



Australian Government

Department of Education, Employment and Workplace Relations

ICAB5062B Perform data conversion

Release: 1

ICAB5062B Perform data conversion

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit defines the competency required to translate data from one format to another by means of a data conversion process. The following units are linked and form an appropriate cluster: • ICAB5063B Monitor and support data conversion • ICAI5096B Complete data transition No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
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Application of the Unit

Application of the unit	
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Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare system for conversion	1.1. Obtain data stores that are subject to conversion 1.2. Protect and confirm back-up solutions 1.3. Trial conversion work in an isolated environment secure from production system 1.4. Map and document required data fields from the old system to the new or upgraded system 1.5. Determine field validation requirements from conversion plans, including data field legal ranges 1.6. Determine actions to be taken with fields or records that are rejected by the conversion plan 1.7. Consult stakeholders on creation of conversion plan 1.8. Design data conversion program modules from conversion specifications 1.9. Code and test data conversion program modules according to conversion specifications 1.10. Confirm data conversion and test converted production data
2. Perform data conversion	2.1. Estimate and plan for conversion time 2.2. Prepare production system for data conversion and take off-line 2.3. Undertake action to protect production data 2.4. Take action to ensure minimal disruption to client business requirements during the conversions process 2.5. Document data rejected by conversion routines and the reason for rejection 2.6. Execute conversion program modules 2.7. Document results of the conversion process and report to appropriate person

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

REQUIRED SKILLS AND KNOWLEDGE

- Problem solving skills for a defined range of unpredictable problems involving participation in the development of strategic initiatives (e.g. when performing data conversion)
- Plain English literacy and communication skills in relation to analysis, evaluation and presentation of information

Required knowledge

- Broad knowledge of industry-accepted DBMS modelling
- Broad knowledge of conversion from legacy systems
- Broad knowledge of current industry data conversion tools
- Current industry-accepted hardware and software products, with broad knowledge of general features and capabilities and detailed knowledge in some areas
- Broad knowledge of current data modelling methodologies

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- Assessment must confirm sufficient knowledge of the inherent data requirements of both old and upgraded or new systems. Assessment must confirm the ability to remodel data to achieve successful conversion.

To demonstrate competency in this unit the person will require access to:

- Analysis of the source data
- Software development environment
- Technical requirements
- Data mappings
- Logic to convert the data
- Plan of the conversion routines
- Business quality assurance rules associated with data
- The person will need access to the data conversion plan to demonstrate competency in this unit.

Context of and specific resources for assessment

The data conversion process should include/cover:

- Replacing missing data values
- Ensuring correct field values to match field definitions
- Removing unwanted duplicates
- Establishing storage and data presentation standards
- Standardising abbreviations
- Removing unwanted or unnecessary characters and data types

Checking the consistency of data across files and testing data integrity rules

Data conversion is the translation of data from one format to another. Often when data is moved from one

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	system to another, some form of data conversion is required to convert the data to a format the receiving system can interpret. In some cases, it is even necessary to have an intermediate format before converting to final form. The breadth, depth and complexity covering planning and initiation of alternative approaches to skills or knowledge applications across a broad range of technical and/or management requirements, evaluation and coordination would be characteristic. Assessment must ensure: • The demonstration of competency may also require self-directed application of knowledge and skills, with substantial depth in some areas where judgement is required in planning and selecting appropriate equipment, services and techniques for self and others. • Applications involve participation in development of strategic initiatives as well as personal responsibility and autonomy in performing complex technical operations or organising others. It may include participation in teams including teams concerned with planning and evaluation functions. Group or team coordination may also be involved.
Method of assessment	The purpose of this unit is to define the standard of performance to be achieved in the workplace. In undertaking training and assessment activities related to this unit, consideration should be given to the implementation of appropriate diversity and accessibility practices in order to accommodate people who may have special needs. Additional guidance on these and related matters is provided in ICA05 Section 1. • Competency in this unit should be assessed using summative assessment to ensure consistency of performance in a range of contexts. This unit can be assessed either in the workplace or in a simulated environment. However, simulated activities must closely reflect the workplace to enable full

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	demonstration of competency. Assessment will usually include observation of real or simulated work processes and procedures and/or performance in a project context as well as questioning on underpinning knowledge and skills. The questioning of team members, supervisors, subordinates, peers and clients where appropriate may provide valuable input to the assessment process. The interdependence of units for assessment purposes may vary with the particular project or scenario.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example: - ICAB5063B Monitor and support data conversion - ICAI5096B Complete data transition An individual demonstrating this competency would be able to: - Demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas - Analyse and plan approaches to technical problems or management requirements - Transfer and apply theoretical concepts and/or technical or creative skills to a range of situations - Evaluate information, using it to forecast for planning or research purposes - Take responsibility for own outputs in relation to broad quantity and quality parameters - Take some responsibility for the achievement of group outcomes - Maintain knowledge of industry products and services

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<i>System</i> may include but is not limited to:	• databases • applications • servers • operating systems • gateways • application service provider • ISP
<i>Requirements</i> may be in reference to:	• business • system • platform • application • database • network • people in the organisation
<i>Stakeholders</i> may include:	• sponsor • user • development team • project team
<i>Specifications</i> may include but is not limited to:	• technical requirements • user problem statement • current system functionality
<i>Client</i> may include but is not limited to:	• internal departments • external organisations • clubs • individual people • internal employees
<i>Appropriate person</i> may include:	• supervisor • teacher • authorised business representative • client

Unit Sector(s)

Unit sector	Build
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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