



Australian Government

ICTNWK303 Configure and administer a network operating system

Release: 1

ICTNWK303 Configure and administer a network operating system

Modification History

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

Application

This unit defines the skills and knowledge required to create the network configuration required by a client and to set up and use administrative tools to manage the network.

It applies to individuals working as frontline technical support personnel who are required to maintain network continuity through changing requirements.

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. Assess network features	1.1 Determine organisational policies and administration arrangements used to administer the network 1.2 Determine the type of network operating system (NOS) and interfaces used by the existing network and potential compatibility issues caused by integration of other networks 1.3 Identify the risks associated with administration of a network to minimise the loss of data or service during operations 1.4 Determine network administration tools that can be used with the NOS to manage network performance and enforce organisational policies

ELEMENT	PERFORMANCE CRITERIA
2. Administer and support the system using administration interfaces	2.1 Use interfaces to format hard drives, set up security restrictions and establish user log-in information to administer a basic network 2.2 Use administration tools to develop a map of system interaction to determine the data required by particular users and how often the data is accessed 2.3 Examine existing applications and software, and plan required upgrades or reconfigurations to new system or applications 2.4 Test reconfiguration for successful interface with existing system to ensure compatibility
3. Set up and manage the network file system	3.1 Create a required file and folder structure using appropriate administration and system tools 3.2 Set the security, access and sharing of file system to meet user requirements 3.3 Identify and implement the virus protection requirements for the network in line with organisational procedures 3.4 Test and document the file system to ensure that appropriate access is available to the user groups according to organisational standards
4. Administer user services and user accounts	4.1 Determine the user services required, and implement using the appropriate administration and system tools 4.2 Create users and groups as required to facilitate user security and network access according to user authorisation 4.3 Verify successful access by users to authorised network data and resources, and record outcomes 4.4 Set or modify user settings to ensure compliance with security and access policies 4.5 Review procedures and take action to ensure that users who are no longer part of the organisation have their accounts disabled, deleted or modified
5. Provide and support backup security	5.1 Scan and clean the network of viruses before performing backup of the network 5.2 Determine security risks to which data is exposed and provide appropriate prevention methods and recovery processes 5.3 Report identified security risks to appropriate person 5.4 Implement systems to provide backup and service

ELEMENT	PERFORMANCE CRITERIA
	restoration capability in the event of a disaster, according to organisational policies 5.5 Document and disseminate the disaster recovery 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	1.1, 1.4, 3.2-3.4, 4.4, 4.5, 5.4	Recognises and interprets information from organisational policies and procedures to establish the job requirements
Writing	3.4, 4.3, 5.5	Uses specific and relevant language to document new file systems, user access and disaster recovery procedures
Oral Communication	5.3	Articulates information clearly using specific and relevant language suitable to audience to convey requirements, and uses listening and questioning techniques to confirm understanding
Navigate the world of work	1.1, 3.3, 5.4	Complies with explicit organisational policies and procedures
Interact with others	5.3, 5.5	Selects the appropriate form, channel and mode of communication for a specific purpose relevant to own role
Get the work done	1.1-1.4, 2.1-2.4, 3.1-3.4, 4.2-4.5, 5.1, 5.2, 5.4	- 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 - May reflect on outcomes and identify what worked, or develop an improved approach for future situations - Initiates standard diagnostic procedures when responding to familiar and unfamiliar problems

		within immediate context and seeks input from others when problems remain unresolved
--	--	--

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK303 Configure and administer a network operating system	ICANWK303A Configure and administer a network operating system	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 ICTNWK303 Configure and administer a network operating system

Modification History

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

Performance Evidence

Evidence of the ability to:

- use network administrative tools to carry out system administration tasks
- manage the network file system
- create the network configuration required by the client
- provide user services and user accounts
- provide backup and service restoration capability.

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 antivirus software, its operation, installation and update procedures
- summarise current industry standard network operating system (NOS)
- outline the facilities available in the operating environment
- describe the features and capabilities of networking technologies
- explain the implementation of network security in a local area network (LAN) including:
 - file and folder permissions
 - users and group settings
- provide a summary of monitoring aspects of network performance or traffic including:
 - system administration tools
 - third-party tools.

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:

- user network requirements
- antivirus software
- network administration tools
- a live network with a representative range of networked environments and operating systems
- a server
- technical records, organisational policies, access policy and documentation.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

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