visionSearch
Installation Guide

Contents

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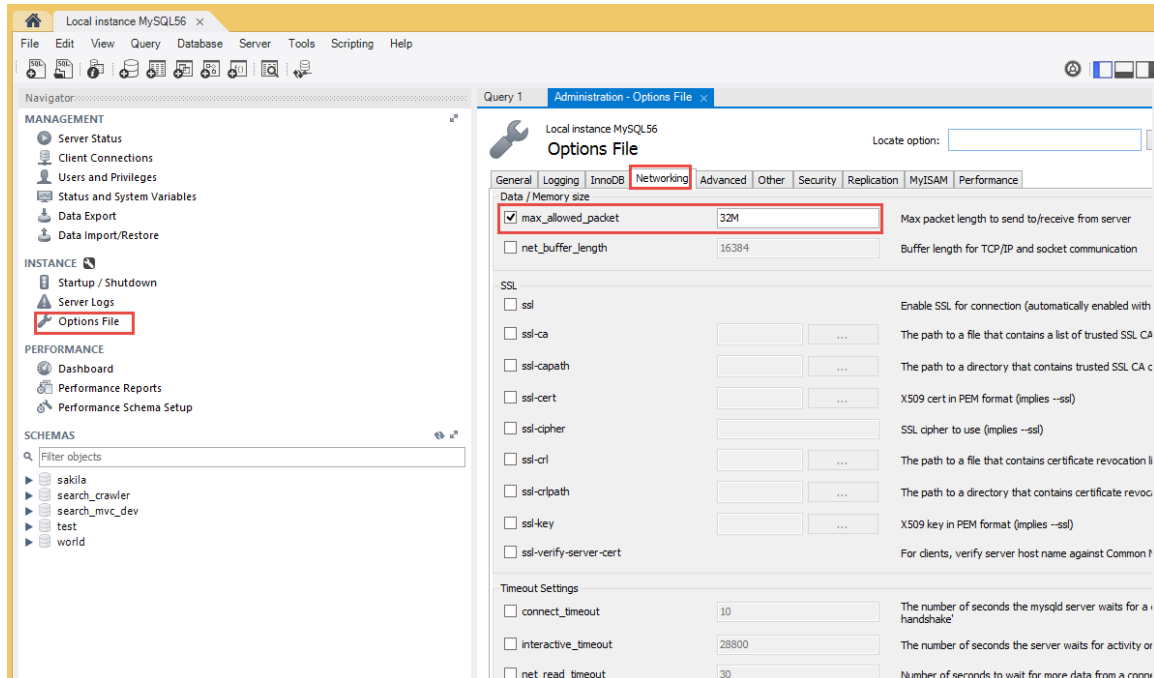# Install Crawler & Indexer

Install JRE (version 1.8 +)

1. Download JRE (jre-8u65-windows-x64.exe) from
   http://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html
   Or you can get from Gold FTP: */ctxusftp/Software/Java/jre-8u65-windows-x64.exe*
2. Install JRE under *C:\Java\jre1.8.0_65*
3. Add Windows Environment Variable
   Variable Name: *JAVA_HOME*
   Variable Value: *C:\Java\jre1.8.0_65*
4. Test Java Installation in cmd.
   Java –version
   If installed successfully, above command will show the installed java version.

Install MySQL (Community Version is OK)

1. Download MySQL Community Server (5.6+) from http://dev.mysql.com/downloads/
   Or you can get from Gold FTP: */ctxusftp/Software/MySQL*
2. Install MySQL under *D:\Program Files*

Install MySQL Workbench (Community Version is OK)
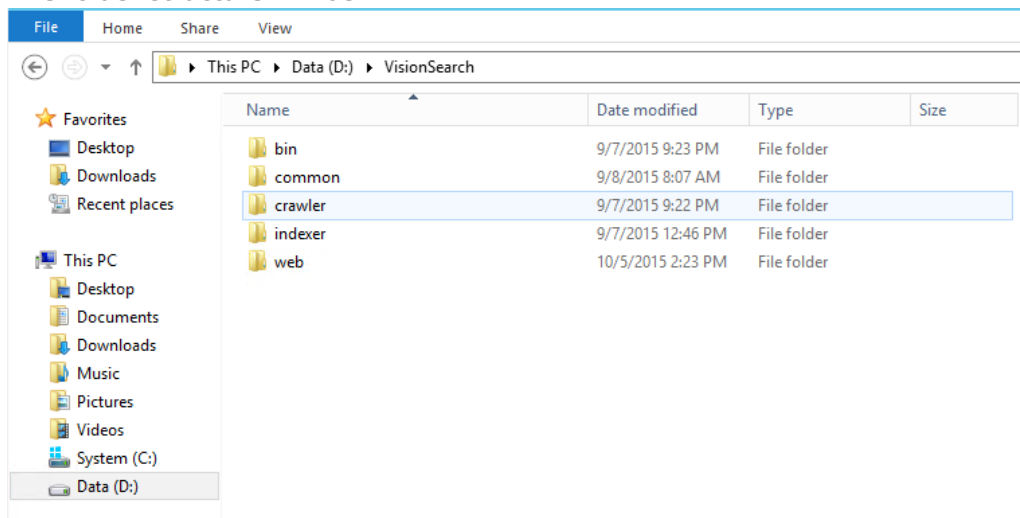
1. Download MySQL Workbench Community (6.1+) from
   http://dev.mysql.com/downloads/
   Or you can get from Gold FTP: */ctxusftp/Software/MySQL*
2. Install MySQL under *D:\Program Files*
3. Change *max_allowed_packet* to *32M*

