



Australian Government

ICTDBS401 Identify physical database requirements

Release: 1

ICTDBS401 Identify physical database requirements

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to identify the scope, and the physical and security requirements of a database.

It applies to individuals employed as database administrators who are required to plan a database to a user's 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
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify the database scope	1.1 Review the requirements of the user, and the current system's architecture 1.2 Determine database size from the requirements and the technical specifications 1.3 Document the database design, and scope, of the project 1.4 Evaluate several database management systems against the requirements, and make the appropriate selection
2. Identify the database requirements	2.1 Review the technical specifications for the database 2.2 Identify the database tables and relationships 2.3 Identify the database data dictionary, table attributes and

ELEMENT	PERFORMANCE CRITERIA
	keys 2.4 Determine the database reports based on the acceptance criteria and requirements
3. Identify the security requirements	3.1 Review the system security plan 3.2 Clarify and confirm that the database management system, and user security, aligns with the system security plan 3.3 Identify, evaluate and record database performance, recovery and audit trail needs
4. Seek client feedback and approval	4.1 Present database scope, technical requirements and security documentation to the user for feedback 4.2 Review user feedback and adjust the database documentation, as required 4.3 Present database documentation to the user for final approval

Foundation Skills

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

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.4, 2.1-2.4, 3.1-3.3, 4.2	Interprets and analyses textual information in order to gather detailed information, and confirm requirements
Writing	1.3, 2.4, 3.3, 4.1, 4.2	Uses technically appropriate language and presents information in a format and layout that conveys factual information
Oral Communication	1.1, 3.2, 4.1-4.3	Uses active listening, questioning and summarising skills, in order to effectively identify, and confirm, requirements
Get the work done	1.1-1.4, 2.1-2.4, 3.2, 3.3, 4.2	- Uses systematic, analytical processes in complex, non-routine situations, setting goals, gathering relevant information, and identifying, and evaluating options against the agreed criteria - Applies formal problem-solving processes when tackling an unfamiliar problem, breaking complex

		issues into manageable parts, identifying, and evaluating several options for action • Understands key principles and concepts underpinning the design and operation of digital systems and tools, and applies these when identifying database scope and requirements
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Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTDBS401 Identify physical database requirements	ICADBS401A Identify physical database requirements	Updated to meet Standards for Training Packages. Minor edits to clarify intent of the performance criteria	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for ICTDBS401 Identify physical database requirements

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Performance Evidence

Evidence of the ability to:

- analyse client requirements
- identify the technical considerations affecting the physical design of a database
- document the database requirements
- review the security plan for the database.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain the principles of databases and database design
- outline the general features, and capabilities, of current industry-accepted hardware and software products
- explain the quality assurance practices that apply to database design
- identify the client's business domain
- describe database requirements appropriate for client's business.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the database field of work, and include access to:

- special purpose materials and industry software packages
- user business requirements
- technical documentation defining the architecture platform
- operating system specifications

- database supplier technical specifications and manuals
- data samples
- the database package.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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