SEMETS369

Performing engineering software acquisition

Overview

This standard identifies the competences you need to perform software acquisition. Software acquisition is to provide supporting evidence to the suitability for use of acquired software. You will be given a detailed brief, and will be required to assess these requirements and to extract all necessary information in order to carry out the software acquisition activity. You will need to select the appropriate software acquisition method to use, based on the selected or potential software supplier. You will be expected to use current British, European, international and company standards.

Your responsibilities will require you to comply with organisational policy and procedures for working in the software acquisition team. You will be required to report any problems with the computer hardware, software or procedures that you cannot personally resolve, or that are outside your permitted authority, to the relevant people. You will be expected to work to verbal/written instructions and draft specifications, with a minimum of supervision, taking personal responsibility for your own actions and for the quality and accuracy of the work that you carry out.

Your underpinning knowledge will provide a good understanding of your work and will provide an informed approach to applying software acquisition procedures. You will understand the various version, configuration and change control techniques, and supporting software, to an adequate depth.

You will understand the safety precautions required when working in the software development team. You will be required to demonstrate safe working practices throughout and will understand the responsibility you owe to yourself and others in the workplace. You will be required to understand the requirements placed on the software supplier, as part of demonstrating that the delivered system will be safe during operational use.

Performance criteria

You must be able to:

1. work safely at all times, complying with health and safety legislation, regulations, directives and other relevant guidelines
2. plan and prepare the software acquisition activities before you start them
3. use appropriate sources to obtain the required information for the software acquisition activity
4. assess the software vendor, using established methods (such as process documents, tool documentation, vendor audit)
5. use references to establish current practices against the supplied software
6. report on how the software has been acquired (such as software safety reports, compatibility issues)
7. save and store the software acquisition reports as the appropriate file type and in the correct location
8. deal promptly and effectively with problems within your control, and seek help and guidance from the relevant people if you have problems that you cannot resolve

Knowledge and understanding

You need to know and understand:

1. the specific safety precautions to be taken when working with software development environment hardware (to include such items as safety guidance relating to the use of visual display unit (VDU) equipment and work stationworkstation environment; repetitive strain injury (RSI); the dangers of trailing leads and cables; how to spot faulty or dangerous electrical leads, plugs and connections)
2. how to return the work area to a safe and useable condition (such as cleaning down work surfaces; putting media, manuals and unwanted items of equipment into safe storage; leaving the work area in a safe and tidy condition)
3. the relevant sources and methods for obtaining any required technical information relevant to the software acquisition tasks (such as new model brief/request; drawing briefs; specification sheets; request for changes or modifications to code; technical publications; calculations; software requirements)
4. the application and use of software acquisition procedures
5. software acquisition methods, and national, international and relevant company software acquisition tasks and procedures
6. the need for configuration control on all artefacts (such as ensuring that completed results are approved, labelled and stored on a suitable storage device)
7. why it is necessary to be able to recall previous issues of acquisition analysis results
8. when to act on your own initiative, and when to seek help and advice from others

Scope/range

1. Prepare for the software acquisition tasks, by carrying out all of the following:
    1.1 check that the working environment is in a safe and appropriate condition and that all working equipment is in a safe, tested and usable condition (such as cables undamaged, correctly connected, safely routed)
    1.2 identify suitable software vendors
    1.3 identify the required standards and all relevant sources (such as software requirements, design and software coding standards)
2. Use one of the following to obtain the necessary data for the software acquisition tasks:
    2.1 software vendor documents
    2.2 software user manuals
    2.3 software vendor audits
    2.4 software help desks
    2.5 software vendor assessments
    2.6 supplier service level agreements (SLA's)
3. Carry out all of the following before performing the software acquisition tasks:
    3.1 ensure that the data and information you have is complete, coherent and accurate
    3.2 analyse the information to identify issues that need to be resolved
    3.3 recognise and deal with problems (such as technical issues and lack of, or incorrect, information)
4. Assess the data sent from a supplier, using two of the following sources:
    4.1 delivered baselines
    4.2 project documents
    4.3 software audits
    4.4 tool performance assessments
    4.5 self assessments
    4.6 SLA performance reports
    4.7 user manuals
    4.8 licensing constraints
    4.9 vendor audits
5. Ensure that the software to be supplied is in line with current practices, using two of the following methods:
    5.1 tool conventions
    5.2 user manuals
    5.3 user forums
    5.4 user feedback
    5.5 historical evidence
6. Report on the software to be acquired, using one of the following methods:
    6.1 audit reports
    6.2 software assessments

7. Save and store the results in appropriate locations, to include carrying out all of the following:

7.1 check that the results are correctly titled, referenced and annotated
7.2 ensure that the results have been checked and that they comply with the company procedure
7.3 save the results to an appropriate location (such as storage device, configuration database)
7.4 ensure that a separate backup copy is created and placed in safe storage

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Developed by	Enginuity
Version Number	3
Date Approved	30 Mar 2021
Indicative Review Date	01 Mar 2024
Validity	Current
Status	Original
Originating Organisation	Enginuity
Original URN	SEMETS369
Relevant Occupations	Engineering, Engineering and Manufacturing Technologies, Engineering Technicians
Suite	Engineering Technical Support Suite 3, Advanced Manufacturing
Keywords	engineering; technical; support; SLA performance reports; licensing constraints; project documents