



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **ICAICT304A Implement system software changes**

**Release: 1**

## ICAICT304A Implement system software changes

### Modification History

Version	Comments
ICAICT304A	This version first released with <i>ICA11 Information and Communications Technology Training Package version 1.0</i>

### Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to implement system software changes and to hand over the modified system to the client's operational area.

### Application of the Unit

This unit applies to those working in support roles who are required to update operating systems on client computers with the latest technology fixes.

### 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
<i>Elements describe the essential outcomes of a unit of competency.</i>	<i>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.</i>

## Elements and Performance Criteria

1. Determine system changes required	<p>1.1 Determine and record required changes to <i>system</i></p> <p>1.2 Ensure that documentary evidence exists to support changes and evaluate changes required</p> <p>1.3 Complete <i>documentation</i> required according to maintenance methodologies</p> <p>1.4 Clarify and confirm the nature of the changes with the <i>client</i></p> <p>1.5 Obtain technical data from reliable sources and request other resources that may be required to complete the changes</p>
2. Carry out system changes	<p>2.1 Plan the procedure to effect intended changes</p> <p>2.2 Consult with colleagues and <i>users</i> involved in the proposed changes and agree a mutually acceptable timeline and method of implementation</p> <p>2.3 Copy initialisation or configuration files prior to implementation</p> <p>2.4 Create a roll-back path in the event of failure</p> <p>2.5 Ensure that changes required in <i>software</i> are made according to project or <i>organisational guidelines</i></p> <p>2.6 Test and verify that the changes have been made according to implementation guides and <i>organisational standards</i></p>
3. Present changes to client	<p>3.1 Demonstrate changes to the client and explain the impact of these changes</p> <p>3.2 Work towards making these changes acceptable to the client if changes are rejected, or making further modifications if required</p> <p>3.3 Update documentation and repositories according to standards and update modifications made to the change-management system</p>
4. Perform handover to client	<p>4.1 Update documentation and client procedures to reflect changes made</p> <p>4.2 Secure sign-off of acceptance documents by client</p> <p>4.3 Facilitate handover of modified system to client's operational area</p>

## Required Skills and Knowledge

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

### Required skills

- communication skills to:
  - consult with colleagues and users
  - evaluate client user requirements
- literacy skills to:
  - interpret organisational guidelines and standards
  - interpret policy and procedures
  - interpret technical manuals
  - write documentation and client procedures
- planning and organisational skills to:
  - effect intended changes
  - prioritise and organise own work
  - technical skills to install and configure system software.

### Required knowledge

- business scheduling requirements
- change control procedures
- client business domain
- current industry-accepted hardware and software products
- emerging standards for data and voice communications
- system's current functionality
- features of system under modification
- organisational policy and procedures with regard to system changes
- vendor software services with regard to system changes.

## 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.*

<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Evidence of the ability to:</p> <ul style="list-style-type: none"> <li>• evaluate, document and implement changes to the system with minimum disruption to the system and client users.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>Assessment must ensure access to:</p> <ul style="list-style-type: none"> <li>• computer</li> <li>• system software currently used in industry</li> <li>• technical manuals and tools</li> <li>• appropriate learning and assessment support when required</li> <li>• modified equipment for people with special needs.</li> </ul>
<b>Method of assessment</b>	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> <li>• verbal or written questioning to assess candidate's knowledge of the system's functionality</li> <li>• direct observation of candidate implementing software change</li> <li>• evaluation of candidate's change process and updated modifications</li> <li>• review reports prepared by candidate, including log books and test results.</li> </ul>
<b>Guidance information for assessment</b>	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, where appropriate.</p> <p>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.</p> <p>Indigenous people and other people from a non-English speaking background may need additional support.</p> <p>In cases where practical assessment is used it should be combined with targeted questioning to assess required knowledge.</p>



## 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.*

<b><i>System</i></b> may include:	<ul style="list-style-type: none"> <li>• application</li> <li>• business</li> <li>• computers</li> <li>• financial system</li> <li>• information system</li> <li>• management system</li> <li>• mobile equipment</li> <li>• network</li> <li>• software.</li> </ul>
<b><i>Documentation</i></b> for version control may follow:	<ul style="list-style-type: none"> <li>• audit trails</li> <li>• client training</li> <li>• International Organization for Standardization (ISO), International Electrotechnical Commission (IEC) and Australian Standards (AS) standards</li> <li>• maintaining equipment inventory</li> <li>• naming standards</li> <li>• project-management templates and report writing</li> <li>• satisfaction reports</li> <li>• version control.</li> </ul>
<b><i>Client</i></b> may include:	<ul style="list-style-type: none"> <li>• customer</li> <li>• external organisation</li> <li>• individual</li> <li>• internal department</li> <li>• internal employee.</li> </ul>
<b><i>Users</i></b> may include:	<ul style="list-style-type: none"> <li>• department within the organisation</li> <li>• person within a department</li> <li>• third party.</li> </ul>
<b><i>Implementation</i></b> may include:	<ul style="list-style-type: none"> <li>• formulating methods for standby operations or contingency plans</li> <li>• implementing the entire system.</li> </ul>
<b><i>Software</i></b> may include:	<ul style="list-style-type: none"> <li>• commercial software applications</li> <li>• in-house or customised software</li> <li>• organisation-specific software</li> <li>• packaged software.</li> </ul>



<b><i>Organisational guidelines</i></b> may include:	<ul style="list-style-type: none"><li>• communication methods</li><li>• content of emails</li><li>• dispute resolution</li><li>• document procedures and templates</li><li>• downloading information and accessing particular websites</li><li>• financial control mechanisms</li><li>• making voice or video calls</li><li>• opening mail with attachments</li><li>• personal use of emails and internet access</li><li>• virus risk.</li></ul>
<b><i>Organisational standards</i></b> may include:	<ul style="list-style-type: none"><li>• communication with stakeholders</li><li>• dispute resolution and modification procedures</li><li>• formal procedures that must be adhered to, such as check points and sign-offs with documented procedures and templates</li><li>• implementation of financial control mechanisms</li><li>• processes for determining size and cost.</li></ul>

## Unit Sector(s)

General ICT