
**Information technology — Processing
languages — Document Style Semantics
and Specification Language (DSSSL)**

**AMENDMENT 2: Extensions to multilingual
and complicated document styles**

iTeh STANDARD PREVIEW

(standards.it-eh.org)
*Technologies de l'information — Langages de traitement — Sémantique
de présentation de documents et langage de spécifications (DSSSL)*

AMENDEMENT 2: Extensions aux modèles multilingues et compliqués
de document

<https://standards.iso.org/standards/sist/6588e41d-1523-4850-835b-8bce3526e0d5/iso-iec-10179-1996-amd-2-2005>

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.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO/IEC 10179:1996/Amd 2:2005](https://standards.iteh.ai/catalog/standards/sist/6588e41d-1523-4850-835b-8bce3526e0d5/iso-iec-10179-1996-amd-2-2005)

<https://standards.iteh.ai/catalog/standards/sist/6588e41d-1523-4850-835b-8bce3526e0d5/iso-iec-10179-1996-amd-2-2005>

© ISO/IEC 2005

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

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.

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.

Amendment 2 to ISO/IEC 10179:1996 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 34, *Document description and processing languages*.

ITEH STANDARD PREVIEW
(standards.iteh.ai)

[ISO/IEC 10179:1996/Amd 2:2005](https://standards.iteh.ai/catalog/standards/sist/6588e41d-1523-4850-835b-8bce3526e0d5/iso-iec-10179-1996-amd-2-2005)

<https://standards.iteh.ai/catalog/standards/sist/6588e41d-1523-4850-835b-8bce3526e0d5/iso-iec-10179-1996-amd-2-2005>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO/IEC 10179:1996/Amd 2:2005](https://standards.iteh.ai/catalog/standards/sist/6588e41d-1523-4850-835b-8bce3526e0d5/iso-iec-10179-1996-amd-2-2005)

<https://standards.iteh.ai/catalog/standards/sist/6588e41d-1523-4850-835b-8bce3526e0d5/iso-iec-10179-1996-amd-2-2005>

Information technology — Processing languages — Document Style Semantics and Specification Language (DSSSL)

AMENDMENT 2:

Extensions to multilingual and complicated document styles

Replace "ISO 639:1988 Code for the representation of names of languages." of 3 **Normative References** with:

ISO 639-1:2002, *Codes for the representation of names of languages — Part 1: Alpha-2 code.*

ISO 639-2:1998, *Codes for the representation of names of languages — Part 2: Alpha-3 code.*

Add the following list items after the list item of "— may-violate-keep-after?" of **12.6.2 Display-group Flow Object Class**:

- `ext-line-number`: is a style object specifying characteristic to be assigned to `ext-line-number` to determine the style of a line number.
- `ext-line-number-start`: is a number that start point of sequence of line numbers to be output. The default value is specified using `declare-characteristic`. This characteristic is inherited.
- `ext-line-number-position`: is either # or a string that specifies the position within the display area at which to output the line number. The default value is specified using `declare-characteristic`. The string property specifies the position of the number by counting from either side of the display area from the initial position of the writing-mode. Thus, when the writing-mode is 'left-to-right' with a layout of 'simple-page-sequence', specifying the value as "2" will display line-number on the right-hand side of the main text area. When layout is 3 columns, using 'column-set-sequence', to display the line number on both sides of 2nd column, specify "3 4" as the value of characteristic. This characteristic is inherited.
- `ext-line-number-interval`: is a positive integer that specifies the interval between successive line numbers. The default value is specified using `declare-characteristic`. This characteristic is inherited.
- `ext-line-number-sep`: is a length specifying the separation between line-number and display area. The default value is specified using `declare-characteristic`. This characteristic is inherited.
- `ext-line-number-side`: is one of the symbols `start`, `end`, or `both`. Specifies the position of display area in which the line-number is displayed. This characteristic overlaps with `ext-line-number-position`: when both characteristics are specified, `ext-line-number-position` has a priority. The default value is specified using `declare-characteristics`. This characteristic is inherited.
- `candidate-point-y`: is a length specifying the candidate point of y-coordinate in a display-group region. The default value is `Opt`. This characteristic is not inherited.
- `keep-with-next-table-row-count`: is a number that specifies the number of table rows that are to be kept together within the area produced by flow object when `keep-with-next?` is #. The default value is 0. This characteristic is not inherited.
- `keep-with-next-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep-with-next?` is #. The default value is 0. This characteristic is not inherited.

