



Australian Government

ICTNWK309 Configure and administer network operating systems

Release: 1

ICTNWK309 Configure and administer network operating systems

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 create a network operating system and set up and use administrative tools to manage the network.

It applies to individuals who are required to provide frontline technical support to maintain network continuity to a network operating system.

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. Identify and assess network features	1.1 Determine organisational policies and procedures used to administer network operating systems 1.2 Determine interfaces used by organisation's existing network 1.3 Identify potential network integration compatibility issues and risks
2. Administer and support system	2.1 Format hard drives, set up security restrictions and establish user log-in information according to organisational requirements 2.2 Determine organisational data requirements and data access frequency on systems interaction map 2.3 Plan required upgrades and reconfigurations to network

ELEMENT	PERFORMANCE CRITERIA
	operating system according to organisational requirements 2.4 Implement planned upgrades and reconfigurations according to task requirements
3. Set up and manage network file system	3.1 Create file and folder structure according to organisational requirements, policies and procedures 3.2 Set security access and sharing of file system to meet organisational requirements 3.3 Identify and implement required network operating system virus protection
4. Administer user services and user accounts	4.1 Create users and groups required to facilitate user security and network access according to user authorisation and organisational requirements 4.2 Verify successful user access to authorised network data and resources, and documents outcomes
5. Provide backup security support	5.1 Scan and clean network of viruses 5.2 Perform backup of network according to organisational procedures and requirements 5.3 Document processes used and lodge with 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
Reading	Analyses and consolidates technical information and data from a range of sources against defined criteria and requirements
Writing	Prepares documentation describing outcomes and processes using relevant language according to organisational requirements
Oral communication	Uses listening and questioning techniques to articulate information and task requirements using succinct verbal language
Teamwork	- Uses appropriate methods to communicate with a range of stake holders and co-workers across different contexts - Uses a range of strategies to establish a sense of connection and build rapport with clients and co workers
Planning and organising	- Plans own work requirements and prioritises actions to achieve required outcomes - Ensures tasks are completed within workplace timeframes

Unit Mapping Information

Supersedes and is equivalent to ICTNWK303 Configure and administer a network operating system.

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 ICTNWK309 Configure and administer network operating systems

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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, and to:

- set up and manage at least one network operating system.

In the course of the above, the candidate must:

- 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.

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:

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

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:

- industry standard ICT blueprint
- 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 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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