



Australian Government

ICTPRG534 Deploy applications to production environments

Release: 1

ICTPRG534 Deploy applications to production environments

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 install, uninstall, and configure an application to a production environment.

It applies to those responsible for the software deployments of enterprise applications. They may work as application DevOps engineers, developers, administrators, release managers or deployment coordinators.

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. Plan software installation	1.1 Determine client system and server system according to installation requirements 1.2 Determine installation method according to installation requirements 1.3 Determine organisational security requirements 1.4 Determine and document software-installation plan according to organisational policies and procedures
2. Perform software installation	2.1 Create an install package for application according to installation plan 2.2 Test install package in test environment 2.3 Deploy install package to production environment

ELEMENT	PERFORMANCE CRITERIA
3. Plan and test application removal	3.1 Create uninstall package according to production environment 3.2 Test uninstall package in test environment according to production environment 3.3 Deploy uninstall package to production environment
4. Perform database installation	4.1 Deploy database from development environment to production environment 4.2 Specify connection string to database according to production environment 4.3 Test database installation according to production environment
5. Manage application configuration	5.1 Configure application to required parameters for the production environment 5.2 Modify deployment variables and use configuration files 5.3 Configure security features application to required parameters for the production environment

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

SKILL	DESCRIPTION
Reading	Interprets, and critically analyses, complex texts and applies the required strategies to construct meaning from complex texts
Writing	Writes and edits code and technical data in a logical manner using required syntax
Planning and organising	Sequences and schedules complex activities, monitors implementation, and manages relevant communication
Problem solving	- Uses systematic, analytical processes in complex, non-routine situations, setting goals, gathering relevant information, and identifying, and evaluating options against the agreed criteria - Uses analytical processes to decide on a course of action, establishing the criteria for deciding between options
Self-management	Identifies and complies with organisational requirements relevant to deployment of applications
Technology	Understands the key principles and concepts underpinning the design, and operation, of digital systems and tools

Unit Mapping Information

Supersedes and is equivalent to ICTPRG504 Deploy an application to a production environment.

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 ICTPRG534 Deploy applications to production environments

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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:

- deploy at least one application to a production environment.

In the course of the above, the candidate must:

- configure variables, parameters and security features for a production environment
- prepare plans for software installation, including account data, resource and security requirements
- install and uninstall packages
- test and troubleshoot issues.

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:

- principles of database management systems applicable to deploying applications to production environments
- software development life cycle (SDLC) that may be used in deploying applications to production environments
- programming language used to create deployment applications
- Information and Communications Technology (ICT) hardware, software, security protocols and standards and organisational policies relevant to deployment of applications.

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:

- packages on client and server system
- database management system software
- required tools and licences
- integrated development environment (IDE).
- end user device.

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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