



Australian Government

ICTSAS426 Locate and troubleshoot ICT equipment, system and software faults

Release: 1

ICTSAS426 Locate and troubleshoot ICT equipment, system and software faults

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 troubleshoot problems and apply systematic processes to fault finding across a wide range of information and communications technology (ICT) disciplines.

It applies to individuals who apply a systematic approach to finding faults, troubleshooting problems and solving issues in a wide range of ICT related areas.

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. Choose the most appropriate fault finding method	1.1 Develop a troubleshooting process to help resolve problems 1.2 Analyse and document the system that requires troubleshooting 1.3 Identify available fault finding tools and determine the most appropriate for the identified problem 1.4 Obtain the required fault finding tools 1.5 Identify legislation, health and safety requirements, codes, regulations and standards related to the problem area
2. Analyse the problem to	2.1 Collect data relevant to the system

ELEMENT	PERFORMANCE CRITERIA
be solved	2.2 Analyse the data to determine if there is a problem and the nature of the problem 2.3 Determine specific symptoms of hardware, operating system and printer problems
3. Identify a solution and rectify the problem	3.1 Formulate a solution and make provision for rollback 3.2 Systematically test variables until the problem is isolated 3.3 Rectify the problem 3.4 Create a list of probable causes of the problem
4. Test system and complete documentation	4.1 Test the system to ensure the problem has been solved and record results 4.2 Identify and implement common preventative maintenance techniques to support ongoing maintenance strategies 4.3 Document the signs and symptoms of the problem and its solution, and load to database of problems or solutions for future reference

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	1.5, 2.1, 2.2	Identifies, analyses and evaluates technical textual information and technical system data to source solutions and determine necessary actions
Writing	1.2, 3.4, 4.1, 4.3	Records specific information relating to issues and outcomes in a sequential manner using correct grammar and spelling
Navigate the world of work	1.5	Identifies and complies with organisational and legislative requirements
Get the work done	1.1-1.5, 2.1-2.3, 3.1-3.4, 4.1-4.3	- Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes - Applies analytical processes to resolve technical or conceptual problems

		• Uses the main features and functions of digital tools to complete work tasks
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Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTSAS426 Locate and troubleshoot ICT equipment, system and software faults	ICASAS426A Locate and troubleshoot IT equipment, system and software faults	Updated to meet Standards for Training Packages. Minor edit to the competency title.	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 ICTSAS426 Locate and troubleshoot ICT equipment, system and software faults

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Performance Evidence

Evidence of the ability to:

- determine the most appropriate fault finding method
- document the troubleshooting process
- analyse and identify faults
- obtain suitable tools and equipment
- apply simple checks, tests and fault finding methodologies
- apply the recommended means to rectify fault and document results.

Note: Evidence must be provided for at least TWO organisations or situations.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain client support and maintenance practices
- identify and describe current industry accepted hardware and software products, including features and capabilities
- discuss the system's current functionality, including details of the proposed system modifications
- describe one or more change management tools
- explain the key features of quality assurance practices with regard to locating and troubleshooting information and communications technology (ICT) equipment, system and software faults
- outline the change control procedures of the organisation
- describe a range of trouble shooting methodologies and system testing tools
- list and describe common symptoms of faulty ICT equipment
- identify and describe legislative, regulatory, standards or codes of practice that impact on the ICT service sector.

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 systems administration and support field of work, and include access to special purpose tools, equipment, materials and industry software packages including:

- system to be diagnosed
- diagnostic and fault finding tools
- technical and system documentation
- organisational requirements for documenting solution.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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