



**Australian Government**

# **ICTPRG614 Create cloud computing services**

**Release: 1**

# ICTPRG614 Create cloud computing services

## 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 design, build, test and deploy web services and cloud computing applications to specifications.

It applies to individuals in software engineering roles with the Information and Communications Technology (ICT) skills required to create and install web services and cloud computing applications.

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

## Unit Sector

Programming and software development

## 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. Design web service and cloud computing application | 1.1 Identify web service and cloud computing application requirements<br>1.2 Determine development environment and tools required to create web service and cloud computing application<br>1.3 Define required web service and cloud computing application architecture and framework |
| 2. Build web service and cloud computing application  | 2.1 Determine required web service functionality<br>2.2 Build and develop required web service<br>2.3 Determine required cloud application requirements<br>2.4 Build cloud computing application in determined environment to meet required functionality                             |

| ELEMENT                                               | PERFORMANCE CRITERIA                                                                                                                                                                                                               |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. Test web service and cloud computing application   | 3.1 Test web service functionality according to technical specifications<br>3.2 Test cloud computing functionality according to technical specifications<br>3.3 Seek and respond to feedback from required personnel               |
| 4. Deploy web service and cloud computing application | 4.1 Deploy web service and cloud computing application to required environment<br>4.2 Document work and submit and obtain sign off from required personnel<br>4.3 Seek and respond to feedback from required personnel as 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                 | <ul style="list-style-type: none"><li>Interprets complex technical and operational documentation to determine and confirm job requirements</li></ul>                                                                                                                                                                                                                                                 |
| Writing                 | <ul style="list-style-type: none"><li>Prepares complex documentation conveying completed developments using detailed language</li><li>Writes and edits code and technical data in a logical manner using required syntax and language</li></ul>                                                                                                                                                      |
| Oral Communication      | <ul style="list-style-type: none"><li>Uses listening and questioning techniques to confirm requirements and articulate complex concepts and matters using relevant industry for intended audience</li></ul>                                                                                                                                                                                          |
| Self-management         | <ul style="list-style-type: none"><li>Demonstrates a sophisticated knowledge of principles, concepts, language and practices associated with the digital world and uses them to troubleshoot and understand the uses and potential of new technology</li><li>Demonstrates knowledge of the importance of monitoring and controlling access to digitally stored and transmitted information</li></ul> |
| Planning and organising | <ul style="list-style-type: none"><li>Uses a broad range of strategies to store, access and organise virtual information and demonstrates the knowledge that design choices will influence what information is retrieved and how it is interpreted and used</li></ul>                                                                                                                                |
| Problem solving         | <ul style="list-style-type: none"><li>Uses a mix of intuitive and formal processes to identify key information and issues, evaluate alternative strategies, anticipate consequences and consider implementation issues and contingencies</li></ul>                                                                                                                                                   |

| SKILL | DESCRIPTION                                                                                                                                                                                                    |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | <ul style="list-style-type: none"><li>• Uses knowledge of context to address common problems in operating a web service and a cloud computing application and performs basic debugging when required</li></ul> |

## Unit Mapping Information

Supersedes and is equivalent to ICTPRG604 Create cloud computing services.

## Links

Companion Volume Implementation Guide is found on VETNet -

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