peripheral manufacturer</p> <p>Replace <i>consumables</i> and <i>components</i> when required</p> <p>Fix peripheral mishaps and malfunctions</p> <p>Monitor peripheral usage and traffic and recommend additional peripherals if needed</p> <p>Determine failures of peripheral services or devices and rectify as required</p>

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- analytical skills to determine failures of peripheral services or devices
- communication skills to:
 - demonstrate use of peripheral services to users
 - discuss network issues with clients and team members
 - educate users about the causes of network problems and how to minimise their recurrence
 - liaise with clients and team members across different levels and in different contexts
- literacy skills to:
 - follow a regular maintenance schedule as recommended by peripheral manufacturer
 - use meaningful names when configuring the peripheral device's name or new profile
- planning skills to plan the installation of peripherals
- problem-solving skills to:
 - fix peripheral mishaps and malfunctions
 - rectify failures of peripheral services or devices
- technical skills to:
 - administer peripheral services
 - configure network settings
 - configure security and access for users
 - install software
 - replace components
 - test peripherals for correct operation
 - use peripheral management software
 - use the peripheral device's logging or monitoring features to monitor the health of the peripheral.

Required knowledge

- configuration of peripherals for network use
- current industry standard network peripherals
- general construction and operation of peripheral devices to facilitate troubleshooting.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of the ability to:</p> <ul style="list-style-type: none"> • plan and install peripherals, and connect to network and test operation • manage the use of peripheral services with workstations • maintain networked peripherals according to a maintenance schedule • rectify faulty peripheral services or devices.
Context of and specific resources for assessment	<p>Assessment must ensure access to:</p> <ul style="list-style-type: none"> • range of peripherals • network administration tools • live network with a representative range of networked client server environments and operating systems • technical records, organisational policies and documentation • appropriate learning and assessment support when required • modified equipment for people with special needs.
Method of assessment	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> • direct observation of candidate: <ul style="list-style-type: none"> • managing the use of peripheral services with workstations • rectifying faulty peripherals • maintaining networked peripherals • verbal or written questioning to assess candidate's knowledge of networked peripherals • review of network peripheral entries prepared by candidate.
Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, where appropriate.</p> <p>Assessment processes and techniques must be culturally appropriate, and suitable to the communication skill level, language, literacy and numeracy capacity of the candidate and the work being performed.</p> <p>Indigenous people and other people from a non-English speaking</p>

	<p>background may need additional support.</p> <p>In cases where practical assessment is used it should be combined with targeted questioning to assess required knowledge.</p>
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Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><i>Peripherals</i> may include:</p>	<ul style="list-style-type: none"> • Bluetooth device • Firewire (IEEE 1394) device • keyboard • laptop • mobile phone • modem • mouse • multimedia kit • pen • personal digital assistant (PDA), such as palmtop • printer • scanner • speaker • tape cartridge • touch pad • universal serial bus (USB) device • wireless fidelity (wi-fi) router.
<p><i>Users</i> may include:</p>	<ul style="list-style-type: none"> • departments within an organisation • persons within a department • third parties.
<p><i>OHS standards</i> may include:</p>	<ul style="list-style-type: none"> • electrical safety • ergonomics in the workplace: <ul style="list-style-type: none"> • correct posture • style and adjustments of chair • type of desk • type of monitor • working position • length of time in front of computer • lighting level • placement of light fittings • repetitive strain injury (RSI) prevention • safe lifting methods • ventilation.

Network may include:	<ul style="list-style-type: none"> • data • local area network (LAN) • private lines • the internet • use of the public switched telephone network (PSTN) for dial-up modems only • voice • virtual private network (VPN) • wide area network (WAN).
Printer may include:	<ul style="list-style-type: none"> • ink jet • laser • network.
Software may include:	<ul style="list-style-type: none"> • application • commercial • customised • in-house • programming: <ul style="list-style-type: none"> • assembler • compiler • development tools • system: <ul style="list-style-type: none"> • computer security • device drivers • operating system.
Applications may include:	<ul style="list-style-type: none"> • database programs • email programs • internet browsers • spreadsheets • system browsers • word-processing.
Network operating system may include:	<ul style="list-style-type: none"> • Linux • Mac • multi-user capability operating system • Novell NetWare 5 or above • Windows 2000 or above.
Consumables may include:	<ul style="list-style-type: none"> • disks: <ul style="list-style-type: none"> • CD • DVD • ink cartridges • toner cartridges.

Components may include:	<ul style="list-style-type: none">• CD and DVD drives• central processing unit (CPU)• complementary metal oxide semiconductor (CMOS) battery• fax or modem cards• interface cards• motherboards• motherboards• power supply• random access memory (RAM).
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Unit Sector(s)

Networking