

To The Reader, Continued

Do not use for appraisals

This document contains a set of checklists to help an organization determine if its software policies, standards, processes, procedures, training, and tools are consistent with the CMM.

The checklists are *not* intended to be scored or used as the basis for an appraisal (i.e., software capability evaluation or software process assessment).

To The Reader, Continued

Secondary audiences

Secondary audiences of this document include:

- *Managers:* Individuals or groups who are responsible for planning, controlling, and improving software acquisition, development, or maintenance processes and are interested in using the CMM for software process improvement.
 - *Software process participants:* Individuals or groups responsible for implementing some portion of a software acquisition, development, or maintenance process.
 - *Sponsors:* Personnel responsible for funding, authorizing, and providing the needed resources for software process improvement efforts that are based on the CMM.
-

Primary uses

The primary uses of the SPF are to:

- Analyze and review software processes to check consistency with the CMM (in the context of process assurance or process verification).
 - Design software processes so that they are consistent with the CMM.
 - Serve as a technical reference for the SEI workshop “Defining Software Processes: Getting Started.”
-

Additional uses

Additional uses of the SPF include:

Improvement efforts:

- Help identify who should be involved in a software process improvement effort.
- Guide charter and plan development for process action teams (PATs).
- Guide PATs in establishing selection criteria for process improvement pilot projects.
- Help measure success criteria for pilot projects and for installing and institutionalizing a software process.

Defining organizational roles:

- Provide a checklist for software quality assurance (SQA) reviews and audits.
- Help define organizational roles, responsibilities, and scope (e.g., software configuration management).

Others:

- Provide criteria for a “good process definition.”
 - Help communicate the CMM recommendations to achieve a particular maturity level to senior management (or others).
 - Help develop process guides and process models (e.g., SEPG uses the SPF as a template to build a process guide).
 - Help tailor software processes (e.g., structure and content).
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To the Reader

Introduction

The Software Process Framework (SPF) is a document that provides information contained in the SEI Capability Maturity Model (CMM) for Software v1.1 [Paulk93a] in a format suitable for process definition and improvement. The SPF allows users to determine if their organization's software process documentation is consistent with the recommendations made by the CMM. When organizational software process documentation is found to be inconsistent with the CMM, the SPF provides the ability to make informed decisions regarding the applicability of specific CMM recommendations.

Background

Many organizations have started down the path of software process improvement by conducting a software process assessment and then responding with action plans to address the assessment findings. At this point, many organizations find themselves struggling to develop software processes that are consistent with the CMM. The SPF helps to address part of this implementation barrier by answering the question:

How does an organization know if its software policies, standards, processes, procedures, training, and tools are consistent with the CMM?

Primary audiences

The primary audiences of this document are:

- *Software engineering process groups (SEPGs) or process engineers:* Organizational units or personnel responsible for facilitating software process improvement.
- *Software process improvement groups:* Organizational teams responsible for improving software processes such as process action teams (PATs), quality improvement teams, or technical working groups (e.g., a PAT addressing a software process assessment finding).
- *Software quality assurance groups or process assurance:* Organizational groups or personnel responsible for auditing, reviewing, verifying, or validating software processes.

Assumption: The primary audiences of this document are assumed to be experienced in software process improvement, experienced using the SEI CMM, and familiar with CMM-based appraisals (software process assessments and software capability evaluations).

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Table of Contents, Continued

Appendices	Appendix-1
Appendix A List of Acronyms	Appendix-3
Appendix B Glossary of Terms	Appendix-5
Appendix C Role Translation Table	Appendix-21
Appendix D General Term Translation Table	Appendix-39
Appendix E References	Appendix-41

Table of Contents, Continued

Chapter 5 Defined Level (Level 3)	L3-1
Level 3 Policy Checklists	L3-Policy-1
Level 3 Standards Checklists	L3-Standards-1
Level 3 Process Checklists.....	L3-Process-1
Organization Process Focus	L3-Process-3
Organization Process Definition	L3-Process-25
Training Program	L3-Process-49
Integrated Software Management	L3-Process-67
Software Product Engineering.....	L3-Process-103
Intergroup Coordination	L3-Process-149
Peer Reviews	L3-Process-179
Level 3 Procedure Checklists	L3-Procedures-1
Level 3 Summary	L3-Summary-1
Chapter 6 Managed Level (Level 4)	L4-1
Level 4 Policy Checklists	L4-Policy-1
Level 4 Standards Checklists	L4-Standards-1
Level 4 Process Checklists.....	L4-Process-1
Quantitative Process Management.....	L4-Process-3
Software Quality Management	L4-Process-31
Level 4 Procedure Checklists	L4-Procedures-1
Level 4 Summary	L4-Summary-1
Chapter 7 Optimizing Level (Level 5)	L5-1
Level 5 Policy Checklists	L5-Policy-1
Level 5 Standards Checklists	L5-Standards-1
Level 5 Process Checklists.....	L5-Process-1
Defect Prevention	L5-Process-3
Technology Change Management	L5-Process-35
Process Change Management	L5-Process-77
Level 5 Procedure Checklists	L5-Procedures-1
Level 5 Summary	L5-Summary-1

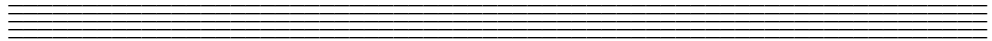
Table of Contents

Acknowledgments	iv
To The Reader	v
Chapter 1 Introduction	Introduction-1
About this document	Introduction-2
Organization of this document	Introduction-4
Questions Addressed by the Software Process Framework	Introduction-5
Process Definition Criteria	Introduction-6
Relation to the CMM	Introduction-8
The Operational Framework	Introduction-9
Chapter 2 Features of the Software Process Framework	Features-1
Checklists	Features-2
CMM Context	Features-4
CMM Reference Text	Features-5
CMM Role Identification	Features-8
Entry and Exit Criteria	Features-9
Translation Tables	Features-11
User References	Features-15
Chapter 3 How to Use the Software Process Framework	Usage-1
Using the Software Process Framework to Analyze and Review Software Processes	Usage-2
Chapter 4 Repeatable Level (Level 2)	L2-1
Level 2 Policy Checklists	L2-Policy-1
Level 2 Standards Checklists	L2-Standards-1
Level 2 Process Checklists	L2-Process-1
Requirements Management	L2-Process-3
Software Project Planning	L2-Process-23
Software Project Tracking and Oversight	L2-Process-59
Software Subcontract Management	L2-Process-97
Software Quality Assurance	L2-Process-129
Software Configuration Management	L2-Process-155
Level 2 Procedure Checklists	L2-Procedures-1
Level 2 Summary	L2-Summary-1

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