Australian Government

Department of Education, Employment and Workplace Relations

ICAPRG528A Perform IT data conversion

Release: 1

ISC INDUSTRY SKILLS COUNCILS
Creating Australia's Future

ICAPRG528A Perform IT data conversion

Modification History

Release	Comments
Release 1	This Unit first released with *ICA11 Information and Communications Technology Training Package version 1.0*

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to translate IT data from one format to another by means of a data conversion process.

Application of the Unit

This unit applies to individuals in support and implementation roles who are required to convert data from one system to another.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Element	Performance Criteria
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.*

Elements and Performance Criteria

1. Prepare system for conversion	1.1 Obtain data stores that are subject to conversion
	1.2 Protect and confirm backup 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

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

Required skills

- communication skills to liaise with stakeholders and clients
- literacy skills to write technical documents
- planning and organisational skills to ensure minimal disruption to client business requirements
- problem-solving skills to develop strategic initiatives when performing data conversion
- technical skills to:
    - back up data
    - code data conversion modules.

Required knowledge

- current and emerging industry knowledge of:
    - hardware and software products, including their general features and capabilities
    - data conversion tools and data modelling methodologies
- overview knowledge of:
    - conversion from legacy systems
    - industry-accepted database management system (DBMS) modelling.

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 ability to: • define inherent data requirements of both old and upgraded or new systems • remodel data to achieve successful conversion • back up data prior to conversion • code conversion programs.
Context of and specific resources for assessment	Assessment must ensure access to: • analysis of the source data • business quality assurance rules associated with data • data mappings • logic to convert the data • plan of the conversion routines • software development environment • technical requirements • data conversion plan • appropriate learning and assessment support when required • modified equipment for people with special needs.
Method of assessment	A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit: • verbal or written questioning to assess candidate's knowledge of data conversion tools and data modelling methodologies • evaluation of candidate's data conversion modules • review of candidate's documented conversion results.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, where appropriate. Assessment processes and techniques must be culturally appropriate, and suitable to the communication skill level, language, literacy and numeracy capacity of the candidate and the work being performed. Indigenous people and other people from a non-English speaking background may need additional support. In cases where practical assessment is used it should be combined

	with targeted questioning to assess required knowledge.

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.

System may include:	• application service provider (ASP) • applications • databases • gateways • internet service provider (ISP) • operating systems • servers.
Requirements may relate to:	• application • business • database • network • people in the organisation • platform • system.
Stakeholders may include:	• development team • project team • sponsor • user.
Specifications may include:	• current system functionality • technical requirements • user problem statement.
Client may include:	• external organisations • individuals • internal departments • internal employees.
Appropriate person may include:	• authorised business representative • client • supervisor.

Unit Sector(s)

Programming and software development

Innovation and Business Skills Australia