



Australian Government

Department of Education, Employment and Workplace Relations

BSBITB501A Establish and maintain a workgroup computer network

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor	<p>This unit describes the performance outcomes, skills and knowledge required to establish a workgroup computer network with an information technology consultant and to manage the network by keeping records, responding to problems, assisting users and providing training.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.</p>
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Application of the Unit

Application of the unit	<p>This unit applies to individuals employed in a range of work environments who are required to apply broad knowledge of computer networks; they may be responsible for installing and maintaining the network, but they will work closely with computer professionals in all aspects of this process. In doing so, they may provide administrative support within an enterprise, or may have been delegated these responsibilities for their workgroup or organisation.</p>
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Manage establishment of a workgroup network	1.1. Determine current and anticipated future network requirements with nominated person in accordance with organisational policy and budgetary constraints 1.2. Ensure selected network is compatible with current organisational software, hardware and work practices 1.3. Obtain and install equipment in accordance with organisational requirements and manufacturers' instructions 1.4. Install software in accordance with organisational requirements and the manufacturers' instructions 1.5. Ensure establishment of network promotes efficiency and access for users
2. Manage maintenance of a workgroup network	2.1. Establish and maintain records to ensure control and security of hardware and software stock, in accordance with organisational policy and procedures 2.2. Respond to network problems and rectify minor faults in accordance with organisational requirements 2.3. Report major problems and consult computer experts in accordance with organisational policy and procedures 2.4. File and store software in accordance with organisational procedures 2.5. Recommend improvement suggestions for the network to appropriate personnel
3. Assist and train network users	3.1. Provide training for staff in using the network in accordance with needs 3.2. Assist network users to maximise network potential 3.3. Examine user skills and provide access to appropriate training to improve individual and workgroup efficiency of network use

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- communication skills to follow complex oral instructions when using new technology, to respond to a complex enquiry or complaint and to give complex instructions
- literacy skills to read and interpret complex technical procedures, and to clarify purchasing information on software and hardware for workgroup computer network
- research skills to seek information on the most appropriate hardware and software to suit the organisation's needs
- problem-solving skills to identify the best course of action if a difficulty arises in operating the workgroup network
- teamwork skills to work with others to ensure the success of the network.

Required knowledge

- features of computer networking
- key provisions of relevant legislation from all forms of government, codes and standards that may affect aspects of business operations, such as:
 - anti-discrimination legislation
 - ethical principles
 - codes of practice
 - privacy laws
 - copyright
 - occupational health and safety
- organisational policies and procedures relating to the tasks required
- software licensing rights and responsibilities.

Evidence Guide

EVIDENCE GUIDE	
<p>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.</p>	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> • applying principles of computer networking • identifying and addressing common problems and arising issues • consulting and negotiating with IT professionals.
Context of and specific resources for assessment	<p>Assessment must ensure:</p> <ul style="list-style-type: none"> • access to office equipment and networked computers • access to software.
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 questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate • review of authenticated documents from the workplace or training environment • demonstration of techniques.
Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> • other information and communications technology units.

Range Statement

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.

<i>Network requirements</i> may include:	<ul style="list-style-type: none"> • hardware, mainframes, servers • internal/external maintenance • memory size • necessary skills and knowledge • scalability • set up needs • software, operating system, application packages, programming • virus scanners, security requirements
<i>Nominated person</i> may include:	<ul style="list-style-type: none"> • external consultant • IT department or section • IT manager • management • service provider • supervisor • system users
<i>Equipment</i> may include:	<ul style="list-style-type: none"> • computers, hardware, peripherals • modem • server, software
<i>Software</i> may include:	<ul style="list-style-type: none"> • accounting • anti-virus • database • internet • organisation specific software • page layout • printer • spreadsheet • word processing
<i>Efficiency and access for users</i> may include:	<ul style="list-style-type: none"> • clear instructions or guidelines, user guides • easy to use • eliminates or minimises duplication in electronic storage of information

RANGE STATEMENT	
	<ul style="list-style-type: none"> • ensures accuracy and security of data • firewalls • gateways • improves reporting processes • logical set up • maximises access to information • multiple users • reduces processing time • security needs • timely training
Records may include:	<ul style="list-style-type: none"> • asset register • details of software licences, locations of software within organisation • file register • index cards • inventory lists • log books • requisition forms
Control and security may include:	<ul style="list-style-type: none"> • allocation of folders and sub-folders • limited number of users, limited time period for usage • monitoring stock level • restricted and authorised access • storage conditions and requirements • use of passwords and log-ins
Network problems may include:	<ul style="list-style-type: none"> • damaged cabling • human error • memory full • server crashing • virus
Rectifying minor faults may include:	<ul style="list-style-type: none"> • anti-virus software • clearing memory space • reloading software • repairing or replacing parts • resetting server
Computer experts may include:	<ul style="list-style-type: none"> • computer service centre • external consultant • IT supervisor or manager • online help • supplier and manufacturer

RANGE STATEMENT	
<i>Filing and storing software</i> may include:	<ul style="list-style-type: none"> • archiving • creating back-up copy • external storage • file register, electronic or paper-based • fire proof , heat proof , humidity proof storage • organisation records room • organisation storeroom
<i>Training</i> may include:	<ul style="list-style-type: none"> • expert demonstration • information sessions • one-on-one • workshops
<i>Network users</i> may include:	<ul style="list-style-type: none"> • organisation personnel • external clients
<i>Maximising network potential</i> may include:	<ul style="list-style-type: none"> • access to information • effectiveness • efficiency • multiple users • reporting facilities • usefulness
<i>Examining user skills</i> may include:	<ul style="list-style-type: none"> • observing • surveying • testing and assessment

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Information and Communications Technology - IT Building and Implementation
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Co-requisite units

Co-requisite units		