- `keep-line-count`: is a number that specifies the number of lines to be kept together within the area produced by a flow object when `keep?` is `#t`, `'page`, `'column-set`, or `'column`. The default value is 0. This characteristic is not inherited.
- `keep-priority`: is an integer that specifies the priority of `keep` within the layout specification when `keep`, `keep-with-next`, `keep-with-previous` are processed. This characteristic is not inherited when a default value has been specified.
- `enable-last-linebreak?`: is a boolean specifying whether line-break is to be inserted or not at the end of generated area. The default value is `#f`. This characteristic is not inherited.
- `basic-spacing?`: is a boolean specifying whether the basic line positioning rule is to be applied or not. The default value is `#f`.
- `line-adjustment?`: is a boolean specifying whether the basic kerning rule of start and end of line is to be applied or not. The default value is `false`.
- `numeric-unit-division?`: is a boolean specifying whether division methods toward numeric and unit are to be applied or not. The default value is `false`.
- `treat-single-line-as-last-line?`: is a boolean specifying whether a single line is treated as last line or not. This characteristic is mainly used when display FOC specifies quadding as justify and the stylesheet writer does not expect single lines to be justified. The default value is `#f`.
- `open-paren-space-length`: is a length specifying the distance between line head and an open parenthesis. The default value is `0pt`.
- `first-line-open-paren-space-length`: is a length specifying the distance between the start position of the first line of paragraph and an open parenthesis.
- `continuous-number-base-position?`: is a boolean indicating whether basic positioning methods based on continuous number is to be applied or not. The default value is `false`.
- `space-addition?`: is a boolean specifying whether inter-letter space adjustment methods are to be applied or not. When the value is `#t` and a line has space for justification, space can be inserted between each letter. The default value is `false`.
- `last-line-characters`: is a number that specifies the minimum number of characters that can be placed in the last line of the text area. The default value is `#f`.
- `font-height`: is a length specifying height of a font using a numeric expression. The default value is `0pt`. This characteristic is not inherited.
- `font-width`: is a length specifying width of a font using a numeric expression. The default value is `0pt`. This characteristic is not inherited.
- `font-family-name`: is either `#f`, indicating that any font family is acceptable, a string giving the font family name property of the desired font resource, or a list of (Language font-family-name) to specify multiple fonts. The initial value is `isoserif`
- `character-rotation`: is one of the symbols 0, 90, 180, or 270. Specifies that floating direction on specified inline characters. 0 means floating direction is same as the value of `writing-mode`. 90 means specified characters' floating direction is orthogonal to `writing-mode`. The default value is 0.
- `base-line-shift`: is a length specifying the distance from the base line. When the value is negative, base line is shifted up (or right). Base line is shifted down (or left) in response to a positive value. The default value is 0.

Add the following list items after the list item of “— writing-mode” of **12.6.3 Simple-page-sequence Flow Object Class**:

- page-number-format: is either #f or a string that specifies the format of a page number. The default value is “1”. This characteristic is not inherited.
- page-number-restart: is a boolean specifying whether the page number is to be re-calculated or not. The default value is #f. This characteristic is not inherited.
- initial-page-number: is a number that specifies the initial value of the page number. The default value is #f. This characteristic is not inherited.

Add the following list items after the list item of “— binding-edge” of **12.6.4 Page-sequence Flow Object Class**:

- page-number-format: is either #f or a string that specifies the format of a page number. The default value is “1”. This characteristic is not inherited.
- page-number-restart?: is a boolean specifying whether the page number is to be re-calculated or not. The default value is #f. This characteristic is not inherited.
- initial-page-number: is a number that specifies the initial value of the page number. The default value is #f. This characteristic is not inherited.

iTeh STANDARD PREVIEW

(standards.itih.ai)

Add the following list items after the list item of “— keep-with-next?” of **12.6.5 Column-set-sequence Flow Object Class**:

- keep-with-next-line-count: is a number that specifies the number of lines to be kept together within the area produced by a flow object when keep-with-next? is #f. The default value is 0. This characteristic is not inherited.
- keep-line-count: is a number that specifies the number of lines to be kept together within the area produced by a flow object when keep? is #t, 'page, 'column-set, or 'column. The default value is 0. This characteristic is not inherited.
- keep-priority: is an integer that specifies the priority of keep within the layout specification when keep, keep-with-next, keep-with-previous are processed. This characteristic is not inherited when a default value has been specified.

Add the following list items after the list item of “— keep-with-next?” of **12.6.6 Paragraph Flow Object Class**:

- keep-with-next-line-count: is a number that specifies the number of lines to be kept together within the area produced by a flow object when keep-with-next? is #f. The default value is 0. This characteristic is not inherited.
- keep-line-count: is a number that specifies the number of lines to be kept together within the area produced by a flow object when keep? is #t, 'page, 'column-set, or 'column. The default value is 0. This characteristic is not inherited.
- keep-priority: is an integer that specifies the priority of keep within the layout specification when keep, keep-with-next, keep-with-previous are processed. This characteristic is not inherited when a default value has been specified.

