



Australian Government

ICTNWK429 Install hardware to networks

Release: 1

ICTNWK429 Install hardware to networks

Modification History

Release	Comments
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 plan, manage and install new hardware components in a network.

It applies to individuals involved in technical Information and Communications Technology (ICT) support roles, including network administrators who support network hardware in a peer-to-peer or client-server networked environment.

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. Determine network hardware requirements	1.1 Determine network hardware and cabling requirements for local area network (LAN), wide area network (WAN), wireless networks according to organisational requirements 1.2 Identify any mobile equipment access design limitations according to task requirements 1.3 Determine effectiveness of organisational guidelines, purchasing policies, procedures, licensing arrangements and budget according to organisational requirements
2. Obtain and test network hardware	2.1 Identify technical specifications for required hardware according to task requirements 2.2 Test hardware capability according to organisational and technical requirements

ELEMENT	PERFORMANCE CRITERIA
	2.3 Document recommendations and provide document to required personnel 2.4 Determine and document licensing requirements and security issues according to organisational and industry standards 2.5 Obtain hardware according to recommendations and organisational requirements
3. Install and configure network hardware	3.1 Install hardware according to manufacturer and organisational policies, procedures and guidelines 3.2 Configure and test installation according to manufacturer and task requirements
4. Provide instruction and support for installed products	4.1 Determine and document organisational user instructions and requirements from installed products 4.2 Provide instruction document to required personnel according to organisational requirements 4.3 Seek evaluation and feedback from required personnel

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	Demonstrates an understanding of licensing and security issues relevant to job requirements
Numeracy	Uses mathematical formulas and calculations to estimate and plan costs according to business budgets
Oral Communication	Uses listening and questioning techniques to confirm information and task requirements, communicate ideas and solutions
Writing	Prepares documentation detailing recommendations, requirements and organisational user instruction using cohesive language for intended audience
Technology	Demonstrates and understanding of technical information and organisational procedures to determine job requirements

Unit Mapping Information

Supersedes and is equivalent to ICTNWK410 Install hardware to a network.

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 ICTNWK429 Install hardware to networks

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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:

- evaluate client user requirements and hardware installation for at least one network
- install a range of network hardware by planning, managing and supporting the installation of new components in a network
- document finished process.

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:

- industry, data and voice networking, security products, devices and procedures, including:
 - industry accepted network protocols
 - organisational contracting procedures and responsibilities
 - system diagnostic software
 - industry accepted network hardware and software products
 - hardware and software installation procedures
 - local area network (LAN) capabilities and characteristics, such as network type, internet protocol (IP) addressing, switch or hub operation
 - various features of network connections, including types of cables, cabling distance limitations and wireless connections
 - operating systems sufficient to enable basic installation
 - set-up and configuration procedures
- software packages supported by organisation.

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:

- vendor hardware and software components
- application software and operating system
- hardware maintenance tools
- a live network
- networked computers
- organisational guidelines
- technical documentation and installation manuals.

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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