

# ReleaseNote80

## 14 March 2019, Apache Solr™ 8.0.0 available

The Lucene PMC is pleased to announce the release of Apache Solr 8.0.0

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.

The release is available for immediate download at:

<http://www.apache.org/dyn/closer.lua/lucene/solr/8.0.0>

Please read CHANGES.txt for a detailed list of changes:

[https://lucene.apache.org/solr/8\\_0\\_0/changes/Changes.html](https://lucene.apache.org/solr/8_0_0/changes/Changes.html)

### Solr 8.0.0 Release Highlights

- Solr is switching from Apache [HttpClient](#) to Jetty Client for adding HTTP/2 support. Most frequent inter-communication between nodes like indexing and query are now sent in HTTP/2. HTTP/1.1 practically allows only one outstanding request per TCP connection this means that for sending multiple requests at the same time multiple TCP connections must be established. This leads to waste of resources on both-sides and long GC-pause. Solr 8 with HTTP/2 support overcomes that problem by allowing multiple requests can be sent in parallel using a same TCP connection.
- Nested documents (AKA child documents or block join) is significantly improved. Most improvements come from storing and leveraging more information about the relationships in the index, like the named relationship between a child and its parent. This information is used by the [child] doc transformer to return children in nested form instead of flat. There is plenty more that can be done with this in the future. Another key improvement is that nested documents can be deleted or replaced in a natural way without orphaning child documents; although care is still needed with delete-by-query.

Being a major release, Solr 8 removes many deprecated APIs, changes various parameter defaults and behavior. Some changes may require a re-index of your content. You are thus encouraged to thoroughly read the "Upgrade Notes" at [http://lucene.apache.org/solr/8\\_0\\_0/changes/Changes.html](http://lucene.apache.org/solr/8_0_0/changes/Changes.html) or in the CHANGES.txt file accompanying the release.

Solr 8.0 also includes many other new features as well as numerous optimizations and bugfixes of the corresponding Apache Lucene release.

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 goes for Maven access.