



Australian Government

ICTNWK305 Install and manage network protocols

Release: 1

ICTNWK305 Install and manage network protocols

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to install and manage network protocols in a networking environment.

It applies to individuals with competent information and communications technology (ICT) skills, working as network administrators who are required to ensure that appropriate protocols have been installed in networks to allow user functionality and maintenance.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Networking

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Install and manage network protocols	1.1 Select, test and validate appropriate network protocol services 1.2 Design a network addressing system, with subnet and host IDs, including appropriate devices 1.3 Configure hosts and workstations to use IP addresses either manually or through automatic allocation of addresses, such as found with dynamic host configuration protocol (DHCP)
2. Identify network protocol applications	2.1 Review a range of well-known network protocol applications 2.2 Evaluate client user requirement and recommend network protocol services 2.3 Apply internet protocol (IP) addressing scheme according to

ELEMENT	PERFORMANCE CRITERIA
	approved policy and procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.2, 2.3	Recognises and interprets textual information, including technical manuals, to establish the job requirements
Writing	2.2	Uses specific and relevant language to document new file systems, user access and disaster recovery procedures
Oral Communications	2.2	- Articulates clearly using specific and relevant language suitable to audience to convey requirements - Uses listening and questioning techniques to confirm understanding
Navigate the world of work	2.3	- Complies with explicit organisational policies and procedures - Ensures knowledge of legislative requirements and products is kept up to date
Get the work done	1.1-1.3, 2.1	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency, and considering how to link with the work of others - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Initiates standard procedures when developing and refining configuration protocols

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK305 Install and manage network protocols	ICANWK305A Install and manage network protocols	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTNWK305 Install and manage network protocols

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Performance Evidence

Evidence of the ability to:

- configure, test and validate network protocols in order to facilitate interconnectivity
- install and manage network protocols in a network, and troubleshoot problems.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe the client business domain, including client organisation structure and business functionality
- list current communications technologies and their associated protocols
- outline current industry accepted hardware and software products, and general features and capabilities
- summarise network protocols currently in use in the organisation and industry, including:
 - transmission control protocol
 - internet protocol (TCP/IP)
 - OSI models
- clarify the vendor product range and development directions
- describe how network protocols transcend organisational size and network complexity.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- a live network

- application software and operating system
- appropriate learning and assessment support when required
- networked computers
- organisational guidelines
- technical documentation and installation manuals
- vendor software.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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