



Australian Government

ICTSAS519 Perform systems tests

Release: 1

ICTSAS519 Perform systems tests

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 ensure that the properties of an entire system are tested and proved adequate before handover to the user for final acceptance testing.

It applies to individuals employed in a range of information and communications technology (ICT) work environments who apply specialised and technical knowledge and systematic approaches to testing, fault finding and problem solving.

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. Prepare for test	1.1 Determine acceptance criteria from system specifications 1.2 Determine and document software life cycle according to system specifications and contact in operations 1.3 Define test plan from acceptance criteria, software life cycle, system specifications and in compliance with organisational testing and acceptance processes 1.4 Notify contact in operations of scheduled tests to understand implications for operations and modify schedule to minimise implications for operations 1.5 Develop test scripts for online test and test run for batch test

	according to test plan 1.6 Prepare test environment and select test tools according to test plan 1.7 Prepare test logs and result sheets according to test plan 1.8 Conduct walk-through with superior to review expected results against acceptance criteria and incorporate feedback
2. Conduct test	2.1 Create clean test environment and initialise test environment according to test plan 2.2 Run test scripts and document results according to organisational testing and acceptance processes and test plan 2.3 Finalise test environment and document completed tests according to test plan and test logs and result sheets. 2.4 Compare and document actual results to expected results for each system unit and complete result sheets
3. Analyse and classify results	3.1 Analyse test results against acceptance criteria to identify variances 3.2 Summarise and classify test results to prepare report highlighting critical and urgent variances 3.3 Notify contact in operations of test completion to communicate implications 3.4 Obtain and incorporate feedback from superior on test results report to finalise report

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	Interprets and analyses a range of textual information and numerical data to determine necessary actions
Writing	- Uses clear language to record and report technical information, and checks for accuracy at all times - Uses writing style and documentation formats appropriate to the task
Oral Communication	Uses clear and accurate language to provide and obtain information relevant to the task
Numeracy	Uses mathematical equations to calculate technical data

	• Accurately records, analyses and documents numerical and technical system data
Navigate the world of work	• Takes full responsibility for following policies, procedures and legislative requirements
Interact with others	• Influences and fosters a collaborative culture and facilitates a sense of commitment and workplace cohesion • Uses communication tools and strategies to build and maintain effective working relationships
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 • Applies systematic and analytical decision making processes for complex and non-routine situations • Addresses complex problems involving multiple variables, using formal analytical, lateral thinking techniques, experience and knowledge to focus in on the root cause

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTSAS519 Perform systems tests	ICTSAS503 Perform systems tests	Edits to 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 ICTSAS519 Perform systems tests

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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:

- Perform two system tests on a system including:
 - develop acceptance criteria
 - develop test plans
 - prepare and initialise a clean test environment
 - test the operation and consistency of the total system prior to delivery according to system specifications, including testing:
 - performance
 - security
 - configuration sensitivity
 - start-up and recovery from failure modes
 - analyse and report test results
 - obtain and act on feedback coming from test results
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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:

- Key features and processes of automated test tools
- Typical procedures for system testing and acceptance
- Implications for organisational operations of system testing activities
- Software life cycles
- Test planning and scheduling
- Test script development
- Test environment preparation

Assessment Conditions

Skills 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:

- Relevant industry software packages
- Documentation of system requirements and design
- Organisational testing and acceptance processes
- Individual contact in operations in the organisation
- Superior in the organisation
- Hardware and environments for system test use
- System or application suitable for testing

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

Links

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