



**Australian Government**

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

# **ICANWK521A Install, configure and test a payment gateway**

**Release: 1**

## ICANWK521A Install, configure and test a payment gateway

### Modification History

Release	Comments
Release 1	This Unit first released with <i>ICAll Information and Communications Technology Training Package version 1.0</i>

### Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to install, configure and test a payment gateway that enables translation of electronic payment information provided online into a form accessible to a merchant processor.

### Application of the Unit

This unit applies to individuals in the network or web development area who are required to build e-commerce facilities into websites.

### 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. Prepare server and ebusiness software for payment site	<ul style="list-style-type: none"><li>1.1 Analyse client requirements</li><li>1.2 Evaluate payment <i>software</i> and select appropriate software to meet <i>specifications</i>, including security and privacy benchmarks</li><li>1.3 Review and compare online merchant options</li><li>1.4 Choose <i>payment method</i> with reference to business requirements and client expectations</li><li>1.5 Test payment software and evaluate to ensure suitability and compatibility with current <i>system</i> and to meet <i>client</i> needs</li></ul>
2. Install payment gateway	<ul style="list-style-type: none"><li>2.1 Install selected payment software</li><li>2.2 Establish online merchant account</li><li>2.3 Configure web pages and back-end <i>solutions</i> to handle requests and integrate with the <i>database</i> for each transaction</li><li>2.4 Obtain merchant account information from the financial institution</li><li>2.5 Implement appropriate security systems to protect the payment infrastructure</li><li>2.6 Configure payment gateway to accept the appropriate payment methods and transaction types according to business requirements</li></ul>
3. Test payment gateway	<ul style="list-style-type: none"><li>3.1 Check transaction <i>server</i> for functionality against expected performance benchmarks</li><li>3.2 Test gateway using transaction types</li><li>3.3 Verify transactions by using the administrative functions of chosen payment software</li><li>3.4 Document payment gateway</li></ul>

## Required Skills and Knowledge

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

### Required skills

- analytical skills to analyse client needs
- literacy skills to document completed work
- numeracy skills to check payment transactions
- planning and organisational skills to complete tasks within costs and timeframe
- technical skills to:
  - configure software on a server
  - script in a variety of languages
  - select and configure a merchant account
  - set up a merchant ID (MID) and a terminal ID (TID).

### Required knowledge

- detailed knowledge of
  - batching verification
  - payment software products
  - processes and techniques associated with implementing client-side shopping carts through active server pages (ASP) and interfacing with databases with ActiveX Data Objects (ADO)
  - public key infrastructure (PKI)
  - relative advantages and disadvantages of credit card, digital cash and online cheque systems
- overview knowledge of:
  - Copyleft and Free Software Foundation
  - copyright and intellectual property
  - electronic commerce modelling language (ECML)
  - encryption options for national and international business
  - globally unique ID (GUID)
  - privacy legislation.

## 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>• review client requirements</li> <li>• install, configure and test a payment gateway</li> <li>• document completed payment gateway.</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>• appropriate servers and software</li> <li>• payment software</li> <li>• simulated merchant account</li> <li>• website</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>• evaluation of candidate's payment gateway</li> <li>• review of candidate's payment gateway documentation</li> <li>• verbal or written questioning to assess candidate's knowledge of:             <ul style="list-style-type: none"> <li>• payment gateways</li> <li>• scripting</li> <li>• security required for ecommerce.</li> </ul> </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>Software</i></b> may include:	<ul style="list-style-type: none"> <li>• commercial applications</li> <li>• customised</li> <li>• in-house</li> <li>• organisation-specific</li> <li>• packaged.</li> </ul>
<b><i>Specifications</i></b> may include:	<ul style="list-style-type: none"> <li>• current system functionality</li> <li>• metrics</li> <li>• project plan</li> <li>• software requirements</li> <li>• technical requirements</li> <li>• user problem statement.</li> </ul>
<b><i>Payment method</i></b> may include:	<ul style="list-style-type: none"> <li>• local and international transactions</li> <li>• use of credit cards</li> <li>• off-line</li> <li>• online cheques or digital cash</li> <li>• online or a combination of both.</li> </ul>
<b><i>System</i></b> may include:	<ul style="list-style-type: none"> <li>• application service provider (ASP)</li> <li>• applications</li> <li>• databases</li> <li>• gateways</li> <li>• internet service provider (ISP)</li> <li>• operating systems</li> <li>• servers.</li> </ul>
<b><i>Client</i></b> may include:	<ul style="list-style-type: none"> <li>• external organisations</li> <li>• individuals</li> <li>• internal departments</li> <li>• internal employees.</li> </ul>
<b><i>Solutions</i></b> may include:	<ul style="list-style-type: none"> <li>• audit requirements</li> <li>• ebusiness or e-commerce solution</li> <li>• changes to network infrastructure</li> <li>• changes to security or privacy provisions</li> <li>• new hardware and hardware upgrades</li> <li>• new software and software upgrades</li> </ul>



	<ul style="list-style-type: none"><li>• inventory management</li><li>• OHS requirements</li><li>• quality requirements</li><li>• user training or implementing a new system.</li></ul>
<b>Database</b> may include:	<ul style="list-style-type: none"><li>• commercial off-the-shelf (COTS) packages</li><li>• object-relational</li><li>• proprietary</li><li>• relational.</li></ul>
<b>Server</b> may include:	<ul style="list-style-type: none"><li>• application or web servers</li><li>• BEA Weblogic servers</li><li>• email servers</li><li>• file and print servers</li><li>• firewall servers</li><li>• FTP servers</li><li>• IBM VisualAge and WebSphere</li><li>• Novell Directory Services (NDS) servers</li><li>• proxy or cache servers.</li></ul>

## Unit Sector(s)

Networking