

ISO/IEC TS 33060

Information technology — Process assessment — Process assessment model for system life cycle processes

*Technologies de l'information — Évaluation du processus —
Modèle d'évaluation du processus pour les processus du cycle de
vie du système*

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

This second edition cancels and replaces the first edition (ISO/IEC TS 33060:2020), which has been technically revised.

The main changes are as follows:

- processes, process purposes, and process outcomes are revised to reflect the ISO/IEC/IEEE 15288:2023 processes;
- base practices are revised to reflect the ISO/IEC/IEEE 15288:2023 activities and tasks;
- process outputs 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.

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The set of International Standards ISO/IEC 33001 to ISO/IEC 33099 defines the requirements and resources needed for process assessment. The overall architecture and content of the series is described in ISO/IEC 33001.

This document defines a process assessment model for system life cycle processes, conformant with the requirements of ISO/IEC 33004, for use in performing a conformant assessment in accordance with the requirements of ISO/IEC 33002.

A process assessment model is related to one or more process reference models. The process reference model defined in ISO/IEC/IEEE 15288 is used as the basis for the process assessment model in this document.

A process assessment model incorporates a process measurement framework conformant with the requirements of ISO/IEC 33003 and is expressed as a process quality characteristic with a defined set of process attributes.

A process assessment model includes a set of assessment indicators. Process performance indicators address the process purpose and outcomes of each process in the process assessment model. Process quality indicators demonstrate the achievement of the process attributes in the process measurement framework. These indicators may also provide a reference source of practices when implementing a process improvement program.

The assessment indicators are used as a basis for collecting objective evidence to support an assessor's judgement in assigning ratings of the performance and quality of an implemented process. The set of indicators defined in this document is not intended to be an all-inclusive set and applicable in its entirety. Subsets appropriate to the context and scope of the assessment should be selected, and potentially augmented with additional indicators.

A process assessment is conducted according to a documented assessment process. A documented assessment process identifies the rating method to be used in rating process attributes and identifies or defines the aggregation method to be used in determining ratings.

ISO/IEC 33020 provides a process measurement framework for the assessment of process capability which may be incorporated as a process measurement framework in this document. ISO/IEC 33020:2019, Annex B includes a set of process quality indicators for each process attribute in the process measurement framework.