Preparation

1. Check Environment Variables
   a. If you installed Nutch before, please remove "Nutch_HOME" Environment Variable.
2. Create a folder in D: or anywhere you want to install vision search, there should not be any space in the folder path. Usually, we install Crawler, Indexer, Vision Search Web UI into the same folder.
3. Extract Vision Search Java App (**Released_VisionSearch_JavaApp.zip**) Package to this folder.
   The folder structure will be:

   ➢ Bin:
      a. visionsearch.bat

We can run this batch file instead of running two windows services
- b. visionsearchservice-crawler.bat
  Crawler Windows Service install/uninstall batch file
- c. visionsearchservice-indexer.bat
  Indexer Windows Service install/uninstall batch file

➢ Common
- a. JRE: we will use it if we don't install JRE. (but would better install JRE)
- b. NSSM: we use it for install windows service
- c. Win32: cygwin32. (Nutch needs it for Hadoop)

➢ Crawler
  Vision Search Crawler application (Java application, base on Nutch).

➢ Indexer
  Vision Search Indexer application (Java application, base on Solr).

➢ Web
  Vision Search Web UI (.NET application, developed by vision).

Install Crawler

Create Database in MySQL
1. Open MySQL Workbench
2. Create an EMPTY database: search_crawler
3. Create another database: search_mvc_dev.
   Extract **Search_CREATE_DB.zip** to get two SQL Scripts.
   - a. Run search_create.sql. (Please uncomment the first line to use the database)
   - b. Run search_data.sql. (Please uncomment the first line to use the database)

Configure Crawler
1. Configure database information of search_crawler in *|crawler|conf|gora.properties*
   ➢ gora.sqlstore.jdbc.url
   ➢ gora.sqlstore.jdbc.user
   ➢ gora.sqlstore.jdbc.password
2. Configure database information of search_mvc_dev in
   |crawler|conf|hibernate.cfg.xml
   ➢ connection.url
   ➢ connection.username
   ➢ connection.password

Install Crawler Windows Service
1. Open cmd.exe (Run as Administrator)
2. Relocate to */bin* folder
3. Run **visionsearchservice-crawler.bat install** command to install Crawler Windows Service
   (**visionsearchservice-crawler.bat remove** command will remove Crawler Windows Service)

Install Indexer
Configure Indexer

1. Configure database information of search_mvc_dev in
   |indexer|webapps|visionsearch|WEB-INF|classes|hibernate.cfg.xml
   a. connection.url
   b. connection.username
   c. connection.password

Install Indexer Windows Service

1. Open cmd.exe (Run as Administrator)
2. Relocate to **/bin** folder
3. Run **visionsearchservice-indexer.bat install** command to install Indexer Windows Service
   (**visionsearchservice-indexer.bat remove** command will remove Indexer Windows Service)

Install Web UI
Install Web UI

1. Get latest version for Web UI (**Released_SEARCH.zip**).
2. Setup Web UI as regular ASP.NET website
   Note:
   a. Licenses: Extract Released_Search Licenses.zip, we can get two licenses
      o Enterprise (Unlimited)
         This is for hosting on Vision Server, there is no limitation for how many search engines we can create.
      o Standard(5)
         This is for hosting on Client Server, this license can allow the user to create 5 search engines at most.
   b. App Pool settings, please use Integrated Mode and Network Service identity.
3. Configure Web UI
   a. Go to **|web|Configuration|Custom.config**, change connection string.
   b. Go to **|web|Configuration|Custom.config**, add or change app setting
      i. **SolrSearchURL** -> **http://localhost:8983/visionsearch**
   c. Add **Log** folder if not exist under **|web|Configuration|**
   d. Set **Read/Write** permission for **Network Service** account on **Log** folder.

Start Windows Service & Test

Since Crawler Windows Service depends on Indexer Windows Service, when you start Crawler Windows Service, it will automatically start Indexer Windows Service.

After the two windows service has been started,

➢ You can access http://localhost:8983/visionsearch in browser to test Indexer.

➢ Open the Web UI website address in browser to test Web UI
➢ Try to add a search engine in Web UI, and index now to test Crawler.