



Australian Government

ICTNWK311 Install and test network protocols

Release: 2

ICTNWK311 Install and test network protocols

Modification History

Release	Comments
Release 2	This version first released with ICT Information and Communications Technology Training Package Version 8.0. Removal of 'Writing' skill removed from Foundation Skills.
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 6.0.

Application

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

It applies to individuals with Information and Communications Technology (ICT) skills, who are required to provide network support 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. Prepare to install network protocols	1.1 Determine network protocol, user and task requirements 1.2 Select network protocol applications according to task requirements 1.3 Determine network protocol services according to task requirements 1.4 Design network addressing system according to protocol and task requirements
2. Install network	2.1 Install and validate network protocol services according to task

ELEMENT	PERFORMANCE CRITERIA
protocols	requirements 2.2 Install required network addressing system 2.3 Apply internet protocol (IP) addressing scheme according to user needs and organisational policies and procedures 2.4 Configure IP addresses on hosts and workstations
3. Test network protocols	3.1 Test and validate network protocols according to user requirements 3.2 Seek and respond to network protocol performance feedback 3.3 Store unused ICT equipment and dispose of redundant ICT equipment according to manufacturer specifications and organisational procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Learning	Ensures knowledge of legislative requirements and products is kept up to date
Reading	Recognises and interprets textual information, including technical manuals to establish the job requirements
Oral Communications	Uses listening and questioning techniques to articulate information and task requirements using succinct verbal language
Self-management	Identifies roles and responsibilities for task and makes decisions on work completion parameters in accordance with organisational procedures, WHS and environmental guidelines
Technology	Identifies the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks

Unit Mapping Information

Supersedes and is equivalent to ICTNWK305 Install and manage network protocols.

Links

Companion Volume Implementation Guide is found on VETNet -

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

Assessment Requirements for ICTNWK311 Install and test network protocols

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- configure, test and validate network protocols in order to facilitate interconnectivity on at least one occasion
- install and manage network protocols in a network and troubleshoot problems on at least one occasion.

In the course of the above, the candidate must:

- adhere to work health safety (WHS) requirements according to organisational policies and procedures.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- business domains, including the organisational structure and business functionality of the network
- user needs, manufacturer specifications and organisational policies and procedures
- network protocol required to install and manage network protocols
- required communications technologies and their associated protocols
- industry accepted hardware and software products, and general features and capabilities
- network protocols currently in use in the organisation and industry, including:
 - transmission control protocol
 - internet protocol (TCP/IP)

- OSI models
- vendor product range and development directions
- network protocols transcend organisational size and network complexity.

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

- a live network
- application software and operating system
- networked computers
- organisational guidelines
- technical documentation and installation manuals
- vendor software
- work health and safety (WHS) guidelines, policies and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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