Australian Government

Department of Education, Employment and Workplace Relations

ICAT4194B Ensure basic website security

Release: 1

INDUSTRY
SKILLS
COUNCILS
Creating Australia's Future

ICAT4194B Ensure basic website security

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit defines the competency required to provide basic website security. The following unit is linked and forms an appropriate cluster: • ICAT4195B Ensure dynamic website security No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Application of the Unit

Application of the unit	

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units		
	ICAI3101B	Install and manage network protocols

Employability Skills Information

Employability skills	This unit contains employability skills.

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.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Determine business security requirements	1.1. Identify the level of security required based on the business and commercial intent of the website 1.2. Identify whether password protection is needed for all or part of the site 1.3. Decide minimum or maximum password protection solutions based on *business requirements*
2. Ensure web server security	2.1. Ensure that the web *server* password is obscure and non-traceable 2.2. Install and maintain an effective *intrusion detection* system in line with *business requirements* 2.3. Ensure that user accounts have only the required permissions on the *server* 2.4. Ensure that interpreters (programs that run CGIs) are not stored in the CGI-bin directory 2.5. Ensure that web forms check data before passing it to the *server*
3. Ensure protocol security	3.1. Protect fixed internet *connection* and IP address 3.2. Protect shared *network* resources from intrusion according to *business requirements* 3.3. Ensure that PC protocols and preferences follow *security protocols* 3.4. Disable the TCP/IP bindings for file and printer sharing 3.5. Ensure that NetBIOS over TCP/IP is disabled

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE
This section describes the skills and knowledge required for this unit.
Required skills
• Write Javascript/Vbscript • Write HTML
Required knowledge
• Firewall functionality

REQUIRED SKILLS AND KNOWLEDGE

- Bastion hosts
- HTTP daemons
- Web server operating systems
- Security patches
- Secure socket layer (SSL) protocol

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 the ability to provide basic website security. To demonstrate competency in this unit the person will require access to: • Web servers • Basic website
Context of and specific resources for assessment	The breadth, depth and complexity of knowledge and skills in this competency would cover a broad range of varied activities or application in a wider variety of contexts most of which are complex and non-routine. Leadership and guidance would be involved when organising activities of self and others as well as contributing to technical solutions of a non-routine or contingency nature. Assessment must ensure: • Performance of a broad range of skilled applications including the requirement to evaluate and analyse current practices, develop new criteria and procedures for performing current practices and provision of some leadership and guidance to others in the application and planning of the skills would be characteristic. • Applications may involve responsibility for, and limited organisation of, others.
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

EVIDENCE GUIDE	
	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 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: • ICAT4195B Ensure dynamic website security An individual demonstrating this competency would be able to: • Demonstrate understanding of a broad knowledge base incorporating some theoretical concepts • Apply solutions to a defined range of unpredictable problems • Identify and apply skill and knowledge areas to a wide variety of contexts, with depth in some areas • Identify, analyse and evaluate information from a variety of sources • Take responsibility for own outputs in relation to specified quality standards • Take limited responsibility for the quantity and quality of the output of others

EVIDENCE GUIDE	
	• 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.	
Business requirements may be in reference to:	• business • system • application • network • people in the organisation
Intrusion detection systems may include but is not limited to:	• Tripwire • Cisco • HP • Symantec
Server may include:	• Application/web servers • BEA Weblogic servers • IBM VisualAge and WebSphere • Novell NDS servers • Email servers • File and print servers • FTP servers • Firewall servers • Proxy/cache servers
Connection may include:	• cable • ADSL • fixed line
User may include:	• a person within a department • a department within the organisation • a third party
Network may include but is not	• large and small LANs

RANGE STATEMENT	
limited to:	- national WANs - VPNs - the internet - the use of the PSTN for dial-up modems only - private lines - data - voice
Security protocols may include:	- Secure multipurpose internet mail extensions - Secure socket layer and transport layer security - IP security protocol (domain name system security extensions) (data over cable service interface specification) - IEEE 802.11 Protocol standard for secure wireless local area network products - Point-to-point network tunnelling protocol (PPTP)/Layer 2 tunnelling protocol (L2TP) - Internet protocol security (IPSec) (secure electronic transactions) (Secure shell)

Unit Sector(s)

Unit sector	Test

Co-requisite units

Co-requisite units		

Competency field

Competency field	

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