**Installation and set up instructions for UMLS DB**

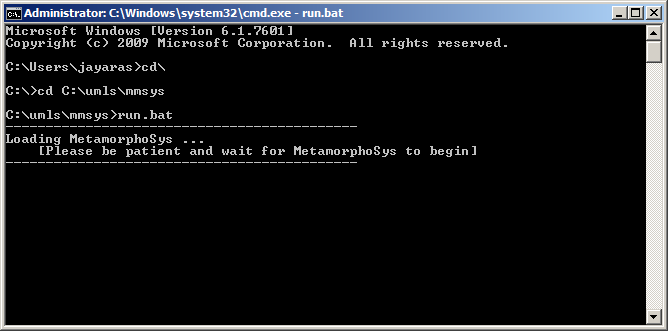
1. Go to <http://www.nlm.nih.gov/research/umls/licensedcontent/umlsknowledgesources.html>

and sign in using the umls license login OR use the UMLS dvd sent to you during registering/applying for UMLS licence. Since these files are pretty big allow at least 100 gb for the full installation. Download the YTEX UMLS Database Archive from <http://umlsdownload.ytex-nlp.org/secure/index.jsp> using a valid UTS login.

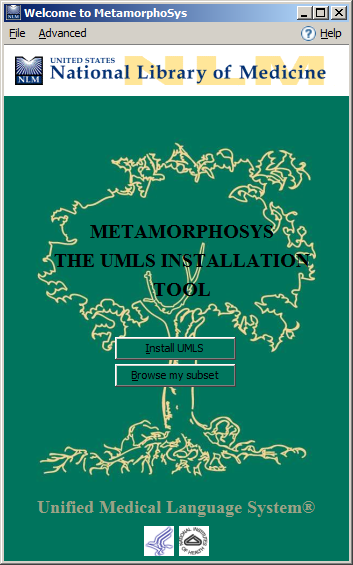
1. Download/copy the following files and extract the Zip file contents all into the same folder.
   1. 2011AA.MD5
   2. 2011AA.CHK
   3. 2011AA-1-meta.nlm
   4. 2011AA-2-meta.nlm
   5. 2011AA-otherks.nlm
   6. mmsys.zip
   7. Copyright\_Notice.txt
   8. README.txt
2. Go to the installation folder and double click on run.bat (windows)
3. You will see the Metamorphosys tool where the db will be installed in the

Folder named 2011AA where the metadata for the various umls knowledge sources

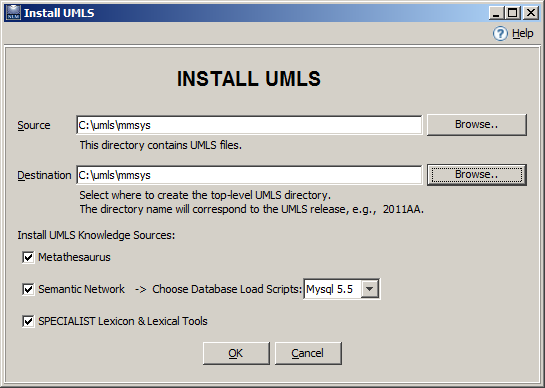
And the data tables in RRF format will be created.



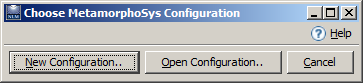
1. Click on Install UMLS.



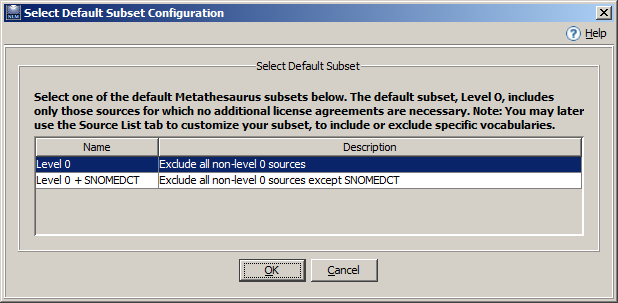
1. The source and destination folders must be the same folder where the UMLS files were downloaded and installed. The sql scripts for populating the database is provided by UMLS only for the Mysql and Oracle db platforms. The script for MS sql server comes with the ytex installation. The instructions for ms sql server are provided below that needs to follow this step of creating the data files using the Metamorphosis application () steps 5 through 11.



