

Report on Identified Refactoring Opportunities for SC/ST Refactoring

Each of the identified control-fields represents an SC/ST refactoring opportunity.

Statistics on Identified Control-Fields:

1. No. of Classes (IPC): 1125
2. Classes Qualified for Refactoring (QC): 91
3. %QC: 8.089%
4. No. of Fields in All Classes (IF): 4120
5. Identified Control Fields (CF): 120
6. %CF: 2.913%
7. No. of Control-Fields for SC Refactoring: 46
8. No. of Control-Fields for ST Refactoring: 74
9. No. of Control-Fields Associated with More Than 15 Conditional-Statements: 2
10. No. of Control-Fields Associated with 11 to 15 Conditional-Statements: 0
11. No. of Control-Fields Associated with 6 to 10 Conditional-Statements: 5
12. No. of Control-Fields Associated with 2 to 5 Conditional-Statements: 113

Identified Control-Fields. A control-field is denoted as $\langle C, f \rangle$, where 'f' is a field of a class with fully-qualified name 'C'. Uses = Number of conditional-statements associated with a control-field.

Uses	Replace Type Code with Subclass (SC)	Uses	Replace Type Code with State (ST)
26	<org.apache.fop.traits.BorderProps, mode>	39	<org.apache.fop.render.rtf.RTFHandler, bDefer>
6	<org.apache.fop.area.BlockViewport, clip>	10	<org.apache.fop.layoutmgr.KnuthElement, bIsAuxiliary>
	<org.apache.fop.fo.pagination.ConditionalPageMasterReference, pagePosition>		
5	<org.apache.fop.area.inline.Viewport, clip>	9	<org.apache.fop.layoutmgr.AbstractBaseLayoutManager, fobj>
4	<org.apache.fop.layoutmgr.inline.TextLayoutManager.AreaInfo, bHyphenated>	6	<org.apache.fop.area.Block, positioning>
	<org.apache.fop.render.rtf.rtfllib.rtfdoc.RtfTableCell, hMerge>	5	<org.apache.fop.fo.expr.PropertyTokenizer, currentToken>
	<org.apache.fop.layoutmgr.BlockContainerLayoutManager, autoHeight>		<org.apache.fop.fo.flow.table.GridUnit, colSpanIndex>
3	<org.apache.fop.fonts.type1.PFMFile, dfItalic>		<org.apache.fop.layoutmgr.BlockStackingLayoutManager, bpUnit>
	<org.apache.fop.pdf.PDFFilterList, ignoreASCIIFilters>		<org.apache.fop.area.RegionReference, regionClass>
	<org.apache.fop.pdf.FlateFilter, predictor>		<org.apache.fop.cli.CommandLineOptions, inputmode>
	<org.apache.fop.render.ps.PSPageDeviceDictionary, flushOnRetrieval>		<org.apache.fop.fo.flow.Leader, leaderPattern>
	<org.apache.fop.area.Trait.Background, repeat>	4	<org.apache.fop.fo.pagination.RegionBA, precedence>
			<org.apache.fop.layoutmgr.AbstractLayoutManager, bFinished>
			<org.apache.fop.render.ps.PSRenderer, twoPassGeneration>
			<org.apache.fop.fonts.trueType.TTFFFile, isCFF>
			<org.apache.fop.layoutmgr.PageBreakingAlgorithm, footnotesPending>
			<org.apache.fop.hyphenation.PatternParser, currElement>

Uses	Replace Type Code with Subclass (SC)	Uses	Replace Type Code with State (ST)
2	<org.apache.fop.fo.flow.BlockContainer, overflow>	3	<org.apache.fop.fo.pagination.Region, overflow>
	<org.apache.fop.area.BodyRegion, columnCount>		<org.apache.fop.pdf.PDFFilter, applied>
	<org.apache.fop.fo.pagination.ConditionalPageMasterReference, oddOrEven>		<org.apache.fop.fonts.trueType.TTFFile, isEmbeddable>
	<org.apache.fop.layoutmgr.KnuthGlue, adjustmentClass>		<org.apache.fop.layoutmgr.BlockStackingLayoutManager, firstVisibleMarkServed>
	<org.apache.fop.render.rtf.rtfli.rtfdoc.RtfList, hasTableParent>		<org.apache.fop.text.linebreak.LineBreakStatus, hadSpace>
	<org.apache.fop.fo.expr.NumericProperty, dim>		<org.apache.fop.fo.FOEventHandler, inMarker>
	<org.apache.fop.fo.flow.InlineContainer, blockItemFound>		<org.apache.fop.fo.flow.table.TableBody, rowsStarted>
	<org.apache.fop.tools.anttasks.SerializeHypPattern, errorDump>		<org.apache.fop.layoutmgr.inline.InlineLayoutManager, fobj>
	<org.apache.fop.fo.pagination.PageNumberGenerator, formatType>		<org.apache.fop.fo.pagination.Flow, flowName>
	<org.apache.fop.fo.flow.BlockContainer, blockItemFound>		<org.apache.fop.fo.flow.table.Table, hasExplicitColumns>
	<org.apache.fop.fonts.Font, metric>		<org.apache.fop.layoutmgr.PageBreakingAlgorithm, newFootnotes>
	<org.apache.fop.pdf.StreamCacheFactory, cacheToFile>		<org.apache.fop.fonts.trueType.TTFFile, capHeight>
	<org.apache.fop.layoutmgr.inline.LeafNodeLayoutManager.AreaInfo, bHyphenated>		<org.apache.fop.fo.XMLWhiteSpaceHandler, inWhiteSpace>
	<org.apache.fop.fo.flow.ListBlock, hasListItem>		<org.apache.fop.fonts.trueType.TTFFile, xHeight>
	<org.apache.fop.area.Span, colCount>		<org.apache.fop.area.inline.AbstractTextArea, textWordSpaceAdjust>
	<org.apache.fop.fo.flow.table.TableColumn, implicitColumn>		<org.apache.fop.area.inline.AbstractTextArea, textLetterSpaceAdjust>
	<org.apache.fop.render.rtf.rtfli.rtfdoc.RtfExternalGraphic, perCentW>		<org.apache.fop.layoutmgr.BlockStackingLayoutManager, breakBeforeServed>
	<org.apache.fop.render.rtf.rtfli.rtfdoc.RtfExternalGraphic, perCentH>		<org.apache.fop.fo.XMLWhiteSpaceHandler, linefeedTreatment>
	<org.apache.fop.layoutmgr.SpaceResolver, isLast>		
	<org.apache.fop.layoutmgr.inline.LineLayoutManager.Paragraph, textAlignment>		
	<org.apache.fop.render.ps.PSRenderer, autoRotateLandscape>		
	<org.apache.fop.fo.pagination.ConditionalPageMasterReference, blankOrNotBlank>		
	<org.apache.fop.area.inline.SpaceArea, isAdjustable>		
	<org.apache.fop.layoutmgr.PageBreaker, needColumnBalancing>		
	<org.apache.fop.render.pdf.PDFSVGHandler.PDFInfo, paintAsBitmap>		
	<org.apache.fop.fo.flow.table.TableCell, blockItemFound>		
	<org.apache.fop.fo.flow.table.Table, tableBodyFound>		
	<org.apache.fop.render.afp.modca.MapCode dFont.FontDefinition, scale>		

