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Ingénierie du logiciel — Pratique recommandée pour l'acquisition des logiciels

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IEEE Recommended Practice for Software Acquisition

Sponsor

Software & Systems Engineering Standards (C/S2ESC) Committee of the IEEE Computer Society

Approved 5 December 2015

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Abstract: A set of useful quality considerations that can be selected and applied during one or more steps in a software acquisition process is described in this recommended practice. The recommended practices can be applied to software that runs on any computer system regardless of the size, complexity, or criticality of the software. The software supply chain may include integration of off-the-shelf (OTS), custom, or free and open source software (FOSS). Each organization or individual using this recommended practice will need to identify the specific quality and activities that need to be included within its acquisition process.

Keywords: acquirer, custom developed, end user, FOSS, IEEE 1062[™], off-the-shelf, OTS, SaaS, software acquisition process, software as a service, supplier

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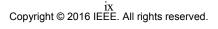
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Introduction

This introduction is not part of IEEE Std 1062-2015, IEEE Recommended Practice for Software Acquisition.

This introduction provides some background on the rationale used to develop this recommended practice. This information is meant to aid in the understanding and usage of this recommended practice.

This recommended practice describes the management and execution of software acquisition activities. It is intended for the following:

- Individuals or organizations that acquire software from suppliers
- Individuals or organizations that acquire software from a developer for resale to other individuals or organizations
- Individuals or organizations that influence how software is acquired from suppliers
- Suppliers interested in providing high-quality software to acquirers

This recommended practice is designed to help organizations and individuals

- Incorporate quality considerations during the definition, evaluation, selection, and acceptance of supplier software for operational use
- Determine how supplier software should be evaluated, tested, and accepted for delivery to end users (standards.iteh.ai)

This recommended practice is intended to satisfy the following objectives:

- Promote consistency within organizations in acquiring third-party software from software suppliers
- Provide useful practices on including quality considerations during software acquisition planning
- Provide useful practices on evaluating and qualifying supplier capabilities to meet user software requirements
- Provide useful practices on evaluating and qualifying supplier software
- Assist individuals or organizations judging the quality of supplier software for referral to end users

Contents

1. Overview	11
1.1 Scope	11
1.2 Purpose	
2. Normative references	12
3. Definitions and terms	13
3.1 Definitions	
3.2 Use of should, may, and can	
4. Software acquisition alternatives	13
4.1 Introduction	
4.2 Custom-developed software	14
4.3 Off-the-shelf (OTS) software	14
4.4 Software as a service (SaaS)	
5. Software acquisition process	18
5.1 Purpose	
5.2 Eight steps in acquiring quality software	19
5.3 Step 1: Planning the software acquisition strategy	22
5.3 Step 1: Planning the software acquisition strategy	24
5.5 Step 3: Identifying potential suppliers	26
 5.5 Step 3: Identifying potential suppliers 5.6 Step 4: Preparing contract requirements 	28
5.7 Step 5: Evaluating proposals and selecting the supplier	
5.8 Step 6: Managing for supplier performance FEE 41062:2019.	
5.9 Step 7: Accepting/the software ai/catalog/standards/sist/9f22c383-ad28-49f7-936f-	
5.10 Step 8: Evaluating the process and identifying improvement opportunities	
6. Quality assurance for software acquisition	36
6.1 Objectives of quality assurance in software acquisition	36
6.2 Implementing quality assurance in software acquisition	
Annex A (informative) Checklists for quality software acquisition processes	38
A.1 Checklist 1: Organizational strategy	39
A.2 Checklist 2: Define the software	40
A.3 Checklist 3: Supplier selection evaluation	42
A.4 Checklist 4: Supplier and acquirer obligations	44
A.5 Checklist 5: Quality and maintenance plans	45
A.6 Checklist 6: User survey	46
A.7 Checklist 7: Supplier performance standards	49
A.8 Checklist 8: Contract payments	50
A.9 Checklist 9: Monitor supplier progress	51
A.10 Checklist 10: Software evaluation	52
A.11 Checklist 11: Software testing	55
A.12 Checklist 12: Software acceptance	56
Annex B (informative) Software safety assurance and software information security assurance	
B.1 Software safety assurance	
B.2 Software information security assurance	58
Annex C (informative) Rights in technical data and software usage	61

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Annex D (informative) Acquisition plan guidelines	62
D.1 (AP Section1) Introduction	
D.2 (AP Section 2) References	63
D.3 (AP Section 3) Definitions	
D.4 (AP Section 4) Software acquisition overview	
D.5 (AP Section 5) Software acquisition process	64
D.6 (AP Section 6) Software acquisition reporting requirements	64
D.7 (AP Section 7) Software acquisition management requirements	64
D.8 (AP Section 8) Software acquisition documentation requirements	65
Annex E (informative) Bibliography	66

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1. Overview

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This recommended practice is divided into six clauses. Clause 1 provides the scope of this recommended practice. Clause 2 lists references to other standards that are essential in applying this recommended practice. Clause 3 provides definitions that are either not found in other standards, or have been modified for use with this recommended practice. Clause 4 describes the options for acquiring software. Clause 5 describes the eight steps in a software acquisition process and the related quality practices that apply to acquiring software. Clause 6 describes how quality assurance can be applied to software acquisition.

This recommended practice also contains five annexes. Annex A provides a set of checklists that individuals or organizations may elect to adapt to their specific needs, Annex B provides software acquisition guidelines with respect to Software Safety Assurance and Software Information Security Assurance, Annex C provides guidelines with respect to rights in technical data software usage, Annex D provides acquisition plan guidelines, and Annex E is the bibliography.

1.1 Scope

This recommended practice describes a set of useful quality considerations that can be selected and applied during one or more steps in a software acquisition process. The recommended practices can be applied to software that runs on any computer system regardless of the size, complexity, or criticality of the software. The software supply chain may include integration of commercial-off-the-shelf (COTS), custom, or free and open source software (FOSS). Each organization or individual using this recommended practice will need to identify the specific quality and activities that need to be included within the organization's acquisition process. Security will be included as a quality attribute considered during the acquisition.