**Australian Government**

# ICTNWK554 Manage enterprise virtual computing environments

**Release: 1**

# ICTNWK554 Manage enterprise 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 manage virtualisation technologies, with the goal of enhancing sustainable Information and Communications Technology (ICT) environments.

It applies to individuals who work in ICT roles where they are 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 |
|---------|----------------------|
| *Elements describe the essential outcomes.* | *Performance criteria describe the performance needed to demonstrate achievement of the element.* |
| 1. Prepare to manage resources | 1.1 Analyse environment and determine organisational virtual computing environment outcome requirements<br>1.2 Test, verify and document required functionality of virtual environment<br>1.3 Determine virtual environment maintenance and upgrades according to organisational requirements and technical specifications<br>1.4 Implement required upgrades and maintenance and restore to organisational requirements |
| 2. Manage virtual machines | 2.1 Convert physical machine to a virtual machine<br>2.2 Select virtual machine deployment methods according to organisational requirements |

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
|  | 2.3 Create and deploy virtual machine and use installation media and automated templates |
|  | 2.4 Deploy virtual machine snapshots and reverse and implement virtual machine changes according to organisational requirements |
| 3. Confirm high availability | 3.1 Plan and design high availability strategy according to organisational requirements |
|  | 3.2 Identify required high availability implementation resources according to organisational and technical requirements |
|  | 3.3 Implement and configure virtual machine environment and confirm high availability and live migration |
| 4. Backup virtual environment | 4.1 Plan and document backup strategy according to organisational and technical requirements |
|  | 4.2 Backup and recover virtual machine and use required integrating third-party tools |
|  | 4.3 Document backup and recovery outcomes and submit to required personnel |
|  | 4.4 Seek and respond to feedback from required personnel |

## 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 | • 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 |
| Oral communication | • Uses listening and questioning techniques to confirm knowledge of requirements to articulate and present complex concepts to the client |
| Reading | • Gathers, interprets and analyses technical and organisational data to determine requirements, according to client needs |
| Writing | • Prepares documentation that expresses ideas and explores complex issues and is constructed logically, succinctly and accurately<br>• Writes and edits computer code and technical data, ensuring the correct syntax and accuracy |
| Planning and organising | • Operates from a broad conceptual plan, developing operational detail in stages and regularly reviewing priorities and performance, during implementation and identifying and addressing any issues |

| SKILL | DESCRIPTION |
|---|---|
| Problem solving | • Recognises anomalies and subtle deviations to normal expectations, focusing attention and quickly remedying any problems as they arise |
| Self-management | • Takes full responsibility for identifying and considering, the required policies and legislative requirements in the management of an enterprise's virtual computing environment |
| Technology | • Identifies and applies complex principles, concepts, language and practices associated with the digital world and understands the uses and potential, of new technology |

# Unit Mapping Information

Supersedes and is equivalent to ICTNWK527 Manage an enterprise virtual computing environment.

# Links

Companion Volume Implementation Guide is found on VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2