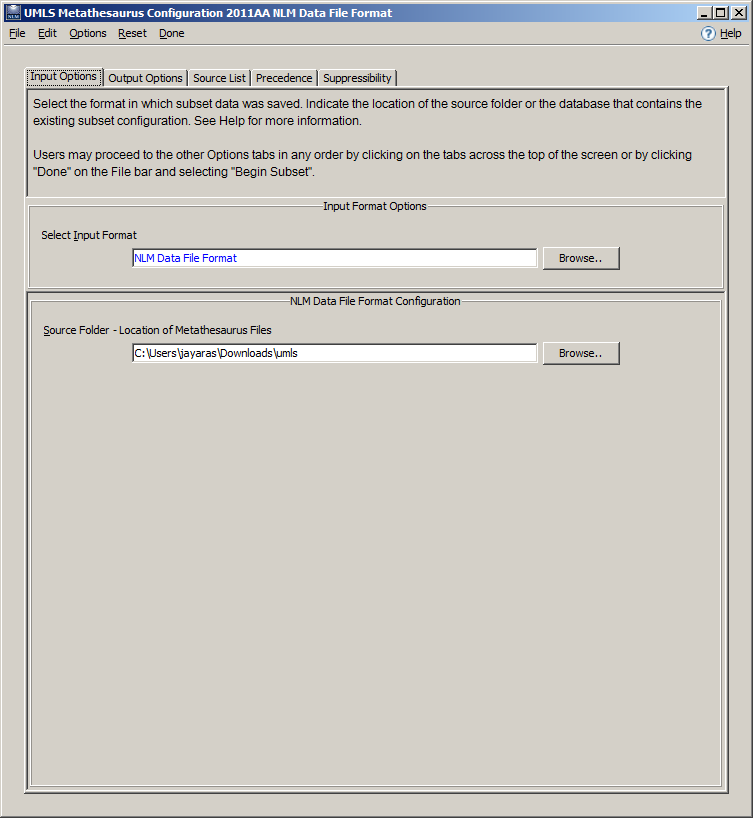
1. Choose new configuration if running this tool for the first time.

