## 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): 102
- 2. Classes Qualified for Refactoring (QC): 14
- 3. %QC: 13.725%
- 4. No. of Fields in All Classes (IF): 694
- 5. Indentified Control Fields (CF): 17
- 6. %CF: 2.45%
- 7. No. of Control-Fields for SC Refactoring: 5
- 8. No. of Control-Fields for ST Refactoring: 12
- 9. No. of Control-Fields Associated with More Than 15 Conditional-Statements: 0
- 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: 2
- 12. No. of Control-Fields Associated with 2 to 5 Conditional-Statements: 15

Identified Control-Fields. A control-field is denoted as <C, f>, 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)
5	<pre><graphics.readviz, forwarddirection=""></graphics.readviz,></pre>	9	<misc.alignmentrecord, forwardstrand=""></misc.alignmentrecord,>
3	<misc.alignmentblock, strand=""></misc.alignmentblock,>	8	<pre><misc.filter.filterinterfaceadaptor,< th=""></misc.filter.filterinterfaceadaptor,<></pre>
	<pre><graphics.readviz.readmapcomparator,< th=""><th>4</th><th><pre><rnaseq.alignmentfilter, quiet=""></rnaseq.alignmentfilter,></pre></th></graphics.readviz.readmapcomparator,<></pre>	4	<pre><rnaseq.alignmentfilter, quiet=""></rnaseq.alignmentfilter,></pre>
2	<pre><rnaseq.finesplicecounter.splicelocation,< pre=""></rnaseq.finesplicecounter.splicelocation,<></pre>	3	<misc.alignmentfilter2, quiet=""></misc.alignmentfilter2,>
	exon1>		<pre><rnaseq.exoncounter, introniccgff=""></rnaseq.exoncounter,></pre>
	<misc.filter.junction, top=""></misc.filter.junction,>		<pre><rnaseq.alignmentfilter, forcesamout=""></rnaseq.alignmentfilter,></pre>
			<misc.alignmentfilter2, isProcessNonPassed&gt;</misc.alignmentfilter2, 
			<pre><graphics.readviz, inauto=""></graphics.readviz,></pre>
		2	<pre><special.intronretentioncgff2, debug=""></special.intronretentioncgff2,></pre>
			<pre><rnaseq.transcriptomerecover, intronfiltermode=""></rnaseq.transcriptomerecover,></pre>
			<pre><misc.filter.filterinterfacesinglereadadapt or,="" reverseselection=""></misc.filter.filterinterfacesinglereadadapt></pre>
			<pre><special.promotercgff, fromtss=""></special.promotercgff,></pre>