



Australian Government

ICTAUT403 Conduct software quality assurance testing

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with the Information and Communications Technology Training Package Version 8.0. Newly created unit of competency to address in-demand skills needs.

Application

This unit describes the skills and knowledge required to create software quality assurance (SQA) test plans and to troubleshoot organisational software as part of the software development lifecycle. It includes troubleshooting software development methods, processes, technologies and tools.

The unit applies to individuals working in information and communications technology (ICT) roles, such as SQA testers and assistants to software engineers.

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

Unit Sector

Automation

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 SQA testing	1.1 Confirm work brief and tasks according to organisational policies and procedures 1.2 Obtain and analyse software lifecycle documentation in the context of organisational requirements 1.3 Create software test script according to vendor specifications and work brief 1.4 Create software test case according to vendor specifications and work brief 1.5 Seek approval on test script and case from authorising

ELEMENT	PERFORMANCE CRITERIA
	personnel
2. Develop test environments	2.1 Execute test script and test case, and document results in required format 2.2 Research and report on automatic SQA testing 2.3 Analyse organisational hardware, software and operating system 2.4 Select and source continuous integration tools 2.5 Configure test environment according to analysis
3. Conduct SQA testing	3.1 Create software issues register according to organisational policies and procedures 3.2 Create SQA test plan according to analysis 3.3 Troubleshoot software according to test plan 3.4 Document any issues in register 3.5 Consult with software developers, and identify and record potential solutions 3.6 Confirm that test results and proposed solutions are documented in required location and format
4. Finalise SQA testing	4.1 File and store SQA test results in required location 4.2 Present SQA test plan and seek feedback from required personnel 4.3 Implement feedback and document changes, where required

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 a range of technical specifications and other information and determines solutions according to requirements
Writing	• Creates files, scripts and plans using software and applicable technical language
Initiative and enterprise	• Identifies concepts, principles and features of approaches in other contexts and redesigns them according to situation
Planning and organising	• Uses systematic processes for goal setting and information gathering and evaluates options against agreed criteria

Skill	Description
Problem solving	Contributes to continuous improvement of digital processes by applying basic principles of analytical thinking
Self-management	Makes some critical and non-critical decisions to develop and test, functional processes and procedures according to requirements
Technology	- Identifies and confirms purposes, specific functions and key features of common digital systems and tools - Applies principles, concepts, language and practices applicable to digital world

Unit Mapping Information

No equivalent unit. Newly created unit.

Links

Companion Volume Implementation Guide is found on VETNet - -

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