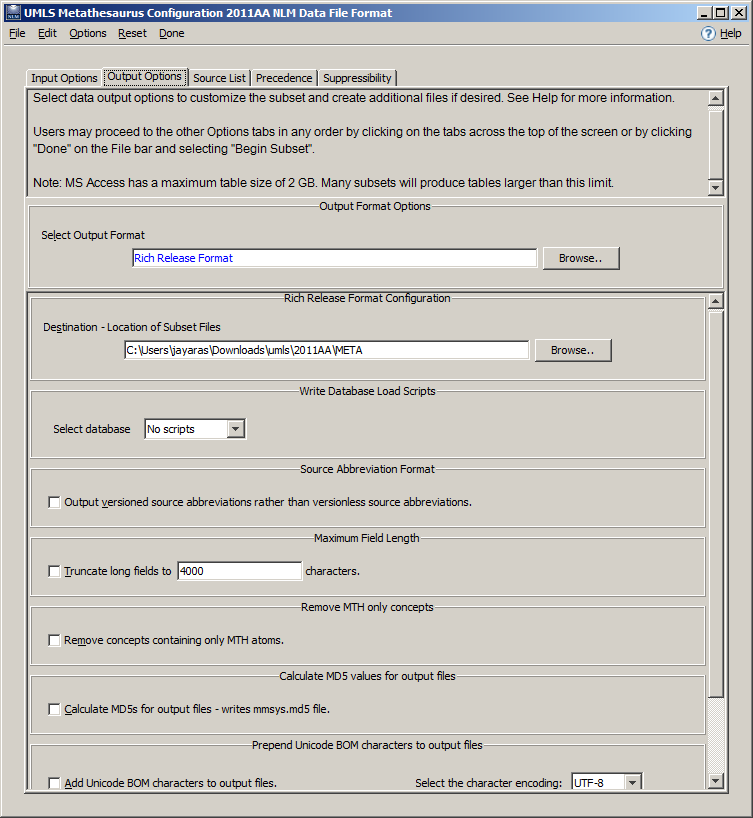


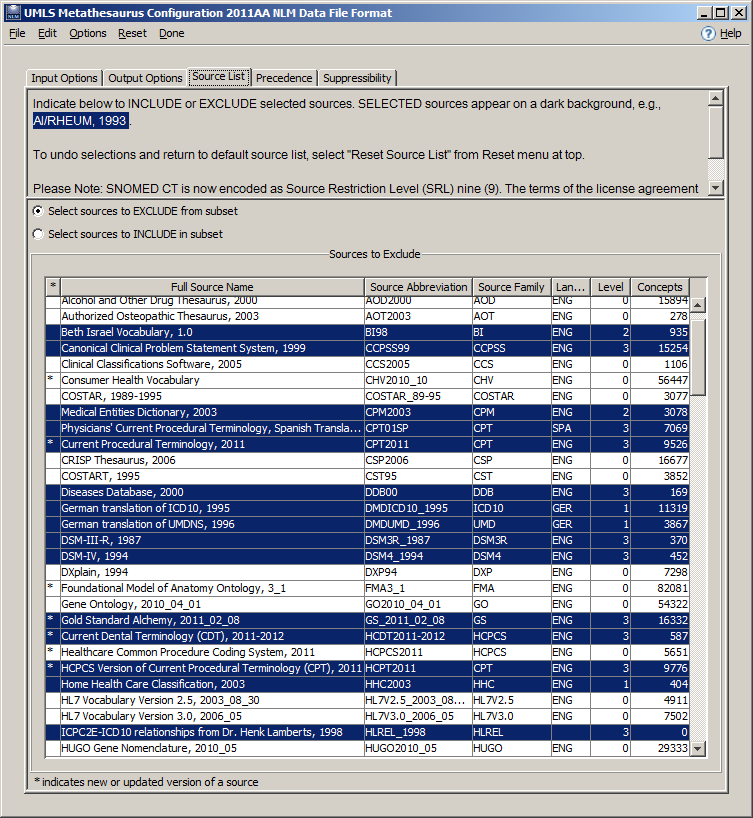
1. Select the default subset and click OK.

