



Australian Government

ICTDBS407 Monitor physical database implementation

Release: 1

ICTDBS407 Monitor physical database implementation

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 undertake database-management system modelling and to monitor database performance.

It applies to database support staff required to test and scrutinise the operation of a physical database, in order to ensure that it functions as efficiently as possible.

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. Undertake database management system modelling	1.1 Review the database prototype as appropriate, to determine the acceptance criteria and performance standards 1.2 Load the test data according to the technical sequence detailed in the relevant documentation 1.3 Generate a test schedule for the database, of tasks to be performed and the results expected
2. Monitor database performance	2.1 Evaluate database performance against the acceptance criteria and performance standards 2.2 Identify discrepancies in the results, when the expected outcomes do not meet the acceptance criteria 2.3 Identify areas needing enhancement, and document the

ELEMENT	PERFORMANCE CRITERIA
	changes to be made 2.4 Modify the database according to project standards 2.5 Repeat performance testing until the expected results are achieved
3. Seek client feedback and sign-off	3.1 Present test results in a document, and provide to the client for feedback 3.2 Incorporate client change requests as appropriate 3.3 Obtain client sign-off to the monitoring process

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, 2.1-2.3, 3.2	Analyses and interprets textual information to establish performance requirements and discrepancies
Writing	1.3, 2.3, 3.1	Uses appropriate language, layout and format in logically presenting technical data and other information
Oral Communication	1.1, 3.1-3.3	- Listens, and participates, in oral exchanges in order to effectively identify and confirm requirements - Presents information using appropriate and effective language in order to convey information
Get the work done	1.1-1.3, 2.1-2.5	- Sequences and schedules complex activities, monitors implementation, and manages relevant communication - Uses systematic, analytical processes in complex, non-routine situations, setting goals, gathering relevant information, and identifying and evaluating options against the agreed criteria - Applies key principles and concepts underpinning the design and operation of digital systems, and tools

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTDBS407 Monitor physical database implementation	ICADBS407A Monitor physical database implementation	Updated to meet Standards for Training Packages	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 ICTDBS407 Monitor physical database implementation

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Performance Evidence

Evidence of the ability to:

- identify technical considerations affecting the implementation of a database
- analyse and monitor performance issues during the implementation of a database
- modify a database to meet project and client performance requirements.

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:

- describe the client business domain
- list current industry-accepted hardware and software products
- describe requirements of basic database design
- identify required database performance standards
- outline quality assurance practices
- outline testing and benchmarking processes
- list three or more current principles of databases.

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:

- industry software packages
- the database management system (DBMS)
- the target database prototype
- testing and benchmarking software.

Assessors must satisfy NVR/AQTF assessor requirements.

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