TECHNICAL REPORT

ISO/IEC TR 19758

First edition 2003-04-01

Information technology — Document description and processing languages — DSSSL library for complex compositions

Technologies de l'information — Description de document et langages de traitement — Bibliothèque DSSL pour compositions complexes



ISO/IEC TR 19758:2003(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO/IEC 2003

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Forewordv			
Introductionvi			
1	Scope	1	
2	Normative references	1	
3	Terms and definitions	1	
4	Formatting objects and properties	Δ	
4.1	Paper size		
4.2	Paper placement		
4.3	Unit		
4.4	Basic composition style		
4.5	Model of basic composition style		
4.5.1	Position of image area on a paper		
4.5.2	Models of basic composition styles		
4.6	Font		
4.7	Unit of character size		
4.7	Headline		
4.8.1	Number of headlines		
4.8.1 4.8.2			
_	Position of headline		
4.8.3	Contents of headline		
4.9	Page Number		
4.10	Note		
4.10.1	Type of note		
4.10.2	Reference Mark		
4.11	Inlinenote		
4.12	Emphasizing mark		
4.13	Superscript / Subscript (Superior / Inferior)		
4.14	Word-length adjustment		
4.15	Character space adjustment		
4.16	Clause		
4.16.1	Ordered clause		
4.16.2	Unordered clause		
4.16.3	Indentation of clause		
4.17	List	. 14	
4.17.1	Ordered list	. 14	
4.17.2	Unordered list	. 14	
4.17.3	Indentation of list	. 14	
4.18	Table	. 14	
4.18.1	Character size	. 14	
4.18.2	Position		
4.19	Heading	. 15	
4.19.1	Character size		
4.19.2	Heading composition	_	
4.20	Ruby		
4.21	Paragraph indentation		
4.22	Score		
4.23	Rule		
4.24	Inline		
4.24.1	Line width		
	Line position		

ISO/IEC TR 19758:2003(E)

5	Configuration of DSSSL Library	24
5.1	Processing flow	24
5.1.1	Simple parameter data	25
5.1.2	Full parameter generator	25
5.1.3	Function set	25
5.1.4	Page model set	26
5.1.5	Flow object construction rules	26
5.2	Simple parameter data	26
6	Full parameter generator	28
7	Function set	38
8	Page model set	46
9	Flow object construction rules	52
	•	

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 JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/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, the joint technical committee may propose the publication of a Technical Report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;
- type 3, 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).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

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 19758, which is a Technical Report of type 2, was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 34, *Document description and processing languages*.

This specification is a translation of a JIS/Technical Report "DSSSL library for complex compositions" (TR X 0010:2000) published by Japanese Standards Association (JSA) in September 01, 2000.

Introduction

This Technical Report is based on the activities taken by Application Standards Committee of JBMA (Japan Business Machine Makers' Association) and Electronic Publishing Committee of INSTAC/JSA for application technology of DSSSL (ISO/IEC 10179, Document Style Semantics and Specification Language).

The DSSSL library specified in this Technical Report encourages interchanging SGML (Standard Generalized Markup Language) or XML (Extensible Markup Language) documents with such a complicated style specification by DSSSL as multilingual composition including Japanese and English texts within a page, clause or paragraph.

Information technology — Document description and processing languages — DSSSL library for complex compositions

1 Scope

This Technical Report provides a DSSSL library that can specify styles for the documents described by SGML (Standard Generalized Markup Language, ISO 8879) or XML (Extensible Markup Language, W3C REC-xml-980210). The library makes it feasible to describe DSSSL specification for those documents, without any particular knowledge of DSSSL or particular composition rules.

The library deals with some complex compositions described by a number of complicated DSSSL specification statements. They are typically required in fixed-pitch document styles. Some of them can be applied to proportional pitch styles and fixed/proportional mixtures as well. More sophisticated compositions will be dealt with in a future Technical Report to be submitted.

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.

ISO/IEC 10179:1996, Information technology — Processing languages — Document Style Semantics and Specification Language (DSSSL)

ISO 8879:1986, Information processing — Text and office systems — Standard Generalized Markup Language (SGML)

ISO 8879:1986/Cor.2:1999, Information processing — Text and office systems — Standard Generalized Markup Language (SGML) TECHNICAL CORRIGENDUM 2

ISO/IEC 9541-1:1991, Information technology — Font information interchange — Part 1: Architecture