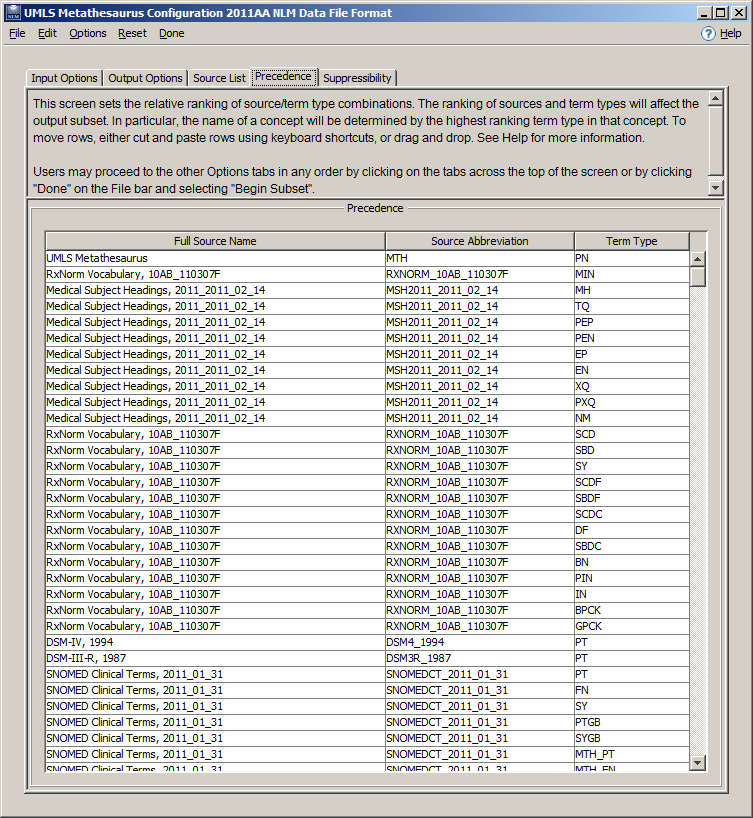


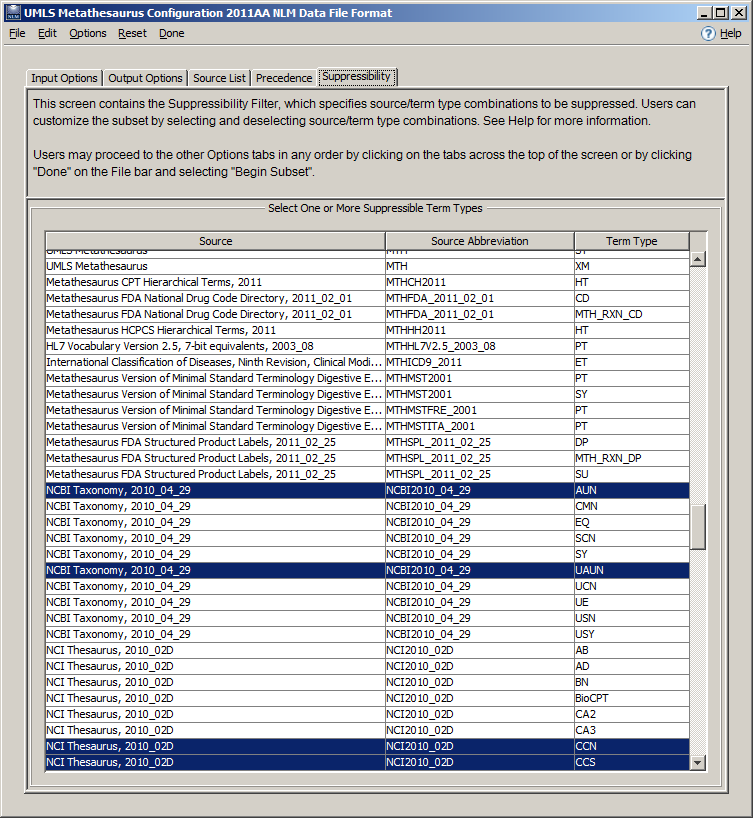
1. The Application goes through the process of creating the data and scripts for the selected subset. This is a checklist of all the components that will be installed in the UMLS db. This process will take a while after which the data files for that subset of UMLS Vocabularies have been created for import to a db platform.
2. Please follow the screens /tabs as shown and enter the folder paths.

