



Australian Government

ICTNWK527 Manage an enterprise virtual computing environment

Release: 1

ICTNWK527 Manage an enterprise virtual computing environment

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 manage virtualisation technologies, with the goal of providing a more sustainable information and communications technology (ICT) environment.

It applies to individuals with excellent communication skills responsible for managing virtualisation technologies.

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. Manage resources	1.1 Monitor and adjust resources, to ensure virtual environment performance functions according to enterprise requirements 1.2 Verify the functionality of the virtual environment
2. Manage virtual machines	2.1 Use migration tools to convert a physical machine to a virtual machine 2.2 Select the appropriate deployment methods for a virtual machine 2.3 Create and deploy a virtual machine, using installation media

ELEMENT	PERFORMANCE CRITERIA
	2.4 Create and deploy a virtual machine, using automated templates 2.5 Use virtual machine snapshots to reverse, or implement, changes to a virtual machine
3. Ensure high availability	3.1 Plan and design a strategy, to ensure high availability of the virtual environment 3.2 Identify and select suitable resources for high availability implementation, according to the enterprise requirements 3.3 Configure the virtual machine environment to ensure high availability 3.4 Configure the virtual machine environment to provide live migration 3.5 Plan and design a backup strategy 3.6 Back up, and recover, a virtual machine using and integrating third-party tools

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, 1.2, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2	Gathers, interprets and analyses technical and organisational data to determine requirements, according to client needs
Writing	1.2, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.5	- Prepares documentation that expresses ideas and explores complex issues, and is constructed logically, succinctly and accurately - Writes and edits computer code, and technical data, ensuring the correct syntax and accuracy
Oral Communication	1.1, 1.2, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2	- Liaises with clients about operational requirements, using specific and relevant language - Uses listening and questioning techniques to confirm understanding
Navigate the	1.1, 1.2	Takes full responsibility for identifying and considering, the relevant policies and legislative

world of work		requirements in the management of an enterprise's virtual computing environment
Get the work done	1.1, 1.2, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.3, 3.4, 3.6	• Demonstrates a sophisticated understanding of the principles, concepts, language and practices associated with the digital world and understands the uses, and potential, of new technology • May operate from a broad conceptual plan, developing operational detail in stages and regularly reviewing priorities, and performance, during implementation, and identifying, and addressing any issues • Monitors the outcomes of decisions, considering the results from a range of perspectives, and identifying key concepts and principles that may be adaptable in the future • Uses a nuanced understanding of context to recognise anomalies and subtle deviations to normal expectations, focusing attention and quickly remedying any problems as they arise

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK527 Manage an enterprise virtual computing environment	ICANWK527B Manage an enterprise virtual computing environment	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 ICTNWK527 Manage an enterprise virtual computing environment

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Performance Evidence

Evidence of the ability to:

- monitor and provide resources to a virtual environment
- create and deploy virtual machines
- implement changes to virtual machines
- back up and recover a virtual machine.

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:

- identify and describe, current government and industry policies, and guidelines, in relation to the development of sustainable information and communications technology (ICT) environments
- describe the current technologies, and processes, designed to produce a sustainable ICT environment
- define the structure, functions, and business organisation of the client
- summarise the application and deployment of virtual machine management tools
- outline virtual machine configuration and integration options.

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:

- a site or prototype, where virtual machine environments may be implemented
- the network's technical requirements

- the appropriate software.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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