

# History of Changes

## Table of contents

1 Version FOP Trunk ().....	2
2 Version 0.92beta (18 Apr 2006).....	2
2.1 Code.....	2
3 Version 0.91beta (23 Dec 2005).....	4
3.1 Code.....	4
4 Version 0.90alpha1 (22 Nov 2005).....	6
4.1 Code.....	6
5 Version 0.20.5 (18 July 2003).....	6
5.1 Code.....	6

## 1. Version FOP Trunk ()

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## 2. Version 0.92beta (18 Apr 2006)

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### 2.1. Code

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- Initial support for page-position="last" added. (JM)
- Reenabled loading of user-supplied hyphenation patterns that was available in FOP 0.20.5. (See "hyphenation-base" option in the user configuration) (JM)
- Added support for fixed-width spaces. (JM)
- Added support for kerning. (JM)
- Support for "userconfig" attribute in FOP Ant Task. (JM) Thanks to Jirí Mareš.
- Initial support for XMP metadata (PDF 1.4) under fo:declarations. (JM)
- Added support for the background-position shorthand property. (AD)
- Added support for the font shorthand property. (AD)
- Added support for system-color() function. (JM) Thanks to Max Berger. Fixes [38618](#).
- Added support for the from-table-column() function. (Thanks to gerhard.oetl.at.oesoft.at for the inspiration.) (AD)
- New feature: "Intermediate format" (IF). The IF is basically the XML dialect written by the area tree renderer (XMLRenderer). A new parser for this format allows reparsing a serialized and possibly modified area tree and rendering it to the final target format. (JM)
- Relative URLs for the font configuration attributes metrics-url and embed-url are now supported. A new configuration property font-base has been added. It sets the base URL against which relative font URLs are resolved. If font-base is not set base is used. (MM) Fixes [36729](#).
- Added support for RFC2397 "data" URLs. (JM) Thanks to Richard Wheeldon. Fixes [38132](#).
- The font loading code now reads the encoding value from the XML font metrics file so that fonts like Symbol and ZapfDingbats can be embedded explicitly (Required by PDF/A). (JM)
- Added feature: support for white-space shorthand (AD)
- Added feature: support for page-break-\* shorthands (AD)
- Bugfix: The generation of the PDF "d" (setdash) command was assuming that only integer values can be used but that isn't the case. Dash patterns PDFGraphics2D would be wrong in the process. (JM)
- Bugfix: Fixed a division by zero problem in TTFReader and improved the detection of the capHeight and xHeight font metric values for TrueType fonts. (JM)
- Bugfix: Allow URLs in basic-link's external-destination to be wrapped in "url()". (JM)

- Bugfix: Corrected enumerated property value for white-space property from "no-wrap" to "nowrap". (MM)
- Bugfix: Added support for white-space-treatment="preserve" in particular to support the white-space="pre" short hand property. (MM) Fixes [38457](#).
- Corrected expectation and behaviour for the text-indent property to only apply to the first line area generated by a block. (JM)
- Bugfix for invalid handling of ICC color profiles in JPEG images and for dealing with CMYK JPEG images with the Adobe APPE marker. (JM)
- Bugfix: Certain filter combinations in PDF could lead to invalid PDFs. DecodeParams were not properly handled. (JM)
- Bugfix: CCITT Group 4 encoded TIFF images with multiple strips are now properly embedded in PDF files. (JM)
- Bugfix: Fixed a copy/paste error in the table layout code that caused wrong page break decisions when table-headers and/or table-footers are used. (JM)
- Bugfix: Fixed an NPE that was thrown when a table was used inside a footnote-body. (JM)
- Bugfix: Fixed a problem with certain TrueType fonts which are missing the "PCLT" table, where a baseline-shift="sub" had no effect due to a missing x-height value. (Note: This only affects TTFReader, so the font metric file has to be regenerated.) (JM)
- Bugfix: When the base URL was specified as a file system path, the constructed URL was wrong. (JM)
- Bugfix: Fixed two causes for ClassCastExceptions in BlockContainerLayoutManager. (JM)
- Bugfix: padding-top and padding-bottom on list-items could lead to wrong page break decisions and thus to overlapping text. (JM)
- Bugfix: break-before and break-after were ignored on list-items. (JM)
- Bugfix: The elements representing a non-breaking space weren't always correct. (LF) Fixes [38507](#).
- Bugfix: Text-decoration was not promoted if no text-decoration attribute was specified on a nested element. (JM) Fixes [38453](#).
- Bugfix: Spanned cells could lead to an false error message about overlapping cells and ultimately a NullPointerException. (JM) Fixes [38397](#).
- Bugfix: Regions with non-standard names got ignored in RTF output leading to missing headers and footers. (JM)
- The RTF output now properly generates the "\landscape" flag for documents in landscape orientation. (JM)
- Following a clarification by the XSL FO SG, space traits are only set on the first and last area generated by an FO, and not on every area anymore. (JM)
- Bugfix: Floating point numbers were not properly formatted in the PDF renderer which could lead to error messages while opening a PDF in Acrobat Reader. (JM)
- Bugfix: Spans that end up with a negative height don't get swallowed anymore. (JM) Fixes [38054](#).

