



Australian Government

ICTSAS415 Optimise ICT system performance

Release: 1

ICTSAS415 Optimise ICT system performance

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to identify, improve and monitor information and communications technology (ICT) system performance.

It applies to individuals who are experienced technical support personnel, such as help desk supervisors, ICT support technicians and user support specialists responsible for maintaining computer system performance.

No licensing, legislative, or certification requirements apply to this unit at the time of publication.

Unit Sector

Systems administration and support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify areas of poor performance	1.1 Collect system performance data during various usage conditions and times, using available technical tools 1.2 Evaluate the collected system performance data related to organisational benchmarks and client feedback to identify areas of poor performance
2. Investigate methods to improve system performance	2.1 Identify options to improve performance through discussing the system performance findings with appropriate person and accessing technical resources 2.2 Create a report for appropriate person, including cost analysis and identified options for alternative courses of action designed to

ELEMENT	PERFORMANCE CRITERIA
	measurably improve performance 2.3 Present report to appropriate person for decision as to preferred course of action
3. Develop an implementation plan for system optimisation	3.1 Develop a plan for implementing the approved optimisation, with prioritised tasks and minimum disruption to clients 3.2 Factor project budget and staff availability into the implementation plan 3.3 Submit the implementation plan to the appropriate person for approval and revision, if necessary
4. Modify system to optimise performance	4.1 Install or configure system components according to installation procedures and organisational guidelines, following the implementation plan 4.2 Measure and record the change in performance resulting from the system modification to assess that the required level of optimisation has been achieved 4.3 Update appropriate documentation according to organisational guidelines to reflect the system optimisation
5. Monitor ongoing system performance	5.1 Implement and maintain a performance register 5.2 Review and assess benchmarks and performance regularly with the work team to enable timely optimisation and updates

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 4.3	Analyses and evaluates technical and non-technical information and numerical data from a range of sources to determine benchmarks and performance indicators
Writing	2.2, 2.3, 3.3, 4.2, 4.3, 5.1	Accurately records information and numerical data, and prepares material using clear and accurate language to convey explicit information, requirements and recommendations

Oral Communication	2.1, 5.2	Uses active listening and questioning techniques, and participates in verbal exchanges with a range of stakeholders to obtain information and express requirements
Numeracy	1.1, 2.2, 3.2, 4.2	Uses mathematical equations to calculate and compare numerical and financial data to determine required actions and for preparing technical reports
Navigate the world of work	4.1	Takes personal responsibility for following explicit and implicit policies and procedures
Interact with others	2.1-2.3, 3.3, 5.2	- Selects and uses appropriate conventions and protocols when communicating with co-workers and others in a range of work contexts - Collaborates with others to achieve shared goals
Get the work done	1.1,1.2, 2.1, 2.2, 3.1, 3.2, 4.1-4.3, 5.1, 5.2	- Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes - Applies analytical processes to resolve technical or conceptual problems - Uses main features and functions of digital tools to complete work tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTSAS415 Optimise ICT system performance	ICASAS415A Optimise IT system performance	Updated to meet Standards for Training Packages. Minor edit to the competency title.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTSAS415 Optimise ICT system performance

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- analyse system performance and document a plan to improve performance
- modify and tune the system to keep the system balanced and performing well.

Note: Evidence must be provided for at least TWO organisations or occasions.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- analyse business scheduling requirements, including the role of stakeholders and the degree of stakeholder involvement
- compare and contrast current industry standard hardware and software monitoring tools, and how to interpret information produced from monitoring
- describe optimum system performance, change-control procedures and theoretical concepts
- analyse one or more change management tools
- discuss quality assurance practices with regard to proposed changes to information and communication technology (ICT) systems
- analyse current system functionality and describe the key features and functions of the system under modification.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the systems administration and support field of work, and include access to special purpose tools, equipment, materials and industry software packages including:

- special purpose tools, equipment and materials

- industry software packages, including:
 - system components and software for performance tuning
 - technical manuals and resources
 - fault logs
 - diagnostic tools.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>