



Australian Government

ICTSUS808 Plan and manage virtualisation for ICT sustainability

Release: 1

ICTSUS808 Plan and manage virtualisation for ICT sustainability

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 4.0.

Application

This unit describes the skills and knowledge required to analyse, plan and manage virtualisation and managed services for an organisation in order to improve sustainability.

It applies to individuals who have responsibility for conducting or managing information and communications technology (ICT) infrastructure projects such as network managers, ICT infrastructure managers, network planners and designers, consultants or contractors.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Sustainability

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. Develop plan to implement ICT virtualisation	1.1 Critically analyse current organisational operations and priorities to determine processes and objectives that could be supported by virtualisation technologies 1.2 Research and analyse virtualisation scenarios, including undertaking risk assessments and relative comparisons of each to determine predicted return on investment 1.3 Document results of analysis and form recommendations to create plan for implementation, including prioritisation and sequencing of processes to be virtualised based on organisational priorities 1.4 Finalise recommendations and present implement plan for virtualisation to organisational stakeholders and incorporate

	feedback and agree recommendations
2. Manage deployment of virtual machines	2.1 Produce virtualisation management plan to capitalise using virtual machines according to organisational priorities and implementation plan 2.2 Manage procurement of virtual machines necessary to fulfil the virtualisation management plan 2.3 Manage installation and launch of virtual machines according to virtualisation management plan
3. Manage outsourced services and cloud networks	3.1 Critically analyse ICT organisational requirements to produce cloud architecture, using multiple cloud computing elements indicating layers of cloud client stack 3.2 Produce cost–benefit analysis to determine net impact of decisions related to outsourced services according to cloud architecture 3.3 Analyse deployment model options and select according to organisational requirements 3.4 Establish service level agreement (SLA) with managed services provider or network provider to ensure outsourced responsibilities are specified and agreed to

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	Critically analyses documentation from a variety of sources and records and consolidates information to determine requirements
Writing	Prepares analytical reports, management plans and SLAs, and documents technical requirements and procedures for a diverse range of people in required format
Numeracy	Analyses and confirms capacity and interoperability requirements, calculates cost–benefit analysis
Navigate the world of work	- Works autonomously, making high level decisions to achieve and improve organisational goals - Develops and implements strategies that ensure organisational policies, procedures and regulatory requirements are being met - Monitors and reviews organisational policies, procedures and adherence to legislative requirements to implement and manage change

Get the work done	- Plans strategic priorities and outcomes within a flexible, efficient and effective context, in a diverse environment exposed to competing demands - Gathers and analyses data and seeks feedback to improve plans and processes - Makes high impact decisions in a complex and diverse environment, using input from a range of sources - Explores and incubates new and innovative ideas through unconstrained analysis and critical thinking to develop and improve the organisation's goals - Uses digital technologies to manage organisational operations and actively investigates new technologies for strategic and operational purposes
-------------------	--

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTSUS808 Plan and manage virtualisation for ICT sustainability	ICTSUS801 Plan and manage virtualisation for ICT sustainability	Edits to elements and performance criteria to clarify intent. Updates to Assessment Requirements.	Equivalent unit

Links

Companion Volume Implementation Guides are available from VETNet -

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

Assessment Requirements for ICTSUS808 Plan and manage virtualisation for ICT sustainability

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 4.0.

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements and performance criteria of this unit; including evidence of the ability to:

- Develop one plan for virtualisation including:
 - analysis of existing organisational processes
 - analysis of three virtualisation options and return on investment for each
 - prioritisation and sequencing of processes to be virtualised
- Develop one virtualisation management plan including:
 - procurement and acquisition of virtual machines
 - key performance measures and monitoring processes
 - roles and responsibilities
- Present plan to and communicate with, a group of at least three stakeholders to obtain feedback and generate buy in, on one occasion
- Manage the procurement and deployment of virtual machines in line with the virtualisation management plan on one occasion
- Manage the outsourced services and cloud networks of the above plan including a cost-benefit analysis and service level agreement with managed service provider on one occasion
-

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements and performance criteria of this unit. This includes:

- Approaches and options for using virtualisation to enable sustainability
- Organisational structure and functionality
- Cloud computing architecture
- Compatibility issues and resolution procedures
- Virtualisation technology products, key features, and advantages and disadvantages

- Range of relevant managed services, including software, network and support
- Technologies and other requirements relevant to virtualisation, including:
 - cloud computing
 - power supply requirements and management
 - server design and network architecture
 - set-up and configuration procedures
 - single and multiple processors
 - vendor specifications and requirements for software installation
 - virtual server functionality
 - system diagnostics
 - software simulations
- Key features of a management plan
-

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in an ICT working environment or workplace. This includes access to:

- Individual organisational stakeholders
- Organisational plan including priorities and structure
- Organisational ICT requirements
- Organisational operations documentation, including detailed information on current processes and costs
- Current system requirements and specifications
- Current server virtualisation
- Information on managed services options and costings
- Site and equipment on which servers can be virtualised

Assessors of this unit must satisfy the assessor requirements in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guides are available from VETNet -

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