- `basic-spacing?`: is a boolean specifying whether the basic line positioning rule is to be applied or not. The default value is `#f`.
- `line-adjustment?`: is a boolean specifying whether the basic kerning rule of start and end of line is to be applied or not. The default value is `false`.
- `numeric-unit-division?`: is a boolean specifying whether division methods toward numeric and unit are to be applied or not. The default value is `false`.
- `treat-single-line-as-last-line?`: is a boolean specifying whether a single line is treated as last line or not. This characteristic is mainly used when display FOC specifies quadding as justify and the stylesheet writer does not expect single lines to be justified. The default value is `#f`.
- `open-paren-space-length`: is a length specifying the distance between line head and an open parenthesis. The default value is `0pt`.
- `first-line-open-paren-space-length`: is a length specifying the distance between the start position of the first line of paragraph and an open parenthesis.
- `continuous-number-base-position?`: is a boolean indicating whether basic positioning methods based on continuous number is to be applied or not. The default value is `false`.
- `space-addition?`: is a boolean specifying whether inter-letter space adjustment methods are to be applied or not. When the value is `#t` and a line has space for justification, space can be inserted between each letter. The default value is `false`.
- `last-line-characters`: is a number that specifies the minimum number of characters that can be placed in the last line of the text area. The default value is `#f`.
- `font-height`: is a length specifying height of a font using a numeric expression. The default value is `0pt`. This characteristic is not inherited.
- `font-width`: is a length specifying width of a font using a numeric expression. The default value is `0pt`. This characteristic is not inherited.
- `font-family-name`: is either `#f`, indicating that any font family is acceptable, a string giving the font family name property of the desired font resource, or a list of (Language font-family-name) to specify multiple fonts. The initial value is `isoserif`.
- `character-rotation`: is one of the symbols `0`, `90`, `180`, or `270` specifying that a floating direction on specified inline characters. `0` means a floating direction is same as the value of writing-mode. `90` means specified characters' floating direction is orthogonal to writing-mode. The default value is `0`.
- `base-line-shift`: is a length specifying the distance from the base line. When the value is negative, base line is shifted up (or right). Base line is shifted down (or left) on positive value. The default value is `0`.
- `drop-character-number`: is a number that specifies the number of characters can be displayed as dropcap characters. The default value is `0`. This characteristic is not inherited.
- `dropcap-height`: is a length specifying height of a dropcap region. The default value is `0pt`. This characteristic is not inherited.
- `dropcap-width`: is a length specifying width of a dropcap region. The default value is `0pt`. This characteristic is not inherited.
- `string-bullet-list`: is a list of strings that specifies the ordered bullet expression. Specified list will be rendered as the bullet of the ordered list. Each list item will be embraced by doublequote and separated by space. A doublequote can be written inside a string only by escaping it with a backslash(`\`) as in "The world \"recursion\" has many meanings.". Sample of this expression is as follows: `string-bullet-list: '(list("one" "two" "\three" "four"))`. The default value is `""`. This characteristic is not inherited.

Replace the list item of “— font-family-name” of **12.6.6 Paragraph Flow Object Class** with:

- font-family-name: is either #f, indicating that any font family is acceptable, a string giving the font family name property of the desired font resource, or a list of (Language font-family-name) to specify multiple fonts. The initial value is isoserif.

Add the following list item after the list item of “— break-after-priority” of **12.6.8 Line-field Flow Object Class**:

- inhibit-justify-space: is one of the symbols before, after, both, or #f specifying the inhibition of space by quadding: 'justify before/after the FOC line-field. The default value is #f. This characteristic is not inherited.

Add the following list item after the list item of “— line-sep” of **12.6.9 Sideline Flow Object Class**:

- sideline-shift: is a length specifying the shifted length by means of a relative coordinate. The default value is 0 pt. This characteristic is inherited.

Add the following list items after the list item of “— inhibit-line-breaks?” of **12.6.11 Character Flow Object Class**:

- character-rotation: is one of the symbols 0, 90, 180, or 270 specifying that a floating direction on specified inline characters. 0 means a floating direction is same as the value of writing-mode. 90 means specified characters' floating direction is orthogonal to writing-mode. The default value is 0.
- base-line-shift: is a length specifying the distance from the base line. When the value is negative, base line is shifted up (or right). Base line is shifted down (or left) on positive value. The default value is 0.
- font-height: is a length specifying height of a font using a numeric expression. The default value is 0pt. This characteristic is not inherited.
- font-width: is a length specifying width of a font using a numeric expression. The default value is 0pt. This characteristic is not inherited.
- font-family-name: is either #f, indicating that any font family is acceptable, a string giving the font family name property of the desired font resource, or a list of (Language font-family-name) to specify multiple fonts. The initial value is isoserif

Add the following list items after the list item of “— keep-with-next?” of **12.6.14 Rule Flow Object Class**:

- keep-with-next-line-count: is a number that specifies the number of lines to be kept together within the area produced by a flow object when keep-with-next? is #t. The default value is 0. This characteristic is not inherited.
- keep-line-count: is a number that specifies the number of lines to be kept together within the area produced by a flow object when keep? is #t, 'page, 'column-set, or 'column. The default value is 0. This characteristic is not inherited.
- keep-priority: is an integer that specifies the priority of keep within the layout specification when keep, keep-with-next, keep-with-previous are processed. This characteristic is not inherited when a default value has been specified.