



Australian Government

Department of Education, Employment and Workplace Relations

ICANWK412A Create network documentation

Release: 1

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Modification History

Release	Comments
Release 1	This Unit first released with <i>ICA11 Information and Communications Technology Training Package version 1.0</i>

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to determine network requirements, and produce and evaluate appropriate network documentation.

Application of the Unit

This unit applies to the development of appropriate network documentation and is relevant to job roles, such as network administrator, network technician and network support.

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

1. Determine network documentation requirements	1.1 Consult with appropriate personnel 1.2 Identify network documentation standards 1.3 Define network configuration 1.4 Develop naming standards and labelling schemes 1.5 Develop network addressing scheme and verify, using calculations
2. Design network diagrams and checklists	2.1 Identify network software mapping tools 2.2 Use network software mapping tools to design network diagrams 2.3 Develop plans and checklists 2.4 Develop manuals
3. Produce network documentation	3.1 Validate documentation structure with appropriate personnel 3.2 Produce network diagrams 3.3 Produce network plans and checklists 3.4 Produce procedure and policy manuals 3.5 Prepare documentation for publication
4. Complete network documentation	4.1 Check network documentation with appropriate personnel 4.2 Select appropriate media 4.3 Publish network documentation 4.4 Record and store essential network documentation 4.5 Notify appropriate personnel of the completed network documentation

Required Skills and Knowledge

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

Required skills

- communication skills to liaise with internal and external personnel on technical, operational and business-related matters
- literacy skills to develop network documentation maintain records in required formats
- numeracy skills to interpret technical data
- planning and organisational skills to plan, prioritise and monitor own work
- research skills to gain and maintain current industry technical knowledge
- technical skills to:
 - apply network design methodologies
 - determine organisational requirements
 - identify the technical requirements, constraints and manageability issues for a given organisational network
 - use appropriate software tools.

Required knowledge

- open systems interconnect (OSI) layered communication model
- overview knowledge of network requirements related to:
 - applications
 - life cycles
 - manageability
 - quality of service
- network design concepts related to:
 - financial constraints
 - network topologies
 - organisation requirements
 - physical constraints
 - security issues.

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	Evidence of the ability to: • determine client requirements • design network documentation according to standards • produce network documentation according to design specifications.
Context of and specific resources for assessment	Assessment must ensure access to: • relevant network documentation • legislation and standards documentation • industry codes of practice • appropriate learning and assessment support when required. Where applicable, physical resources should include equipment modified for people with special needs.
Method of assessment	A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit: • direct observation of the candidate developing and producing network documentation • review of documents that detail design and development • verbal or written questioning to assess required knowledge.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, where appropriate. 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. Indigenous people and other people from a non-English speaking background may need additional support. In cases where practical assessment is used it should be combined with targeted questioning to assess required knowledge.

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>Appropriate personnel</i> may include:	• customer • manager • network manager • supervisor.
<i>Network configuration</i> may include:	• file systems • hardware • protocols • servers • users • wired • wireless • workstations.
<i>Naming standards</i> may include:	• abbreviations • consistency • generated • geography • host names • legal and special characters • location • name length • parse • platform • theme • usage type.
<i>Labelling schemes</i> may include:	• cabling • hardware.
<i>Network addressing scheme</i> may include:	• dynamic • static • subnet.
<i>Calculations</i> may include binary:	• conversion • division • multiplication • number system

	• subtraction.
Software mapping tools may include:	• commercial • open source • vendor.
Network diagrams may include:	• logical • network • physical • structure • topology.
Plans and checklists may include:	• installation • network plans • OSI reference • patches • pre-installation • test plans • updates.
Manuals may include:	• forms • hardware • maintenance • policy • procedure • security • servicing • technical • user.
Media may include:	• document • online • paper • web page.

Unit Sector(s)

Networking