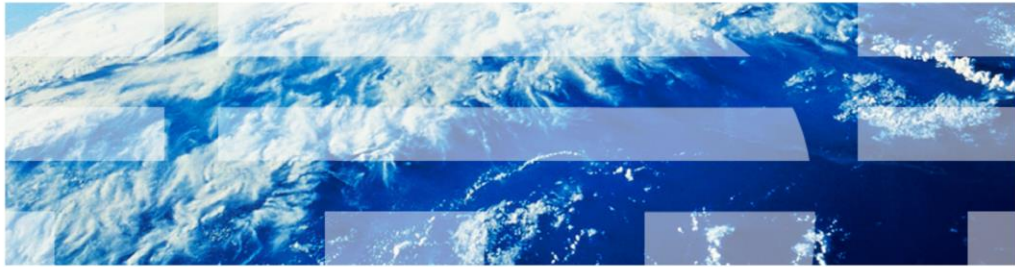


DB2 Text Search

Command line tools



This presentation describes the command line tools available in DB2® Text Search.

DB2 Text Search command line tools

- Configuration tool
- Administration tool
- Synonym tool
- Stop word tool

Command line tools are available to configure and administer DB2 Text Search. There is the Configuration tool, Administration tool, Synonym tool, and Stop word tool. All these tools are available in `sqllib/db2tss/bin` sub folder under the home directory of instance owner.

Configuration tool

- configTool
 - Initial and subsequent configuration
 - List and set server, query and indexing parameters at server and collection levels
- Examples
 - configTool generateToken -configPath /home/tsuser/sqllib/db2tss/config -seed tsuser
The request was successfully executed.
 - configTool printToken -configPath /home/tsuser/sqllib/db2tss/config
The authentication token is printed below. This token is used to communicate with the server. Store the token if applicable.
mpfjyPk=
The encryption key is printed below. This key is used to encrypt the password during text index backup and restore operations. Store the key if applicable.
mpfjyPnVgH0hkWnsyCx6og==
- Link for configuration tool details
 - http://pic.dhe.ibm.com/infocenter/db2luw/v10r5/topic/com.ibm.db2.luw.admin.ts.doc/doc/r_configuring.html

The Configuration Tool, also known as configTool, can be used to perform both initial and subsequent configuration of a DB2 Text Search instance. There are several configuration parameters available related to server, query and indexing at both system level and collection level. You can view and modify the values of these parameters using configTool.

The examples displayed on this slide show the usage of configTool to generate an authentication token that can be used to communicate with the Text Server and another example is provided to print the same.

Refer to the Information Center for more details on the configuration parameters available with configTool.

Configuration tool - Example

```
configTool printAll -configPath /home/tsuser/sqllib/db2tss/config
```

```
configPath /home/tsuser/sqllib/db2tss/config
adminHTTPPort 55005
defaultDataDirectory /home/tsuser/sqllib/db2tss/config/collections
installPath /home/tsuser/sqllib/db2tss
logPath /home/tsuser/sqllib/db2tss/log
TemporaryBaseDirectory /tmp
logLevel INFO
startupHeapSize 1500M
pluginsPath /home/tsuser/sqllib/db2tss/plugins
inputQueueMemorySize 50M
outputQueueMemorySize 50M
documentBatchMemorySize 1M
documentDeleteBatchSize 100
documentTimeout 1800
documentRetryNumber 0
numberOfPreprocessingThreads 4
numberOfIndexerThreads 4
acceptorThreads 300
securePort 0
```

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Command line tools

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This slide displays an example to print the values of all the DB2 Text Search configuration parameters using configTool.

Administration tool

- To perform various administrative tasks
 - Delete orphaned collections
 - Optimizes specified collection
 - Helps enable tracing
 - Displays server version
 - Provides a report on all Text Search collections

- Example

```
adminTool status -configPath /home/tsuser/sqllib/db2tss/config
```

CollectionName	IndexSize	Documents	Deleted
Base	296 B	0	0
tsuser_MYTSTEST_TS394218_0000	3.41 KB	3	0
tsuser_MYTSTEST_TS405516_0000	4.83 KB	5	0
tsuser_MYTSTEST_TS555716_0000	1.84 KB	5	0

- Link for administration tool details

- <http://pic.dhe.ibm.com/infocenter/db2luw/v10r5/topic/com.ibm.db2.luw.admin.ts.doc/doc/r0052950.html>

The Administration Tool, also known as adminTool, is another command line utility that can be used to perform several administrative tasks related to the Text Server.

