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Information technology — Process assessment — Process capability assessment model for service management

Technologies de l'information — Evaluation des processus — Modèle d'évaluation de la capabilité d'un processus pour le management des services

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Contents

Page

Foreword ..... **v**
Introduction ..... **vi**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
4 Overview of the process assessment model **2**
4.1 General 2
4.2 Structure of the process assessment model 3
4.2.1 General 3
4.2.2 Processes 3
4.2.3 Process dimension 4
4.2.4 Capability dimension 4
4.3 Assessment indicators 6
4.3.1 General 6
4.3.2 Process capability indicators 7
4.3.3 Process performance indicators 9
4.4 Measuring process capability 9
5 The process dimension and process performance indicators (level 1) **11**
5.1 General 11
5.2 COM.01 Communication management 12
5.3 COM.02 Documentation management 14
5.4 COM.03 Human resource management 20
5.5 COM.04 Improvement 21
5.6 COM.05 Internal audit 23
5.7 COM.06 Management review 24
5.8 COM.07 Non-conformity management 25
5.9 COM.08 Operational planning 27
5.10 COM.09 Operational implementation and control 34
5.11 COM.10 Performance evaluation 36
5.12 COM.11 Risk management 38
5.13 RAA.1 Business relationship management 40
5.14 RAA.2 Service level management 40
5.15 RAA.3 Service reporting 41
5.16 RAA.4 Supplier management 43
5.17 RAA.5 Service catalogue management 45
5.18 RAF.1 Incident management 45
5.19 RAF.2 Service request management 46
5.20 RAF.3 Problem management 47
5.21 SAD.1 Budgeting and accounting for services 48
5.22 SAD.2 Demand management 49
5.23 SAD.3 Capacity management 50
5.24 SAS.1 Service availability management 51
5.25 SAS.2 Service continuity management 51
5.26 SAS.3 Information security management 53
5.27 SDB.1 Service requirements definition 54
5.28 SDB.2 Service design 54
5.29 SDB.3 Service build and transition 55
5.30 SDB.4 Release and deployment management 56
5.31 SDE.1 Service delivery 57
5.32 SPC.1 Change management 58
5.33 SPC.2 Configuration management 60
5.34 TOP.01 Leadership 62

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6 Process capability indicators **66**
6.1 Introduction 66
6.2 Process capability levels and process attributes 66
6.2.1 General 66
6.2.2 Process capability Level 0: Incomplete process 66
6.2.3 Process capability Level 1: Performed process 67
6.2.4 Process capability Level 2: Managed process 67
6.2.5 Process capability Level 3: Established process 72
6.2.6 Process capability Level 4: Predictable process 76
6.2.7 Process capability Level 5: Innovating process 80
6.3 Related processes for process attributes 84
Annex A (informative) **Conformity of the process assessment model** **86**
Annex B (informative) **Input and output characteristics** **92**
Annex C (informative) **Mapping between base practices and ISO/IEC 20000-1 requirements** **142**
Bibliography **273**

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents) or the IEC list of patent declarations received (see http://patents.iec.ch).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*.

This first edition cancels and replaces ISO/IEC TS 15504-8:2012, which has been technically revised.

The main changes compared to the previous edition are as follows:

— all processes and their base practices are changed to reflect the ISO/IEC TS 33054 processes;

— all process related information products and their descriptions are revised;

— this process assessment model includes a process quality attribute of process performance and can be used with other models of process quality, for instance capability as described in ISO/IEC 33020.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

This document provides a service management process assessment model for use in performing a conformity assessment of process capability in accordance with the requirements of ISO/IEC 33002. It is structured in accordance with the requirements of ISO/IEC 33004 to reflect processes associated with ISO/IEC 20000-1. The scale for assessing the extent of achievement of process capability is based on ISO/IEC 33020.

This document provides a framework of reference for the capability assessment of processes that support the domain of service management.

An integral part of conducting an assessment is to use a process assessment model that is constructed for that purpose. A process assessment model is related to a process reference model and is conformant with ISO/IEC 33004. ISO/IEC 33002 identifies the minimum requirements for performing an assessment in order to ensure consistency and repeatability of the ratings. ISO/IEC 33002 addresses the assessment of process and the application of process assessment for improvement and capability determination. Results of conformant process assessments may be compared when the scopes of the assessments are considered to be similar.

The requirements for process assessment defined in ISO/IEC 33002 form a structure which:

a) facilitates self-assessment;

b) provides a basis for use in process improvement and capability determination;

c) takes into account the context in which the assessed process is implemented;

d) produces a process rating;

e) addresses the ability of the process to achieve its purpose;

f) is applicable across all application domains and sizes of organization;

g) may provide an objective benchmark between organizations.

The relationship between ISO/IEC TR 24774, ISO/IEC 20000-1, ISO/IEC 33002, ISO/IEC 33004, ISO/IEC 33020, ISO/IEC TS 33054, and this document is shown in Figure 1.

