Diff 8.7 vs 9.3 Documentation

1. Solr Core Properties File:
    - In version 9.3, the "solr.xml" file is no longer used to configure cores. Instead, a separate properties file named "core.properties" is utilized.
    - To migrate, need to create the "core.properties" file for each core, specifying the core name, data directory, and other configuration settings.
2. Deprecated Parameters:
    - Some parameters have been deprecated in version 9.3, and should consider using alternatives:
    - a. "solr.xml" file:
        - Remove any unused or deprecated parameters in existing "solr.xml" file.
    - b. Logging:
        - Check the Solr documentation for updated logging configurations and modify the "log4j.properties" file accordingly.
3. ZooKeeper Version:
    - Solr 9.3 requires ZooKeeper version 3.7.x for running Solr in SolrCloud mode.
    - Upgrade ZooKeeper installation to a compatible version is necessary.
4. Schema API Enhancements:
    - The Schema API has been enhanced in version 9.3.
    - If have custom scripts or tools that interact with the schema API, ensure they are compatible with the changes.
5. Security Improvements:
    - Solr 9.3 includes security enhancements. There is change in authentication or authorization features.
6. Plugin Compatibility:
    - Compatibility of any custom or third-party plugins used with Solr 9.3.
    - Upgrade or modify the plugins as needed to ensure they work correctly with the new Solr version.
7. Request Handlers and Query Parsers:
    - Solr 9.3 introduces updates to request handlers and query parsers.
    - Update configuration files (solrconfig.xml) based on the updated specifications and requirements.
8. Index format change:
   Solr 9.3 uses a new index format called " Lucene 9.3" which is different from the previous version used in Solr 8.7 ("Lucene 8.7"). This means that will need to reindex data using the new format.
9. Field type changes: Some field types have been removed or replaced in Solr 9.3. For example, the "string" field type has been replaced by "text" and "keyword" field types. will need to update the schema accordingly.
10. Analyzers and tokenizers: There are some changes in the analyzers and tokenizers in Solr 9.3. For example, the default analyzer for text fields is now "standard_analyzer" instead of "whitespace_analyzer".
11. Query parser updates: The query parser has undergone significant changes in Solr 9.3. There are new features such as support for phrase queries and improved handling of ranges.
12. Faceting improvements: Solr 9.3 includes many faceting improvements, including support for nested facets, range facets, and pivot facets. However, these changes may require updates to existing facet configuration.

13. Aggregations: Solr 9.3 introduces a new aggregation framework that allows for more powerful and flexible grouping and summarization of search results.
14. Other changes: There are numerous other changes in Solr 9.3, including improvements to indexing performance, better support for distributed searching, and updated APIs.
15. Solr Core Configuration: Solr 9.3.0 introduces a new format for core configuration called Core Discovery. The solrconfig.xml file is replaced with separate configuration files:
    - solr.xml: Contains information about cores, their directory paths, and core properties.
    - managed-schema: Stores the schema configuration.
    - managed-synonyms: Contains managed synonyms configuration.
16. To migrate core configuration:
    - Update solr.xml with the appropriate paths and properties for cores.
    - Replace the configuration in solrconfig.xml with the relevant settings in managed-schema and managed-synonyms files.
    - Ensure all necessary properties and field types are correctly defined in the new format.
17. Schema API: Solr 9.3.0 introduces a new Schema API for managing the schema.
18. Query Syntax Changes: Solr 9.3.0 includes updates to the query syntax.
    - Named Collections: Solr 9.3.0 introduces the ability to query named collections. Update queries to include the desired named collection.
    - Result Grouping: The new rollup parameter enables result grouping for aggregated search results. Revise queries to leverage this feature.
    - Field Functions: Explore the additional field functions available in Solr 9.3.0 and modify queries to use them if applicable.
19. SolrCloud Improvements: Solr 9.3.0 brings various improvements to SolrCloud. Some important changes to consider:
    - Distributed Agreement Protocols: Solr 9.3.0 enhances the distributed agreement protocols..
    - Leader Election: Evaluate leader election improvements
    - Collection Management APIs: Access new and enhanced APIs for managing collections. Consider utilizing these APIs for better collection management.
20. Deprecations and API Changes: Review the deprecations and API changes introduced in Solr 9.3.0. Some key considerations:
    - PerFieldSimilarity: This feature is deprecated in Solr 9.3.0. Instead, use the similarity parameter in the field type definition to customize similarity.
21. Plugin Compatibility: Verify the compatibility of plugins and custom components used in Solr 8.7.0 instance with Solr 9.3.0. Some points to consider:
    - Check for updated versions of plugins compatible with Solr 9.3.0.
    - Update or replace existing plugins with compatible versions to ensure proper functioning.
22. Field Type Changes: Solr 9.3.0 introduces changes to field types that may affect schema. Pay attention to the following:
    - TrieField: The TrieField implementation has been significantly improved. Modify configuration to leverage the updated TrieField functionality.
    - TextField: The TextField type now includes the "termVectors" parameter to control the storage of term vectors. Update field configurations accordingly.
    - PointField: The new PointField replaces the previous spatial field types. Adjust schema and queries to accommodate the PointField type.