



Australian Government

ICTTEN608 Verify new software and hardware releases

Release: 1

ICTTEN608 Verify new software and hardware releases

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 2.0.

Application

This unit describes the skills and knowledge required to authenticate compliance and compatibility of software and hardware to an existing system for new software and hardware releases for an existing system or new infrastructure for convergence to Next Generation Networks (NGN).

It applies to individuals with high-level technical skills who make use of software test routines and test hardware for performance to manufacturer's and design specifications.

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

Unit Sector

Telecommunications – Telecommunications Networks Engineering

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. Plan testing of new software releases	1.1 Obtain manuals, specifications and instructions associated with new releases and identify areas of uncertainty for confirmation with the vendor 1.2 Plan the testing environment of the software release and likely impact with network management centre 1.3 Determine resources required to assist with the test, and negotiate their availability 1.4 Determine and plan outage and notify network management centre as required

ELEMENT	PERFORMANCE CRITERIA
	1.5 Notify customers of impact on the network during the test 1.6 Develop contingency plans to cater for likely problems during the test, including health and safety issues
2. Test software and hardware units	2.1 Load new software and conduct tests using appropriate test equipment according to vendor specifications 2.2 Evaluate test results to assess functionality and features of software and hardware according to vendor documentation 2.3 Test compatibility with existing network and take corrective action with vendor as required 2.4 Implement contingency plans in conjunction with network management if integrity of the network is compromised by the new release
3. Undertake administrative work	3.1 Document test results and store according to enterprise policy 3.2 Discuss ongoing or likely problems with the vendor and initiate follow-up arrangements to ensure a permanent solution 3.3 Provide clearance for software and hardware release to be put in service in the system, according to enterprise procedures

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	1.1, 2.1, 2.2, 3.1, 3.3	Organises, evaluates and interprets technical documentation including software and hardware manuals, specifications and relevant enterprise policy and documentation
Writing	1.4-1.6, 3.1, 3.3	Prepares clear and concise workplace documentation, including reports and recommendations, incorporating technical language to communicate complex information clearly and effectively
Oral Communication	1.3-1.5, 3.2	Clearly articulates requirements and likely challenges when engaging with enterprise personnel, customers and contractors using relevant language suitable to diverse audiences and employs listening and questioning techniques to confirm understanding

Numeracy	2.2	Extracts and evaluates technical data, including equipment specifications during testing phase
Navigate the world of work	3.1, 3.3	Adheres to organisational procedures and protocols when planning and undertaking work
Interact with others	1.1, 1.2, 1.5, 3.2	- Selects and uses appropriate conventions and protocols when communicating with customers, vendors or technical personnel in a range of work contexts - Collaborates and cooperates with others to achieve joint outcomes
Get the work done	1.1-1.4, 2.1, 2.3, 2.4	- Uses a combination of formal, logical planning processes and an increasingly intuitive understanding of context for complex, high-impact activities with strategic implications - Uses advanced features of digital systems and tools to enter, store, test and analyse data - Uses systematic, analytical processes in complex, non-routine situations, setting goals, gathering relevant information and identifying and evaluating options against agreed criteria - Uses formal, analytical and lateral thinking techniques for diagnosing problems, and generating and evaluating possible solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTTEN608 Verify new software and hardware releases	ICTTEN6094A Verify new software and hardware releases	Updated to meet Standards for Training Packages.	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 ICTTEN608 Verify new software and hardware releases

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Performance Evidence

Evidence of ability to:

- develop a plan for testing new software releases, including functionality and performance under load conditions
- develop a contingency plan recognising potential causes of problems and their impact on service levels
- test compatibility of software and hardware with existing system
- analyse impact of integration of new hardware and software release on the network and make recommendations for improvement.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

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

- explain features and operating requirements of testing routines and equipment, key performance indicators (KPIs) and service level agreements
- explain information required to operate software and hardware according to a test specification
- outline manufacturer's requirements for operation of equipment
- summarise specific organisational requirements relating to the activity and site conditions
- clarify system maintenance and upgrade procedures, codes of practice and other formal agreements impacting the work activity
- explain test methods, performance and integration requirements
- summarise typical issues and challenges that occur with new software and hardware releases.

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 should be typical of those experienced in the telecommunications networks engineering field of work and include access to:

- a system to verify compliance and compatibility of software and hardware
- test equipment currently used in industry
- systems manuals, vendor specifications and enterprise policy.

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

Links

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