



Australian Government

ICTCLD604 Manage data in cloud environments

Release: 1

ICTCLD604 Manage data in cloud environments

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 carry out best practice data integration activities to effectively manage data in cloud environments. It includes preparing data infrastructure and managing datasets with project teams.

The unit applies to individuals who may work in a variety of roles, including senior data engineers and infrastructure engineers.

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

Unit Sector

Cloud computing

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. Organise task requirements and prepare data	1.1 Confirm work brief and tasks according to organisational policies and procedures 1.2 Establish structure and purpose of data in specified cloud environment 1.3 Confirm data consistency across required platforms 1.4 Consult with required personnel and confirm data management objectives
2. Prepare infrastructure	2.1 Select data integration method according to work brief 2.2 Identify and source data integration tools according to work

ELEMENT	PERFORMANCE CRITERIA
	brief and organisational policies and procedures 2.3 Configure infrastructure according to according to selected data integration method 2.4 Confirm that cloud environment is connected as required in work brief 2.5 Validate data quality, data speeds, and master and metadata
3. Supervise data integration technologies to service data	3.1 Check data staging and landing processes according to work brief 3.2 Confirm that data management toolset supports protocols and interfaces of major cloud-based platforms and applications 3.3 Check on-demand and real-time data processes according to work brief 3.4 Distribute serviced data integration technologies to project team
4. Update data management policies and procedures	4.1 Review related data management policies and procedures and recommend suitable updates to articulate best practice 4.2 Seek and integrate input from project team into recommended updates 4.3 Obtain any required approval to implement recommendations 4.4 Make required amendments to data management policies and procedures 4.5 Distribute and store amended data management policies and procedures according to organisational requirements

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
Numeracy	Analyses and synthesises embedded mathematical information in a broad range of tasks and texts
Oral communication	- Leads discussions to explore data management policies and procedures and iteratively confirms team member understanding - Uses developed listening, observational and questioning skills to communicate ideas and understand others' perspectives

Skill	Description
Reading	Organises, evaluates and critiques ideas and information from a range of complex texts
Planning and organising	- Identifies key factors that impact decisions and their outcomes, drawing on experience, competing priorities, and decision-making strategies - Plans strategic priorities and outcomes in a flexible, efficient and effective context and diverse environment exposed to competing demands
Self-management	Develops and implements strategies that confirm that organisational policies and procedures and regulatory requirements are being met

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 ICTCLD604 Manage data in cloud 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:

- implement and manage the servicing of at least two different datasets in a cloud environment
- update at least one data management policy and one data management procedure as a result of above servicing.

In the course of the above, the candidate must:

- research industry-recognised data management processes and procedures
- 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:

- functions and features of data components, including:
 - data quality
 - data speeds
 - master and metadata
 - data volume
- uses of cloud technologies in storing data
- types and applications of data integration technologies
- methods to identify risks in data management
- types of industry-recognised:
 - data management processes and procedures

- information and communications technology (ICT) controls, infrastructure and tools used to integrate data in cloud environments
- functions and features of integration tools
- methods to prepare cloud infrastructure
- methods to update and finalise documentation, including organisational policies and procedures
- 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:

- cloud environments where data may be managed
- 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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