



Australian Government

ICPSUP381 Operate and maintain computer resources

Release: 1

ICPSUP381 Operate and maintain computer resources

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to undertake basic computing skills including routine personal computer maintenance, upgrades, restorations, data storage, conversion and transmission.

It applies to individuals who perform a range of defined tasks relating to the printing and graphic arts industry, and who may also provide some leadership and guidance to others with some limited responsibility for the output of others.

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

Unit Sector

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. Perform routine system maintenance	1.1 Required equipment is checked, and is in working order and available for use 1.2 Peripherals are fitted, maintained, cleaned and adjusted as required 1.3 Personal computer furniture and fittings are adjusted according to work health and safety (WHS) practices and protection of equipment considerations 1.4 Routine system maintenance and security processes are performed 1.5 Correct functioning of automated processes is monitored

ELEMENT	PERFORMANCE CRITERIA
	1.6 Monitors are adjusted only when being calibrated and are otherwise left alone 1.7 All abnormalities and system malfunctions are reported 1.8 Off-line maintenance records are kept up-to-date
2. Perform back-ups and restorations on a personal computer	2.1 File system back-ups are performed regularly according to established workplace practices 2.2 Back-up media are labelled, stored and rotated according to established workplace practices 2.3 Files are restored from back-up as required 2.4 Data is recovered from damaged and corrupted files using small office tools 2.5 Adequate written records of back-ups are kept
3. Store and supply consumables	3.1 Consumables are stored and disposed of according to WHS, care of equipment and system security 3.2 Stock levels and user needs are monitored to ensure required consumables are available
4. Upgrade and configure a personal computer	4.1 Software and peripherals are installed, upgraded and configured according to enterprise policy 4.2 New software, upgrades and adjustments are tested to ensure adequate performance 4.3 Personal computer furniture and fittings are adjusted to meet workplace standards for WHS and care of equipment 4.4 Written records of installations, upgrades and configurations are maintained
5 Access documentation, records and updates	5.1 Documentation, including hardware and software manuals and equipment inventory and service records, is stored and accessed appropriately 5.2 Supplementary product information, updates and technical reference material are accessed using the internet, journals and other sources
6. Access and deliver data	6.1 Removable storage devices are connected, disconnected and configured as required 6.2 Data is accessed from different types of file systems 6.3 Data is stored and converted to suit a variety of operating systems, environments and applications 6.4 Data is transmitted effectively by the method most appropriate

ELEMENT	PERFORMANCE CRITERIA
	to the task

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	4.2, 5.1, 5.2, 6.1-6.4	Recognises text within job specifications and follows written instructions
Writing	1.8, 2.2, 2.5, 4.4	Uses clear, specific and industry related terminology to complete and update workplace documentation
Navigate the world of work	1.3, 2.1, 3.1, 4.3	Recognises and follows organisational and legislative requirements associated with own role
Interact with others	1.7	Uses appropriate communication protocols and conventions to report issues
Get the work done	1.1, 1.2, 1.4-1.8, 2.1-2.5, 3.1, 3.2, 4.1, 4.2, 4.4, 5.1, 5.2, 6.1-6.4	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Understands purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks, adapting some functions to improve personal efficiency - Initiates standard procedures when responding to familiar problems within immediate context - Takes responsibility for outcomes of routine decisions related directly related to own role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSUP381 Operate and maintain computer	ICPSU381 Operate and maintain	Updated to meet Standards for Training	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
resources	computer resources	Packages	

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSUP381 Operate and maintain computer resources

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Performance Evidence

Evidence of the ability to:

- correctly operate and maintain computer resources
- produce log books and written records showing system maintenance and configuration history over a period of THREE months, including all reported abnormalities and how they were addressed
- perform a routine system back-up and restore a nominated file from an earlier back-up
- convert a document from one common file format to another and make the file available for access on a different platform (eg Macintosh application to MS-Windows application via suitably encoded Internet email attachment)
- research and report availability of upgrades and support for TWO pieces of hardware and TWO pieces of software currently in use.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

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

Work health and safety (WHS) requirements for terminal operators

- describe correct positioning of the keyboard, mouse and screen to avoid fatigue
- explain when a foot rest is appropriate

Computing technology

- describe relationships between baud rate, bits per second and bandwidth
- explain the meaning of MIPPS
- describe the function of the video card
- specify what must be checked before commencement of a software installation or upgrade

Security and storage of data

- identify risks that might exist for the system, the enterprise and users if an individual proceeds to install their own software (assuming the software has been scanned for viruses)
- describe back-up and restoration procedures currently used, as well as their strengths and weaknesses
- explain why hand-written records are kept
- describe how to identify and respond to a possible security breach or virus attack
- list environmental factors that could cause data loss from removable media

File preparation, conversion and encoding including cross-platform considerations

- describe how to retain fonts of converted files
- explain differences in file naming conventions between IBM-PC, Macintosh and Unix
- list three encoding methods for internet email transmission of files and state which platform each is used for
- list four common graphics file formats and when each format should be chosen

Correct use of network and telecommunications technologies

- explain how a Macintosh can communicate with another computer
- identify types of cabling and network cards installed and their effect on data transmission speed
- summarise how to transmit data
- describe how to conduct a search for product information on the internet
- identify the most efficient way to exchange files with clients or other companies

Specific hardware, peripherals and consumables for the pre-press area

- list the configuration of a typical high performance pre-press computer
- identify the form of computer language used to drive an image setter
- describe types of removable media commonly used in the pre-press area
- list pieces of hardware that require periodical cleaning

Pre-press software

- specify the limiting factor of most desktop publishing pre-press software
- explain where a multitasking computer operating system fits in the pre-press production process
- identify appropriate software to:
 - scan for a virus
 - produce a logo
 - manipulate an image
 - set up a printer network
 - create a page of text

Information sources

- list the machine manuals, safety and other documentation relevant to this task and outline the information included in these documents.

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 Support field of work and include access to special purpose tools, equipment and materials.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>