Optimise performance of digital systems

Overview

This standard is about selecting, safely setting up and using digital system components, storage media and peripheral devices and making sure that they are working properly, such as by testing, fault finding and solving problems.

It involves improving the use of IT for self and others by adjusting interfaces, customising settings, linking multiple devices and monitoring maintenance. It includes establishing procedures for data and system recovery and troubleshooting non-routine IT problems. It also includes developing guidelines for digital safety and the use of digital systems.

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Performance criteria

You must be able to:
1. advise others on how to operate digital systems with due regard to IT health and safety good practice
2. simplify and streamline user interfaces to improve efficiency of digital systems
3. assist others to customise settings to improve efficiency and accessibility of digital systems
4. specify IT system components, storage and peripheral devices required to meet user needs
5. configure network settings for effective mobile and remote computing
6. install, remove and upgrade application software as appropriate and to improve system performance
7. use system administrative tools to improve system performance
8. use appropriate operating system features within organisational constraints to support own work
9. take appropriate action to resolve routine IT problems in line with organisational guidelines
10. check system error problems have been resolved in line with organisational guidelines
11. establish relevant procedures for recovery in the event of system faults or failure
12. help others to select and use appropriate resources to respond to IT system problems
13. contribute to the development of appropriate organisational guidelines for the use of digital systems

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Knowledge and understanding

You need to know and understand:

1. regulations, organisational policies and procedures governing the performance of
2. digital systems including IT health and safety and good practice, and how to apply them
3. how to determine the specification of digital systems required for a range of purposes
4. characteristics of IT systems that affect performance
5. main features and functions of computer operating systems
6. the range of help and troubleshooting facilities available to solve problems with digital systems
7. factors which influence choice of Internet Service Providers
8. tests that can be used to check system and connectivity
9. methods that can be used to optimise online system performance
10. how to distinguish between data and system file types
11. factors affecting compatibility of different digital systems and how to avoid compatibility issues
12. the need to check compatibility of software and hardware upgrades with other parts of the system
13. benefits and drawbacks associated with upgrading software and digital systems
14. when and how to upgrade software

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Developed by	e-skills
Version Number	1
Date Approved	January 2015
Indicative Review Date	June 2017
Validity	Current
Status	Original
Originating Organisation	e-skills UK
Original URN	ESKITU052
Relevant Occupations	ICT for users
Suite	IT Users
Keywords	Digital systems, networks, printers, backup