

24774

First edition  
2021-05

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# Systems and software engineering — Life cycle management — Specification for process description

*Ingénierie du logiciel et des systèmes — Gestion du cycle de vie —  
Spécification pour la description des processus*



Reference number  
ISO/IEC/IEEE 24774:2021(E)

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Published in Switzerland

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## Foreword

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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 ISO/IEC documents should be noted. This document was drafted in accordance with the rules given in the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives) or [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs)).

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ISO/IEC/IEEE 24774 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*, in cooperation with the Systems and Software Engineering Standards Committee of the IEEE Computer Society, under the Partner Standards Development Organization cooperation agreement between ISO and IEEE.

This first edition cancels and replaces ISO/IEC TR 24774:2010, which has been technically revised.

The main changes compared to ISO/IEC TR 24774:2010 are as follows:

- process definition and examples have been updated to reflect SC 7 latest standards;
- the former ISO/IEC Technical Report has been jointly revised with IEEE as an International Standard.

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](http://www.iso.org/members.html) and [www.iec.ch/national-committees](http://www.iec.ch/national-committees).

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## Introduction

For an organization to function effectively, the organization has to determine and manage numerous interrelated activities and tasks to achieve its goals. An activity or a set of activities using resources and managed in order to enable the achievement of outcomes through the transformation of inputs into outputs can be considered a process. Often the output from one process forms the input to other processes. When processes are explicitly described and performed in a systematic manner, the likelihood of consistent quality in the results is improved. Thus, process descriptions and process models (frameworks of related processes) enable consistent performance and delivery of expected results.

A number of international, national and industry standards describe processes and process reference models. The process descriptions vary in format, content and level of prescription. The purpose of this document is to encourage uniformity in the description of processes. Uniform description of processes facilitates adoption, adaptation and improvement of standardized processes, as well as process assessment. The combination of processes and the development of process views from different reference models eases the development of new models and facilitates comparison of processes.

In order for users of standards to select the appropriate forms of process description and apply them in a consistent fashion, it is desirable to develop a common characterization of all of these forms of process description. This document presents requirements for the description of processes in terms of their format, content and level of prescription. The requirements of this document can be applied to any process model developed for any purpose.

This document is intended for use by all parties that define process models, for example systems and software engineers, sector or special interest groups, professional standards groups, researchers, and process assessors.