



Australian Government

ICTWEB438 Conduct operational acceptance tests of websites

Release: 1

ICTWEB438 Conduct operational acceptance tests of websites

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 provide high-level assurance that websites can be effectively and efficiently provisioned and deployed live, in a systematic manner.

The unit applies to individuals employed as web designers and web developers who are involved in testing the effectiveness of websites.

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

Unit Sector

Web

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 test and establish testing framework and methodology	1.1 Establish and document testing framework and schedule 1.2 Determine processes and functions requiring testing and assign quantitative and qualitative performance benchmarks to each process and function 1.3 Document page templates, style guides and expected traffic loads 1.4 Determine and document test methodology and select automatic testing software 1.5 Assemble and brief testing panel on conduct of test 1.6 Develop user and installation manuals according to user needs and requirements

ELEMENT	PERFORMANCE CRITERIA
2. Test individual pages and page relationships against business requirements	2.1 Test pages against style guides and templates and confirm consistency of structure and content 2.2 Apply automatic testing software 2.3 Document page statistics of confirmed test results 2.4 Test installation and examples listed in instruction manual 2.5 Assess page navigability, response time and functionality using a variety of browsers and devices against business requirements 2.6 Test software interface points, site security and privacy against business and technical requirements 2.7 Conduct load simulation testing, using single and multiple independent browsers, or automated load testing tools 2.8 Obtain and complete test sign-off sheets for applicable tests
3. Apply and document further tests	3.1 Test website's ability to handle concurrent access 3.2 Conform to applicable privacy, accessibility and acceptable usage policy standards 3.3 Apply automatic testing software 3.4 Collect, collate and document results from sample user and data from automated test 3.5 Obtain and complete test sign-off sheets for further tests performed
4. Evaluate test results	4.1 Consolidate and compare results to benchmarks 4.2 Identify results that fail to meet benchmarks and conduct a site remedial iteration 4.3 Record and document test results as site performance baseline, against which further development and updating can be measured 4.4 Provide evaluation feedback to required personnel and obtain signoff prior to going live

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
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SKILL	DESCRIPTION
Numeracy	Determines, analyses and presents, numerical and statistical, data and informs decisions and actions required
Oral communication	Conveys information by participating in verbal exchanges including listening, questioning and discussing, data and information
Reading	Examines, constructs, organises and validates relationships, between both discrete and interrelated data and information
Writing	Produces a concise formal document and conveys technical information and procedures using required format, technical language and spelling and grammar
Problem solving	- Develops options, resolves issues, designs and implements tests and ascertains functionality of solutions prior to full implementation - Designs and refines ideas according to needs, resources and constraints using a combination of lateral and analytical thinking
Self-management	- Complies with product and business requirements and protocols - Sequences and schedules complex activities, monitors implementation and manages communication
Technology	Creates and refines websites using a range of digitally-based technologies and software packages and hardware

Unit Mapping Information

Supersedes and is equivalent to ICTWEB407 Conduct operational acceptance tests of websites.

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 ICTWEB438 Conduct operational acceptance tests of websites

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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:

- prepare an operational acceptance test that measures the independent and integrated structural content and technical components of the site according to business requirements.

In the course of the above, the candidate must:

- confirm testing panel is aware of test conduct
- develop user and installation manuals
- apply automatic testing software and collect, collate and document results and tests
- conduct tests on at least two browsers and at least two digital devices
- evaluate results against benchmarks
- provide feedback on test results to required personnel.

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:

- the client business domain
- the structure, function and business organisation of the client, including business-process design
- organisational policies and procedures that cover routine work processes and use of:
 - web optimising tools
 - web monitoring tools
 - web testing procedures
- technical performance measurement
- user acceptance testing methods
- website accessibility and equity principles

- website structures, design and testing methodologies and standards
- common website security issues and risk mitigating methods
- common testing software and metrics used and its application
- applicable privacy, accessibility and accessible usage policy standards
- organisational policies and procedures relevant to conducting operational acceptance tests of websites.

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:

- required tools, equipment and materials including:
 - web servers, browsers and website
- industry standard software packages, including site server software and analysis software
- required hardware, digital devices and its components
- organisational requirements documentation, customer relationship model, website manuals and instructions.

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

Links

Companion Volume Implementation Guide is found on VETNet -

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