



Australian Government

ICTXRE402 Apply virtual reality solutions in organisations

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 address consumer needs and fulfil organisational opportunities using virtual reality (VR). It involves investigating extended reality technologies and establishing virtual environments with VR solutions.

The unit applies to individuals working in information and communications technology (ICT) roles who contribute to activities required to implement extended reality solutions in workplace contexts.

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

Unit Sector

Extended reality

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 to design and implement VR solutions	1.1 Confirm work brief and tasks according to organisational policies and procedures 1.2 Research and report on VR solutions according to organisational criteria 1.3 Shortlist preferable VR solutions according to organisational criteria 1.4 Recommend shortlisted VR solutions and gain approval from required personnel 1.5 Create VR implementation plan and include approved VR

ELEMENT	PERFORMANCE CRITERIA
	solution 1.6 Source VR configuration hardware, software and tools according to implementation plan and confirm component serviceability
2. Design and test VR solutions	2.1 Analyse existing system architecture and programming requirements 2.2 Create VR solution integration design according to work brief 2.3 Configure VR solution prototype according to integration design and programming requirements 2.4 Confirm that VR solution prototype meets organisational requirements and gain approval to deploy VR solution 2.5 Deploy VR solution across specified organisational processes according to work brief
3. Support VR solutions	3.1 Research three-dimensional (3-D) technologies related to implemented VR solution according to organisational policies and procedures 3.2 Seek VR technical assistance and monitor VR solution according to organisational policies and procedures 3.3 Report on monitored VR solution to required personnel according to organisational needs
4. Analyse VR solutions	4.1 Analyse post deployment VR solutions according to work brief 4.2 Test and rectify any detected issues according to work brief 4.3 Report on analysis findings according to organisational policies and procedures 4.4 Store VR solutions to required locations according to organisational policies and procedures

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	Reviews complex texts with at times complex technical terms
Writing	Develops a broad range of materials using clear language in order to convey specialised information and requirements
Planning and organising	Uses formal processes to identify key information and issues, evaluate strategies and plan to rectify implementation issues

Skill	Description
Problem solving	• Uses formal analytical techniques to implement solutions

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>

Assessment Requirements for ICTXRE402 Apply virtual reality solutions in organisations

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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:

- apply at least two virtual reality (VR) solutions to a virtual workspace, using at least one of the following concepts:
 - web design-based concepts
 - application design-based concepts
 - mobile design-based concepts.

In the course of the above, the candidate must:

- develop VR prototype using required programming language
- securely and safely store VR solutions to required locations
- apply required organisational policies and procedures.

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:

- key functions and features of desktop, web and mobile programming language, including:
 - Java Script
 - Python
 - C#
 - C++
- key functions and features of web developments and components, including:
 - backends
 - servers

- application programming interfaces
- app development
- game development
- required functions and features of:
 - neural networks and machine learning
 - three-dimensional (3-D) and animation technologies
- VR-enabled solutions, including:
 - VR applications
 - console and personal computer (PC)-connected headsets
 - standalone headsets
 - VR user experience hubs and showrooms
- functions and features of artificial intelligence-based diagnostic tools
- methods to configure and apply VR solutions in virtual workspaces using different concepts and technical guidelines
- organisational formats for documentation and reports
- organisational policies and procedures and legislative requirements relating to work tasks.

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:

- a virtual workspace where VR solutions are applied
- VR technological infrastructure, including tools, hardware, software and configuration components
- opportunities for interaction with others
- work brief and organisational policies and procedures required to demonstrate the performance evidence.

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

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