



Australian Government

ICTNWK410 Install hardware to a network

Release: 1

ICTNWK410 Install hardware to a network

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

It applies to individuals employed in technical information and communications technology (ICT) support roles, such as 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 Assess client network hardware and cabling requirements, considering compatibility with existing application software and operating system 1.2 Analyse requirements against local area network (LAN), wide area network (WAN), wireless networks, and mobile equipment access design limitations and organisational guidelines 1.3 Evaluate client requirements according to organisational guidelines, corporate purchasing procedures, licensing arrangements and budget
2. Obtain network hardware	2.1 Contact vendors and obtain technical specifications 2.2 Evaluate or test hardware according to client requirements and

ELEMENT	PERFORMANCE CRITERIA
	organisational guidelines 2.3 Document recommendations and provide copies to appropriate person 2.4 Determine and document licensing requirements and security issues 2.5 Acquire hardware according to recommendations and organisational procedures 2.6 Organise cabling infrastructure where required
3. Install network hardware	3.1 Conduct installation with minimal disruption to clients 3.2 Install hardware according to appropriate installation procedures 3.3 Configure and test the installation to ensure that it meets client needs
4. Provide instruction and support for installed products	4.1 Determine and document client instructions and needs 4.2 Provide one-to-one or group instruction to client and users as required 4.3 Obtain client evaluation and feedback to ensure that client requirements have been met

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	1.2, 2.2, 2.5	Recognises and interprets licensing and security issues, technical information and organisational procedures to determine job requirements
Writing	2.4, 4.1	Prepares information which incorporates evaluation of information and specialised and cohesive language in a format and style appropriate to a specific audience
Oral Communication	2.1, 2.3, 4.1-4.3	- Uses listening and questioning skills to confirm understanding for requirements - Participates in regular verbal exchanges and uses appropriate, detailed and clear language to address

		key personnel and to disseminate information
Numeracy	1.3	Uses mathematical formulas and calculations to estimate and plan costs according to business budgets
Navigate the world of work	1.2, 1.3, 2.4, 2.5	Appreciates the implications of legal and regulatory responsibilities related to own work
Get the work done	1.1-1.3, 2.2, 2.5, 2.6, 3.1- 3.3	- Determines job priorities, resources and equipment, and works logically and systematically to maintain the continuity of network operations and business functions during network installation tasks - Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Recognises and responds to predictable routine problems related to own role in the immediate work context - Automatically implements standard procedures for routine decisions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK410 Install hardware to a network	ICANWK410A Install hardware to a network	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 ICTNWK410 Install hardware to a network

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Performance Evidence

Evidence of the ability to:

- evaluate client user requirements and hardware installation
- install a range of network hardware by planning, managing and supporting the installation of new components in a network, according to organisational policies and procedures.

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:

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

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:

- 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 must satisfy NVR/AQTF assessor requirements.

Links

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