



Australian Government

ICTSAS445 Configure and troubleshoot operating system software

Release: 1

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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 install, configure, optimise and troubleshoot operating system (OS) software to ensure organisational and client requirements are met.

It applies to experienced individuals who, whilst working under minimal supervision and in an instructional and management capacity, are required to install, configure, optimise and troubleshoot OS system software to meet organisational client requirements.

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

Unit Sector

Systems administration and support

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 suitable operating systems	1.1 Research OS vendor sites, technical specifications and system requirements 1.2 Compare and contrast different OS according to organisational procedures 1.3 Determine licensing, hardware and security requirements 1.4 Determine OS for required operation 1.5 Provide OS recommendation to required personnel
2. Install, configure, test and optimise	2.1 Install OS according to organisational requirements 2.2 Configure OS user interface installation

ELEMENT	PERFORMANCE CRITERIA
operating systems	2.3 Identify directory structures and demonstrate management of virtual memory 2.4 Test OS functions and operations according to organisational procedures 2.5 Optimise OS according to organisational and client requirements 2.6 Document OS installation procedures and functionality according to organisational procedures
3. Resolve operating system problems using command line options and system tools	3.1 Identify command line options and system tools 3.2 Troubleshoot OS problems according to organisational procedures 3.3 Identify and determine OS problem resolution strategies 3.4 Implement OS resolution strategies according to task requirements 3.5 Test OS problem resolution
4. Provide instruction for new operating system implementation	4.1 Confirm resolution of problems with client according to client service policy 4.2 Document changes to OS according to organisational procedures 4.3 Provide one-to-one change instruction to client and users as required 4.4 Obtain OS client evaluation and approval 4.5 Finalise OS change procedures according to organisational procedures

Foundation Skills

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

SKILL	DESCRIPTION
Reading	Researches and analyses technical textual information and numeric data to source solutions and determine required actions
Writing	Uses clear and technical language and formats required to the task to record and convey information, requirements and recommendations

Oral Communication	• Articulates ideas and strategies using effective communication techniques and industry standard technical language intended for audience and environment • Provides instructions to clients on how changes made to operating systems affect the operating system functionality
Initiative and enterprise	• Takes personal responsibility for following explicit and implicit policies, procedures and technical requirements
Teamwork	• Selects and uses required conventions and protocols when communicating with clients and others in a range of work contexts
Problem solving	• Applies analytical processes to resolve technical or conceptual problems
Self-management	• Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes
Technology	• Uses main features and functions of digital tools to complete work tasks

Unit Mapping Information

Supersedes and is equivalent to ICTSAS425 Configure and troubleshoot operating system software.

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 ICTSAS445 Configure and troubleshoot operating system software

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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, including evidence of the ability to:

- install, configure, optimise and troubleshoot two different operating systems, on two separate occasions, each for a different organisation.

In the course of the above, the candidate must:

- improve system performance with minimum disruption to clients
- identify OS problems and resolve using command line options and system tools.

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:

- requirements of different operating systems
- architecture of technical systems
- industry accepted hardware and software products
- functions and features of the OS used by the organisation
- OS resolution strategies, including:
 - command line options
 - system tools
- installation and configuration of systems software including:
 - organisational requirements for OS software
 - prerequisites for system software installation
 - set-up and configuration procedures
 - software packages supported by the organisation
 - system's functionality
 - system's diagnostic software

- vendor specifications and requirements for installation
- organisational procedures, including:
 - OS comparison and contrast methods
 - OS functionality and operation testing
 - OS installation procedure documentation
 - OS troubleshooting procedures
 - OS change documentation
 - OS change procedures.

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 accepted devices where OS installations can be performed
- OS software
- command line options and system tools
- technical documentation
- organisational documentation.

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

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