

# ReleaseNote41



January 2013, Apache Lucene™ 4.1 available

The Lucene PMC is pleased to announce the release of Apache Lucene 4.1

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 4.1 Release Highlights:

- \* Lucene 4.1 has a new default codec (Lucene4lCodec) based on the previously-experimental "Block" indexing format for improved performance, but also incorporating the functionality of "Appending" and "Pulsing".
- \* The default codec incorporates the optimization of Pulsing: terms that appear in only one document (such as primary key/id fields) just store the document id in the term dictionary instead of a pointer to this document id in a separate file.
- \* The default codec incorporates an efficient compressed stored fields implementation that compresses chunks of documents together with LZ4. (see <http://blog.jpountz.net/post/33247161884/efficient-compressed-stored-fields-with-lucene>)
- \* Lucene no longer seeks when writing files (all fields are written in an append-only way). This means it works by default with append-only streams, hdfs, etc.
- \* New suggest implementations: AnalyzingSuggester, where the underlying form (computed from a Lucene Analyzer) used for suggestions is separate from the returned text (see <http://blog.mikemccandless.com/2012/09/lucenes-new-analyzing-suggester.html>), and FuzzySuggester, which additionally allows for inexact matching on the input.
- \* Near-realtime support was added to the facet module. (see <http://shaierera.blogspot.com/2012/11/lucene-facets-part-1.html>)
- \* New Highlighter (postingshighlighter) added to the highlighter module. (see <http://blog.mikemccandless.com/2012/12/a-new-lucene-highlighter-is-born.html>)
- \* Added FilterStrategy to FilteredQuery for more flexibility in filtered query execution.
- \* Added CommonTermsQuery to speed up queries with very highly frequent terms. Term frequencies are efficiently detected at query time - no index time preparation required.
- \* Several bugfixes and optimizations since the 4.0 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.