You can use it to delete orphaned collections, optimize the specified collection, set trace options for debugging purposes and check the server version. It also provides a report on all Text Search collections including the details like index size, number of documents indexed, and so on.

The example displayed on this slide shows the usage of adminTool for printing the status of all collections. Refer to the Information Center for more details on the adminTool.

Synonym tool

- To add or remove synonym dictionaries for a Text Search index
- Create XML file that contains synonym groups

```
<?xml version="1.0" encoding="UTF-8"?>
<synonymgroups version="1.0">
  <synonymgroup>
    <synonym>database</synonym>
    <synonym>DB</synonym>
    <synonym>RDBMS</synonym>
  </synonymgroup>
  <synonymgroup>
    <British Broadcasting Corporation </synonym>
    <synonym>BBC</synonym>
  </synonymgroup>
</synonymgroups>
```
- Use this XML file to add synonym dictionary to specific Text Search index

The Synonym Tool is a command line tool used to add or remove synonym dictionaries for a Text Search index. A synonym dictionary consists of words that are synonyms to each other. First, an XML file should be created with the required synonym groups as displayed on this slide and use this file to add a synonym dictionary to the required text index.

Synonym tool - Examples

- Examples
 - `synonymTool importSynonym -synonymFile path-to-synonym-file -collectionName collection-name -replace true or false -configPath absolute-path-to-config-folder`
 - `synonymTool removeSynonym -collectionName collection-name -configPath absolute-path-to-config-folder`
- Link for synonym tool details
 - <http://pic.dhe.ibm.com/infocenter/db2luw/v10r5/topic/com.ibm.db2.luw.admin.ts.doc/doc/r0052952.html>

The examples displayed on this slide show the usage of the Synonym Tool for adding and removing a synonym dictionary for a text index. Refer to the Information Center for more details on Synonym Tool.

Stop word tool

- Add, modify or remove stop words per language
- One XML file per language with name `language_code-Stw.xml`
- Example
 - French stop word file is called `fr-Stw.xml`
- Example of a stop word file:

```
<?xml version="1.0" encoding="UTF-8"?>
<stopWords>
<stopWord>lotus</stopWord>
<stopWord>pond</stopWord>
</stopWords>
```

Most frequently occurring terms are referred to as Stop words, for example, a, an, the, and so on. The Stop word Tool is a command line tool that can be used to remove stop words from search queries. A list of stop words can be added, modified, or removed using this tool. Stop words are specified in XML files, one XML file per language with name *language_code-Stw.xml*. For example, the French stop word file is called `fr-Stw.xml`.

Stop word files are installed in `sqllib/db2tss/config/dictionaries` sub folder under the home directory of the instance owner.

A sample stop word file is displayed on this slide. It should be updated with custom stop words. As per this sample, the terms 'lotus' and 'pond' are removed from the search query.

Stop word tool - Example

- Example
 - stopwordTool.sh “*directory-containing-the-stopword-XML-files-and-dictionaries*”
- Link for stop word tool details
 - <http://pic.dhe.ibm.com/infocenter/db2luw/v10r5/topic/com.ibm.db2.luw.admin.ts.doc/doc/r0058492.html>

After modifying the XML file with a list of custom stop words, stop DB2 Text Search instance service and then run the stop word tool to update the stop word dictionaries as shown in the example displayed on this slide. Refer to the Information Center for more details on the Stop word tool.

Additional resources

- IBM Education Assistant modules
 - DB2 Text Search - [Installation, configuration and upgrade](#)
 - DB2 Text Search - [Indexing](#)
 - DB2 Text Search - [Search features](#)
 - DB2 Text Search - [Administration commands](#)
 - DB2 Text Search - [Overview](#)
- IBM Information Center
 - <http://pic.dhe.ibm.com/infocenter/db2luw/v10r5/topic/com.ibm.db2.luw.admin.ts.doc/doc/c0051296.html>

This slide displays additional IBM Education Assistant modules related to DB2 Text Search and it provides the link to the IBM Information Center.

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