- Bugfix: Certain border styles could lead to a NullPointerException. (JM) Fixes [38132](#).
- Bugfix: Space was not adjusted if the space was on a nested block. This could lead to content overflowing the bottom of a page. (JM) Fixes [38102](#).
- Bugfix: TableCell did not properly report that it generates reference-areas which could lead to wrong inherited values for start-indent and end-indent. (JM)
- Bugfix: Image height for BMP images was incorrectly calculated (MM) Fixes [38089](#).
- Bugfix: NullPointerException on certain fo:inline within lists. (MM) Fixes [38053](#).
- Bugfix: ClassCastException on certain fo:inline with border combinations. (MM) Fixes [37743](#).
- Changed a method name in LineArea from finalize to finalise because it was never intended for the method to be an override of the Java Object finalize method. If invoked by the Java garbage collector it may cause a NPE. (MM)
- Implement property name as default argument on some xsl-function calls. (SP) Thanks to Gerhard Oetl. Fixes [38098](#).
- Implement force-page-count property of page-sequence. (SP) Thanks to Gerhard Oetl. Fixes [38087](#).
- Improvements to the code for inline block content. (SP)
- Revision of refinement white-space handling. (AD)

### 3. Version 0.91beta (23 Dec 2005)

#### 3.1. Code

- Added checks that warn about tables and block-containers that are wider than the available content area. (JM)
- First attempt at SVG support in RTF output. SVG images are converted to 300dpi JPEG images internally. (JM)
- The command-line now automatically sets two parameters for any XSLT transformation: "fop-output-format" contains the MIME type of the currently selected output format, "fop-version" contains FOP's version number. (JM)
- Added an alternative set of rules for calculating text indents which tries to mimic the behaviour of many commercial FO implementations that chose to break the rules in the FO specification in order to better meet the natural expectations of inexperienced FO users. (JM)
- font-family list still not fully supported but a comma-separated list is now properly tokenized. FOP will now go through all fonts in the list to find one that is available, but it doesn't do so per character, yet. (JM)
- Implemented "Overconstrained Geometry" rules (5.3.4, XSL 1.0) for the most important cases. (JM)
- Support for leader painting in PostScript output. (JM)

- Support for hyphenation-ladder-count. (LF, MM)
- Fixed a bug where the linefeed-treatment property value "preserve" was not honoured when used in conjunction with text-align="center". (MM)
- Bugfix: hard breaks with even-page or odd-page were not handled correctly when spaces were surrounding the break. (JM) Fixes [37964](#).
- Fixed a bug where SVG content could be clipped when rendered to PostScript. (JM)
- Changed the way resolutions are handled. The single resolution in the user agent got split up into source and target resolutions. For more info, see the updated documentation. Note: backwards-incompatible change! (JM)
- Bugfix: Some content inside a table-header may not have been rendered on pages  $n > 1$  in certain conditions. (JM) Fixes [37875](#).
- Fixed a bug where an empty line, i.e. a block containing only a &nbsp;, was not rendered at all. (MM)
- Fixed a bug where the area for a finished cell that is broken over pages was created once for each row it was spanned over instead of only once. (JM)
- Bugfix: Footnotes were lost if the footnote appeared in centered text. (JM) Fixes [37880](#).
- Fix to correct image sizes in RTF output. (JM)
- The output file is now deleted when an exception occurs when calling FOP from the command-line. (JM)
- Bugfix: Areas for table-cells that are broken over more than one page are now generated even if all its content is already painted on a previous page. This fixes strange effects like a table grid that is not completely painted. (JM)
- Bugfix: Column balancing produced strange break decisions in certain multi-column documents with large amounts of text. (JM) Fixes [37828](#).
- Bugfix: The combination of content-width="scale-to-fit" and content-height="100%" did not work as expected due to a datatype conversion bug. (JM) Thanks to Tom Craddock. Fixes [37815](#).
- Bugfix: A span="all" on the first block cause a subsequent page break and the first block didn't span all columns. (JM) Fixes [37813](#).
- Bugfix: Self-created OutputStreams in PNG Renderer were not properly closed. (JM)
- Bugfix: Relatively positioned BlockViewports (from block-containers) caused the paint cursor not be properly advanced when space-before or space-after were present. (JM)
- Bugfix: Space resolution was incomplete for content in table-cells. Conditional elements didn't get removed. (JM)
- The validation check for non-zero borders and padding on a region-\* and for empty static-content elements is now turned off when relaxed validation is active to improve compatibility with FO documents written for other FO implementations. (JM)
- Bugfix for "/" by zero" ArithmeticExceptions when an URL to a non-existing image is used and content-width and/or content-height is used. (JM)
- Bugfix for a multi-threading problem: propertyListTable initialization moved from the

constructor to a static block in FONode. This fixes NullPointerExceptions in PropertyList. (JM)

- Bugfix for placement of text inside a text area when borders are present in PostScript output. (JM)
- Deprecated Fop constructors that use integer constants to select the output format have been removed in favor of the constructors that use MIME types. (JM)
- Changed the XMLHandler interface so it doesn't report the MIME type it supports but instead can report whether it supports a particular Renderer implementation. XMLHandlers are now configurable. (JM)
- Improved log and error messages in a number of places by adding additional context information that should make it easier to find the location in the source files. (JM)
- Additional checks to detect text overflows. The overflow property is now properly handled where applicable. (JM)
- Source location information improved. If location information is not available, the context information is provided based on text content. (JM)
- The border-collapse property on fo:table is now forced to the value "separate" until the collapsing border has been implemented. (JM)
- Improvements on leader painting in PDF output. (JM)

## 4. Version 0.90alpha1 (22 Nov 2005)

### 4.1. Code

- **Complete redesign of the FOP codebase** in the period between Dec 2001 and Nov 2005. There are just too many changes to list here. If you like to know details, run `svn log --verbose`  
`http://svn.apache.org/repos/asf/xmlgraphics/fop/trunk/`. (all)

## 5. Version 0.20.5 (18 July 2003)

### 5.1. Code

- For the change log for the maintenance branch (where FOP 0.20.5 came from), please see the "CHANGES" file in the distribution, or the CHANGES file in the SVN repository. (all)