

ReleaseNote43

MM 2013, Apache Lucene™ 4.3 available

The Lucene PMC is pleased to announce the release of Apache Lucene 4.3

Apache Lucene is a high-performance, full-featured text search engine library written entirely in Java. It is a technology suitable for nearly any application that requires full-text search, especially cross-platform.

This release contains numerous bug fixes, optimizations, and improvements, some of which are highlighted below. The release is available for immediate download at:

<http://lucene.apache.org/core/mirrors-core-latest-redir.html>

See the CHANGES.txt file included with the release for a full list of details.

Lucene 4.3 Release Highlights:

- * Significant performance improvements for minShouldMatch BooleanQuery due to skipping resulting in up to 4000% faster queries.
- * A new SortingAtomicReader which allows sorting an index based on a sort criteria (e.g. a numeric DocValues field), as well as SortingMergePolicy which sorts documents before segments are merged.
- * DocIdSetIterator and Scorer now has a cost API that provides an upper bound of the number of documents the iterator might match. This API allows optimisation during query execution or how filters are applied.
- * Analyzing/FuzzySuggester now allow to record arbitrary byte[] as a payload. The suggesters also use an ending offset to determine whether the last token was finished or not, so that a query "i " will no longer suggest "Isla de Muerta" for example.
- * Lucene Spatial Module can now search for indexed shapes by Within, Contains, and Disjoint relationships, in addition to typical Intersects.
- * PostingsHighlighter now allows custom passage scores, per-field BreakIterators and has been detached from TopDocs. Additionally, subclasses can override where string values for highlighting are pulled from alternatively to stored fields.
- * New SearcherTaxonomyManager manages near-real-time reopens of both IndexSearcher and TaxonomyReader (for faceting).
- * Added new facet method to the facet module to compute facet counts using SortedSetDocValuesField, without a separate taxonomy index.
- * DrillSideways class, for computing sideways facet counts, is now more flexible: it allows more than one FacetRequest per dimension and now allows drilling down on dimensions that do not have a facet request.
- * Various bugfixes and optimizations since the 4.2 release.

Please read CHANGES.txt for a full list of new features.

Please report any feedback to the mailing lists
(<http://lucene.apache.org/core/discussion.html>)

Note: The Apache Software Foundation uses an extensive mirroring network for distributing releases. It is possible that the mirror you are using may not have replicated the release yet. If that is the case, please try another mirror. This also goes for Maven access.