# ReleaseNote63

4 November 2016, Apache Solr 6.3.0 available

Solr is the popular, blazing fast, open source NoSQL search platform from the Apache Lucene project. Its major features include powerful full-text search, hit highlighting, faceted search and analytics, rich document parsing, geospatial search, extensive REST APIs as well as parallel SQL. Solr is enterprise grade, secure and highly scalable, providing fault tolerant distributed search and indexing, and powers the search and navigation features of many of the world's largest internet sites.

Solr 6.3.0 is available for immediate download at:

. http://lucene.apache.org/solr/mirrors-solr-latest-redir.html

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

. https://lucene.apache.org/solr/6\_3\_0/changes/Changes.html

Solr 6.3 Release Highlights:

DocValues, streaming, /export, machine learning:

- \* Optimize, store and deploy AI models in Solr
- \* Ability to add custom streaming expressions
- \* New streaming expressions such as "fetch", "executor", and "commit" added.
- \* Parallel SQL accepts <, >, =, etc., symbols.
- \* Support facet scoring with the scoreNodes expression
- \* Retrieving docValues as stored values was sped up by using the proper leaf reader rather than ask for a global view. In extreme cases, this leads to a 100x speedup.

#### Faceting:

- \* facet.method=enum can bypass exact counts calculation with facet.exists=true, it just returns 1 for terms which exists in result docset
- \* Add "overrequest" parameter to JSON Facet API to control amount of overrequest on a distributed terms facet

## Logging:

- \* You can now set Solr's log level through environment variable SOLR\_LOG\_LEVEL
- $^{\star}$  GC logs are rotated by JVM to a max of 9 files, and backed up via bin/solr scripts
- \* Solr's logging verbosity at the INFO level has been greatly reduced by moving much logging to DEBUG level
- \* The solr-8983-console.log file now only logs STDOUT and STDERR output, not all log4j logs as before
- \* Solr's main log file, solr.log, is now written to SOLR\_LOGS\_DIR without changing log4j.properties

### Start scripts:

- \* Allow 180 seconds for shutdown before killing solr (configurable, old limit 5s) (Unix only)
- \* Start scripts now exits with informative message if using wrong Java version
- \* Fixed "bin/solr.cmd zk upconfig" command which was broken on windows
- \* You can now ask for DEBUG logging simply with '-v' option, and for WARN logging with '-q' option

# SolrCloud:

- \* The DELETEREPLICA API can accept a 'count' parameter and remove "count" number of replicas from each shard if the shard name is not provided
- \* The config API shows expanded useParams for request handlers inline
- \* Ability to create/delete/list snapshots at collection level
- \* The modify collection API now waits for the modified properties to show up in the cluster state before returning
- \* Many bug fixes related to SolrCloud recovery for data safety and faster recovery times.

#### Security:

- \* SolrJ now supports Kerberos delegation tokens
- \* Pooled SSL connections were not being re-used. This is now fixed.
- \* Fix for the blockUnknown property which made inter-node communication impossible
- \* Support SOLR\_AUTHENTICATION\_OPTS and SOLR\_AUTHENTICATION\_CLIENT\_CONFIGURER in windows bin/solr.cmd script
- \* New parameter -u <user:pass> in bin/post to pass basicauth credentials

#### Misc changes:

- \* Optimizations to lower memory allocations when indexing JSON as well as for replication between solr cloud nodes.
- \* A new Excel workbook (.xlsx) response writer has been added. Use 'wt=xlsx' request parameter on a query request to enable.

Further details of changes are available in the change log available at:  $http://lucene.apache.org/solr/6_3_0/changes/Changes.html$ 

Please report any feedback to the mailing lists (http://lucene.apache.org/solr/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 applies to Maven access.