TECHNICAL REPORT

ISO/IEC TR 24754-2

First edition 2011-10-15

Information technology — Document description and processing languages — Minimum requirements for specifying document rendering systems —

Part 2:

Formatting specifications for document rendering systems

Technologies de l'information — Description des documents et langages de traitement — Exigences minimales pour spécifier les systèmes de conversion de documents —

Partie 2. Spécifications de formatage pour les systèmes de conversion de documents







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Published in Switzerland

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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. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC TC 1.

International Standards are drafted in accordance with the rules given in the SO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

In exceptional circumstances, when the joint technical committee has collected data of a different kind from that which is normally published as an International Standard (state of the art), for example), it may decide to publish a Technical Report. A Technical Report is entirely informative in nature and shall be subject to review every five years in the same manner as an international Standard.

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.

ISO/IEC TR 24754-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, Information technology, Subcommittee SC 34, Document description and processing languages.

ISO/IEC 24754 consists of the following parts, under the general title Information technology — Document description and processing languages — Minimum requirements for specifying document rendering systems:

- Part 1: Feature specifications for document rendering systems
- Part 2: Formatting specifications for document rendering systems [Technical Report]

Introduction

The scope of ISO/IEC 24754-1 makes reference to a set of style specifications an originator provides to a recipient to reconstruct the presentation of a structured document. To avoid problems with presentation, the originator and recipient must negotiate the available functionality in a document rendering system. Through such negotiation, the exchanged style specifications can avoid making reference to functionality not available in the document rendering system. This manages the expectations of the originator and the recipient regarding the final rendering.

ISO/IEC 24754-1 presumes the originator (the end user with the data that is to be formatted) has created the required style specifications for the recipient (the compositor writing the stylesheet or other instructions for the document rendering system) to render the document as desired. No guidelines are included in ISO/IEC 24754-1 regarding the components of a formatting specification reflecting all of the style specifications suitable for specifying the use of facilities available in the document rendering system.

This part of ISO/IEC 24754 provides such guidance. Utilizing the terminology of ISO/IEC 24754-1, it describes the context of use of the features listed in ISO/IEC 24754-1 so as to direct the end user in the authoring of a useful formatting specification for developers and compositors to implement. Beyond those terms specified in ISO/IEC 24754-1, this part of ISO/IEC 24754 incorporates guidelines and terminology derived from ISO/IEC 9541 (various parts), ISO/IEC 10179, and ISO/IEC TR 19758.

The relationship between this part of ISO/IEC 24754 and ISO/IEC 24754-1 is depicted in Figure 1, where the end user must write a suitable formatting specification for the compositor to create the necessary stylesheet (layout instructions) for a document rendering system to produce the appropriate formatted result for the end user.

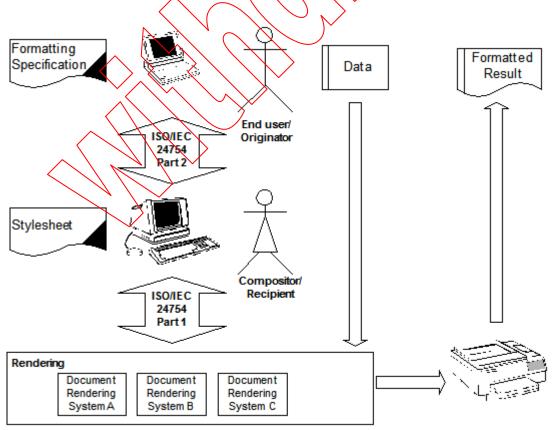


Figure 1 — Relationship between ISO/IEC 24754-1 and ISO/IEC TR 24754-2

Information technology — Document description and processing languages — Minimum requirements for specifying document rendering systems —

Part 2:

Formatting specifications for document rendering systems

1 Scope

This part of ISO/IEC 24754 provides guidelines in the writing of formatting specifications targeted for document rendering systems supporting functionality described by ISO/IEC 24754-1. There is no scope of conformance constraints against which the use of these guidelines are measured. Possible user requirements for publishing layouts are unbounded. It is the user's obligation to describe their formatting requirements to be fulfilled by a developer or a compositor using a document rendering system. Using incomplete formatting specifications can delay achieving the desired rendered result.

This part of ISO/IEC 24754 is a specification of questions for the writer of a formatting specification. It is assumed that the writer of a formatting specification is unaware of the needs of the stylesheet writer in meeting the needs of the specification writer. For a writer aware of such needs, this part of ISO/IEC 24754 is a useful checklist of the issues to be considered.

This part of ISO/IEC 24754 outlines various considerations users should assess when analysing their rendering expectations. Properties described by this part of ISO/IEC 24754 should be specified in sufficient detail such that a developer or compositor has the information required to engage the necessary facilities in the document rendering system.

This part of ISO/IEC 24754 does not presume any particular stylesheet language with which to specify layout and formatting properties. Various stylesheet languages support different degrees of functionality described herein. Not all languages can assume to offer control over the properties described by this part of ISO/IEC 24754, yet it behaves the user to specify as much detail as possible so as to equip the developer or compositor for their task. By knowing as many nuances of layout as desired, there are more strategies available with which to accomplish a layout as close as possible to the requirements.

Many components of this part of ISO/IEC 24754 are presented to the reader as questions in the first person, so as to ask the reader to reflect on their requirements when answering the question.

2 Normative references

The following referenced documents are indispensable for the application 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.

NOTE Each of the following documents has a unique identifier that is used to cite the document in the text. The unique identifier consists of the part of the reference up to the first comma.

ISO/IEC 24754-1, Information technology — Document description and processing languages — Minimum requirements for specifying document rendering systems — Part 1: Feature specifications for document rendering systems