Australian Government

ICTDBS415 Build a database

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 4.0.

Application

This unit describes the skills and knowledge required to build, implement, test and evaluate a database using an established design.

It applies to individuals employed as database administrators and designers who are required to build databases for information storage and retrieval requirements.

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

Unit Sector

Database

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Confirm the database design	1.1 Review database design documentation, including data structures, queries, reports, and user interfaces to identify organisational data management, access and security requirements 1.2 Evaluate sufficiency of database access and security feature design to organisational data security plan 1.3 Document and rectify inconsistencies between database design and organisational data security plan
2. Create a prototype database	2.1 Develop prototype database according to database design 2.2 Populate database tables with current organisational data to test database implementation 2.3 Write conversion programs to import data from existing systems

Future Skills Organisation

	in accordance with scope specified in database design documentation
	2.4 Assess functionality of prototype with user, including identifying errors in program code and modifying user interfaces and reports
	2.5 Incorporate feedback from user into prototype
	2.6 Obtain user approval of prototype
3. Deploy the database	3.1 Develop implementation plan for database aligned with user acceptance criteria
	3.2 Install database management system software on network in accordance with implementation plan
	3.3 Populate database tables with organisational data in accordance with implementation plan
	3.4 Implement security and access controls in accordance with database design documentation and implementation plan
	3.5 Test and document database output and security controls, and record results in accordance with database design documentation
4. Evaluate the database	4.1 Review the database against user acceptance criteria and rectify discrepancies
	4.2 Complete database documentation in accordance with user acceptance criteria
	4.3 Identify and document user training requirements from database design documentation
	4.4 Seek and secure user acceptance of database in accordance with user acceptance criteria

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	• Analyses and interprets textual information in order to establish client system requirements and establish design inconsistencies
Writing	• Uses appropriate technical terminology in recording test results and discrepancies • Produces reports and documentation that are cohesive and well-structured, in order to convey detailed and accurate information,

	•	and instructions
Oral Communication	•	Uses active listening, questioning and summarising skills to establish client requirements, training needs and when seeking product or stage approval
Interact with others	•	Recognises and applies the protocols governing what to communicate, with whom, and how
Get the work done	•	Sequences and schedules complex activities, monitors implementation and manages relevant communication
	•	Uses a formal decision-making process, setting or clarifying goals, gathering information, and identifying and evaluating several choices, against a limited set of criteria
	•	Uses analytical processes to decide on a course of action, establishing criteria for deciding between different options

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTDBS415 Build a database	ICTDBS412 Build a database	Minor updates to elements 1–4 to clarify intent. Edits to assessment requirements to clarify intent.	Equivalent unit

Links

Companion Volume Implementation Guides are available from VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2