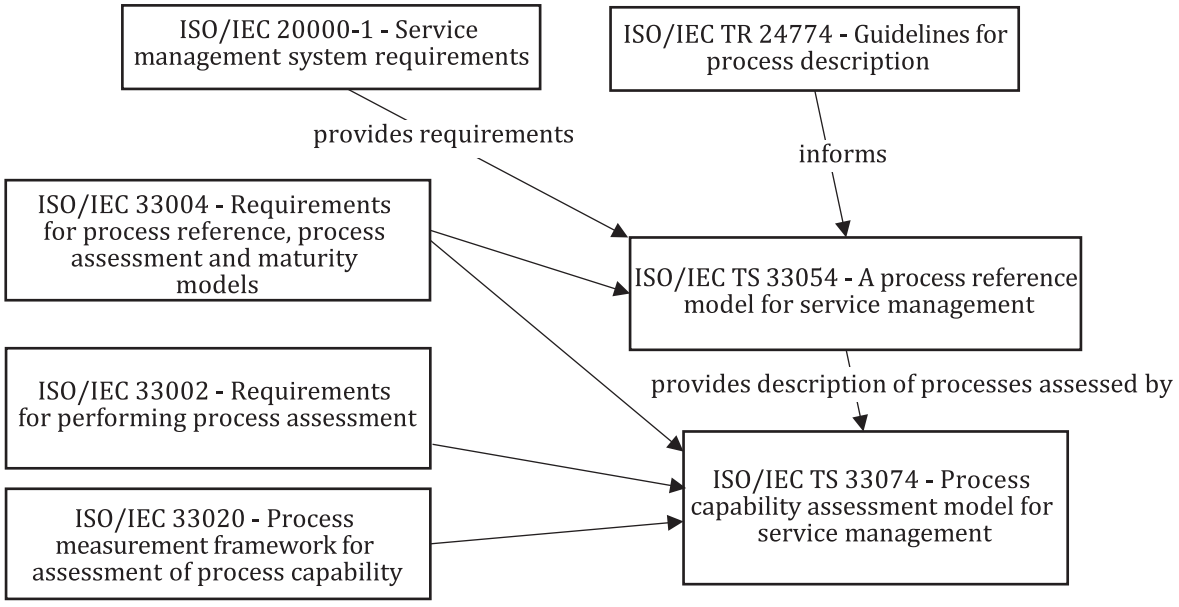


Figure 1 — Relationships between relevant standards

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Any organization may use processes with additional elements in order to suit it to the environment and circumstances. This process assessment model contains a set of indicators to be considered when interpreting the intent of its process reference model. It provides greater detail to indicate process performance and capability. The indicators may also be used when implementing a process improvement program or to help evaluate and select an assessment model, method, methodology or tools.

This process assessment model embodies the core characteristics that could be expected of any process assessment model consistent with ISO/IEC 33004. Nevertheless, any other process assessment models meeting the requirements of ISO/IEC 33004 may be used in a conformity assessment.

This document has a similar structure to ISO/IEC TS 33072 and ISO/IEC TS 33073. It may be used in conjunction with these process assessment models to support joint assessment of service management processes, information security management, and quality management processes

Within this document:

— Clause 4 provides a detailed description of the structure and key components of a process assessment model, which includes two dimensions: a process dimension and a capability dimension. Assessment indicators are introduced in this clause.

— Clause 5 addresses the process dimension. The processes are described in the process assessment model in terms of purpose and outcomes. The process assessment model includes a set of process performance indicators called base practices for each process. The process assessment model also defines a second set of indicators of process performance by associating inputs and outputs with each process. Clause 5 is also linked directly to Annex B, which defines the inputs/outputs characteristics.

— Clause 6 addresses the capability dimension. It duplicates the definitions of the capability levels and process attributes from ISO/IEC 33020, and expands each of the nine attributes through the inclusion of a set of generic practices. These generic practices belong to a set of indicators of process capability, in association with generic resource indicators, and generic inputs/outputs indicators. Annex B is also linked directly to Clause 6 as it defines the inputs/outputs characteristics.

— Annex A provides a statement of conformance of the process assessment model to the requirements defined in ISO/IEC 33004.

— Annex B provides selected characteristics for typical inputs/outputs to assist the assessor in evaluating the capability level of processes.

— Annex C contains three tables. Table C.1 identifies the base practices linked to requirements; Table C.2 identifies the requirements linked to base practices; and lastly, Table C.3 identifies the base practices not linked to requirements.

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Information technology — Process assessment — Process capability assessment model for service management

1 Scope

This document:

— defines a process assessment model that relies on the process reference model published as ISO/IEC TS 33054 that meets the requirements of ISO/IEC 33004 and that supports the performance of an assessment by providing indicators for guidance on the interpretation of the process purposes and outcomes and the process attributes as defined in ISO/IEC 33020;

— provides guidance, by example, on the definition, selection and use of assessment indicators.

A process assessment model comprises a set of indicators of process performance and process capability. The indicators are used as a basis for collecting the objective evidence that enables an assessor to assign ratings. The set of indicators included in this document is not intended to be an all-inclusive set.

The process assessment model in this document is directed at assessment sponsors and competent assessors who wish to select a model, and associated documented process method, for assessment (for either capability determination or process improvement). Additionally, it can be of use to developers of assessment models in the construction of their own model, by providing examples of good service management practices. It can be used by:

a) service providers to assess and improve a service management system (SMS);

b) service providers to demonstrate their capability for the planning, design, development, transition and delivery of services that meet agreed service management requirements.

Any process assessment model meeting the requirements defined in ISO/IEC 33004 concerning models for process assessment can be used for assessment. Different models and methods can be needed to address differing business needs. The assessment model in ISO/IEC TS 33074 is provided as an assessment model meeting all the requirements expressed in ISO/IEC 33004.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 20000-10, *Information technology — Service management — Part 10: Concepts and vocabulary*

ISO/IEC 33001, *Information technology — Process assessment — Concepts and terminology*

ISO/IEC TS 33054, *Information technology — Process Assessment — Process reference model for service management*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 33001 and ISO/IEC 20000-10 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

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