



**Australian Government**

# **ICTNWK557 Configure and manage advanced virtual computing environments**

**Release: 1**

# ICTNWK557 Configure and manage advanced virtual computing environments

## 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 configure and manage advanced virtual computing environments and to provide a more efficient and reliable Information and Communications Technology (ICT) environment.

It applies to senior networking staff who are responsible for increasing the sustainability of an organisation.

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. Configure and manage core virtual networks	<ul style="list-style-type: none"><li>1.1 Plan and design a virtual network according to organisational requirements</li><li>1.2 Configure virtual local area networks (VLANs) and required security and virtual switch (vSwitch) ports</li><li>1.3 Implement required security policies, traffic-shaping and network interface controller (NIC) teaming</li><li>1.4 Manage required distributed vSwitch connections, vSwitch physical and vSwitch storage adapter connections</li><li>1.5 Configure and manage required multiple networks according to organisational requirements</li></ul>

ELEMENT	PERFORMANCE CRITERIA
2. Configure and manage core infrastructure storage and services	<ul style="list-style-type: none"><li>2.1 Obtain vendor provided virtualisation software technical storage specifications and system requirements</li><li>2.2 Plan, design and document core infrastructure storage environment according to organisational requirements</li><li>2.3 Create, configure, manage and secure virtual storage connection according to technical specifications</li><li>2.4 Install and test local and shared data store, data store clusters and resource pools according to technical specifications</li><li>2.5 Configure required provisioning services and templates according to organisational requirements and technical specifications</li></ul>
3. Secure virtual environment	<ul style="list-style-type: none"><li>3.1 Plan and document administrative strategies according to organisational requirements</li><li>3.2 Configure required user roles and administer virtual environment according to organisational requirements and technical specifications</li><li>3.3 Set up and secure required user privileges and permissions</li><li>3.4 Submit documents to required personnel, seek and respond to feedback</li></ul>

## Foundation Skills

*This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.*

SKILL	DESCRIPTION
Learning	<ul style="list-style-type: none"><li>• Monitors the progress of plans and schedules and reviews and changes them, to meet new demands and priorities</li><li>• Investigates new and innovative ideas as a means by which to continuously improve work practices and processes through consultation, formal and analytical thinking</li></ul>
Oral communication	<ul style="list-style-type: none"><li>• Articulates requirements and responsibilities clearly and distinctively, using industry standard technical language intended for audience and environment</li></ul>
Reading	<ul style="list-style-type: none"><li>• Draws on strategies, in order to build and maintain knowledge throughout complex texts</li></ul>
Writing	<ul style="list-style-type: none"><li>• Prepares documentation that expresses ideas, explores complex issues and is constructed logically, succinctly and accurately</li></ul>

SKILL	DESCRIPTION
Planning and organising	<ul style="list-style-type: none"><li>Operates from a broad conceptual plan, developing the operational detail in stages, regularly reviewing priorities and performance during implementation and identifying and addressing issues</li></ul>
Problem solving	<ul style="list-style-type: none"><li>Makes critical decisions quickly and intuitively in complex situations, taking into consideration a range of variables and previous decisions</li><li>Applies systematic and analytical decision-making processes for complex and non-routine situations</li></ul>
Self-management	<ul style="list-style-type: none"><li>Modifies or develops organisational policies and procedures, to comply with legislative requirements and the organisation's goals</li></ul>
Technology	<ul style="list-style-type: none"><li>Uses and investigates, new digital technologies and applications to manage and manipulate data and to communicate effectively with others, in a secure and stable digital environment</li></ul>

## Unit Mapping Information

Supersedes and is equivalent to ICTNWK533 Configure and manage advanced virtual computing environments.

## Links

Companion Volume Implementation Guide is found on VETNet -

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