Uses	Replace Type Code with Subclass (SC)	Uses	Replace Type Code with State (ST)
	<org.apache.fop.fo.flow.table.PrimaryGridUnit, isSeparateBorderModel>	2	<org.apache.fop.fo.properties.PropertyMaker, propId>
	<org.apache.fop.fo.flow.table.TableCell, displayAlign>		<org.apache.fop.fo.flow.MultiProperties, hasWrapper>
	<org.apache.fop.area.LineArea.LineAdjustingInfo, lineAlignment>		<org.apache.fop.fo.pagination.SimplePageMaster, hasRegionBody>
	<org.apache.fop.render.afp.modca.AFPDataStream, rotation>		<org.apache.fop.fonts.CustomFont, capHeight>
	<org.apache.fop.fo.expr.RelativeNumericProperty, operation>		<org.apache.fop.fo.pagination.Flow, blockItemFound>
	<org.apache.fop.fo.flow.Leader, ruleStyle>		<org.apache.fop.fo.properties.PropertyMaker, setByShorthand>
			<org.apache.fop.area.AbstractOffDocumentItem, whenToProcess>
			<org.apache.fop.fo.pagination.SinglePageMasterReference, state>
			<org.apache.fop.hyphenation.TernaryTree.Iterator, cur>
			<org.apache.fop.fo.flow.table.GridUnit, rowSpanIndex>
			<org.apache.fop.layoutmgr.PageBreaker, firstPart>
			<org.apache.fop.render.rtf.rtfllib.rtfdoc.WhiteSpaceCollapser, lastEndSpace>
			<org.apache.fop.layoutmgr.inline.AlignmentContext, baselineShiftValue>
			<org.apache.fop.layoutmgr.inline.TextLayoutManager, lineEndBAP>
			<org.apache.fop.fo.InlineCharIterator, startBoundary>
			<org.apache.fop.area.LineArea.LineAdjustingInfo, bAddedToAreaTree>
			<org.apache.fop.fo.flow.table.TableAndCaption, tableFound>
			<org.apache.fop.fonts.LazyFont, realFont>
			<org.apache.fop.layoutmgr.LayoutContext, ipdAdjust>
			<org.apache.fop.svg.PDFTextUtil, inTextObject>
			<org.apache.fop.fo.flow.table.TableBody, lastCellEndsRow>
			<org.apache.fop.pdf.PDFFilterList, disableAllFilters>
			<org.apache.fop.fo.properties.PropertyMaker, inherited>
			<org.apache.fop.render.pdf.PDFRenderer, inTextMode>
			<org.apache.fop.render.rtf.rtfllib.rtfdoc.RtfParagraphKeepTogether, status>
			<org.apache.fop.render.ps.PSRenderer, inTextMode>
			<org.apache.fop.fo.flow.AbstractListItemPart, blockItemFound>
			<org.apache.fop.layoutmgr.PageBreakingAlgorithm, autoHeight>

Uses	Replace Type Code with State (ST)
	<org.apache.fop.layoutmgr.table.TableStepper, delayingNextRow>
	<org.apache.fop.render.pcl.PCLRenderer, disabledPjL>
	<org.apache.fop.fo.FObj.FObjIterator, currentIndex>
	<org.apache.fop.fonts.CustomFont, ascender>
	<org.apache.fop.fonts.CustomFont, descender>
	<org.apache.fop.fonts.FontCache, changed>
	<org.apache.fop.layoutmgr.inline.LineLayoutManager, textAlignment>
	<org.apache.fop.layoutmgr.table.TableStepper, rowFinished>
	<org.apache.fop.pdf.PDFDeviceColorSpace, currentColorSpace>
	<org.apache.fop.layoutmgr.KnuthPenalty, breakClass>
	<org.apache.fop.render.afp.AFPRenderer.ViewPortPos, rot>
	<org.apache.fop.render.afp.modca.AbstractPageObject, rotation>

[Back To Top](#)