

ICAS5199A

Unit Descriptor

Manage business websites and servers

This unit defines the competency required to maintain and manage business websites and the associated servers.

The following units are linked and form an appropriate cluster:

ICAA6157A Develop technical requirements for a business solution
Support

Unit Sector

ELEMENT	PERFORMANCE CRITERIA
1. Maintain business website and contents	1.1 Establish personnel policies and procedures for managing access and changes to all aspects of the business website 1.2 Design and start a training program for teaching staff how to use procedures and policies as well as making changes to the business website 1.3 Evaluate and test site analysis software on a non-live server to verify all features and functions are safe for use on a live server 1.4 Generate site summary reports in line with the organisational quality management program or guidelines 1.5 Review reports found to have generated security flaws 1.6 Check links for functionality and ongoing relevance 1.7 Modify web pages according to changing business requirements and analysis of site summary report 1.8 Maintain and debug <i>database</i> information according to site and information requirements
2. Maintain business security of the website	2.1 Establish a security response procedure to control information placed on the business website by developers, designers and end-users 2.2 Develop a <i>security plan</i> 2.3 Test site security according to organisational requirements of the <i>security plan</i> 2.4 Maintain site security using information from security vendors and technical media outlets
3. Monitor business website performance	3.1 Select <i>server analysis tools</i> with reference to organisational requirements and the range of functionalities requiring monitoring 3.2 Determine business website load metrics and performance indicators in line with organisational requirements 3.3 Measure business website server performance with <i>server analysis tools</i> 3.4 Identify and document business options for performance improvement 3.5 Submit website server performance reports to <i>client</i>

- 4. Undertake capacity planning
 - 4.1 Determine future peak volumes by measuring page usage and volume accesses
 - 4.2 Develop an upgrade program to deal with increasing load and performance issues
 - 4.3 Set performance benchmarks to take into consideration possible future scenarios for each relevant load metric
 - 4.4 Determine options for upgrade path for *equipment* needs based on research and business website performance growth forecasting

KEY COMPETENCIES

The seven Key Competencies represent generic skills considered necessary for effective participation by an individual in the workplace.

Performance Level 1 at this level, the candidate is required to undertake tasks effectively

Performance Level 2 at this level, the candidate is required to manage tasks

Performance Level 3 at this level, the candidate is required to use concepts for evaluating and reshaping tasks

The following Key Competency levels have been considered within the structure of this unit's Performance Criteria.

Key Competency	Performance Level
Communicating ideas and information	3
Collecting analysing and organising information	3
Planning and organising activities	3
Working with others and in teams	3
Using mathematical ideas and techniques	3
Solving problems	3
Using technology	3

RANGE STATEMENT

The Range Statement contextualises the unit of competency and provides a focus for assessment. The information provided is intended to define the scope of assessment and to assist assessors define the performance to be achieved by an individual in the workplace. The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Italicised wording in the Performance Criteria is detailed as follows.

Servers	May include: • Apache HTTP server • IBM VisualAge and WebSphere • Microsoft-Internet-Information-Server, Microsoft-IIS • NetDynamics • Lotus Domino • Zope • Netscape Enterprise server, Netscape-FastTrack, Netscapebusiness • Sun Microsystems iPlanet web server • iPlanet-Enterprise • Sun Microsystems Java web server • Email servers • File and print servers • FTP servers • Proxy servers
Database	May include Oracle, Sybase, Microsoft SQL server, Ingres, DB2, Informix, mSQL, MySQL, SQL server
Server analysis tools	May include Apache JSSI, Apache Jmeter
Security plan	May include theft, viruses, standards (including archival, back-up, network), privacy, audits, alerts and usually relates directly to the security objectives of the organisation.
Client	May include but is not limited to internal departments, external organisations, individual people and employees
Equipment	May include but is not limited to workstations, personal computers, modems or other connectivity devices, printers, DSL modems, hard drives, monitors, switches, hubs, personal digital assistant (PDA) and other peripheral devices

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, required skills and knowledge, the Range Statement and the assessment guidelines for this Training Package.

Critical aspects of evidence

Assessment must confirm the ability to maintain a consistent and constantly performing website that meets the stated business strategies and directions.

Knowledge and skills

Knowledge includes:

- Website architecture
- Website security issues
- Queuing systems
- SGML and associated standards
- Bottlenecks and methods of correction
- Workload metrics
- User request classes
- Electronic Commerce Modelling Language

Skills include:

- Use of a current site server, web server log file analysis and traffic tracking software
- Use of a current forecasting methodology for identifying traffic peaks
- Maintaining firewalls
- Maintaining VPN gateways
- Request for proposals (RFPs)
- Intrusion detection software
- Integrity checking software

Assessment guidance

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 to 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.

In the case of this unit, it could be assessed in a holistic manner with:

- ICAA6157A Develop technical requirements for a business solution

Resources

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

- Site servers and web servers
- Business website
- Site server software
- Analysis software
- Requirements documentation
- Business planning documentation

Role context

Performance issues and response times remain a primary concern of business and business websites. Optimising the performance of the website and associated servers will ensure smooth functionality of the pages and effective operation of commercial transactions through the site.

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.

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.

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