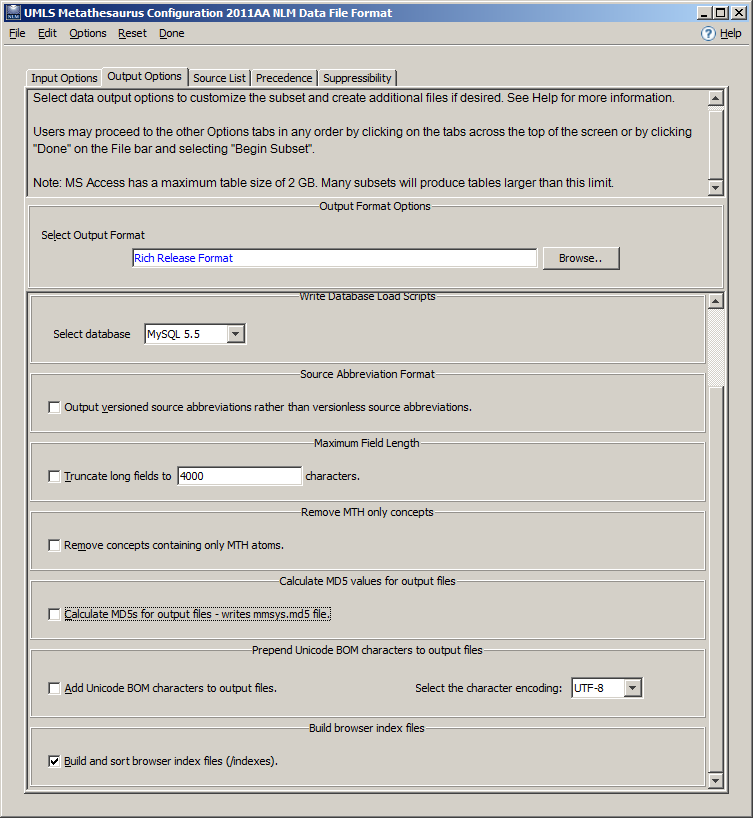


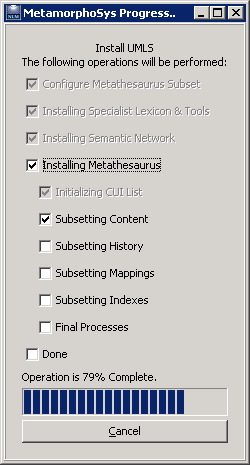


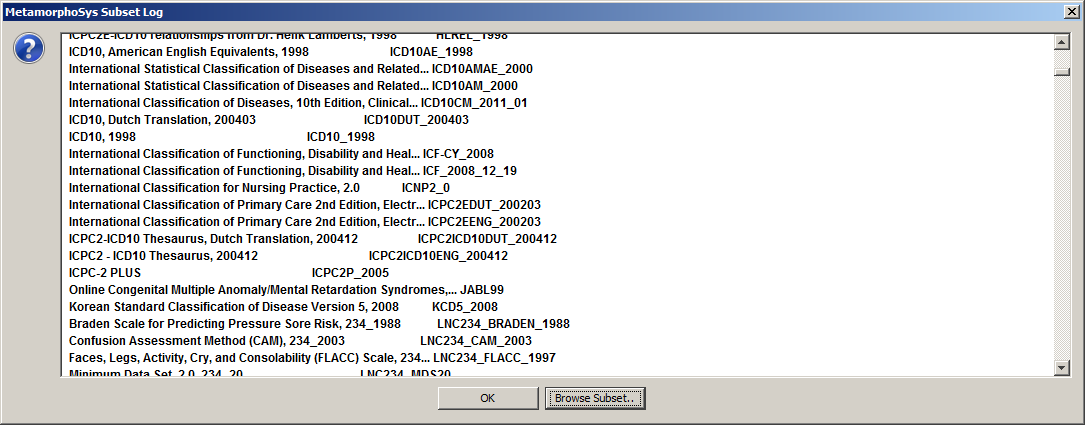












1. Click ok and check if the 2011A folder was created in the UMLS installation folder with the net, Meta directories containing the RRF data files.

**Mysql Installation:** The UMLS data files would need to be loaded into the db platform of choice.

1. Create a database in MySQL into which the UMLS data would be imported.

CREATE DATABASE IF NOT EXISTS umls CHARACTER SET utf8 COLLATE utf8\_unicode\_ci;

1. Configuring Parameters for Performance: Optionally, set the system variables for optimized performance in Mysql 5.5 such as KEY\_BUFFER, etc. in the my.cnf or my.ini file.
2. Configuring and Running the Load Script

### *Windows*:

### After running the Metamorphosys application (previous steps), the subset of UMLS vocabularies are written in RRF (Rich Release Format) into the META directory of the folder (2011A)created by the application during that process. Browse to that folder and open the populate\_mysql\_db.bat script for editing and edit the following parameters.

MYSQL\_HOME should be set to the installation directory of your local MySQL server. This is likely to be something like "C:\Program Files\MySQL\MySQL Server 5.5". The MySQL user/ password and the database name (one created for UMLS) will need to be entered. Here is a sample:

set MYSQL\_HOME="C:\Program Files\MySQL\MySQL Server 5.5"  
set user=myuser  
set password=p4ssw0rd  
set db\_name=umls

1. If your database is configured without a password you can leave the password setting blank, but you will have to update the script "populate\_mysql\_db.bat" and remove all references to the "-p%password%" parameter.  Thus, a line like this:  
     
   %MYSQL\_HOME%\bin\mysql -u %user% -p%password% --local-infile=1 %db\_name% < mysql\_tables.sql >> mysql.log 2>&1  
     
   Must be changed to this  
     
   %MYSQL\_HOME%\bin\mysql -u %user% --local-infile=1 %db\_name% < mysql\_tables.sql >> mysql.log 2>&1
2. Save and double-click the script file to run it. The Mysql.log file will contain the process information for every run of the script. The load may take many hours (especially if you have selected a large subset). When it completes, each of the tables will be loaded, and an initial set of indexes will have been created.

***Linux, Macintosh, or Solaris environment:***

1. Follow the same steps 1 and 2 as above for windows.
2. Sample populate\_mysql\_db.sh after edits in step # 3:

MYSQL\_HOME=/usr  
user=myuser  
password=p4ssw0rd  
db\_name=umls

1. Running the script: It may be necessary to change the file permissions to make the script executable before it can be started.

For example:

% cd <subset directory>  
% chmod 775 populate\_mysql\_db.sh  
% populate\_mysql\_db.sh &

Please refer <http://www.nlm.nih.gov/research/umls/implementation_resources/scripts/README_RRF_MySQL_Output_Stream.html>

**SQL Server Installation:**

1. Create a database in Sql server into which the UMLS data would be imported.
2. The UMLS Database installation on the sql server platform will need to be installed by running a script that comes with the Ytex installation files. Once the above steps for creation of the RRF data files have been completed, ahead and install Ytex 4.0 or above and follow these steps.
3. Navigate to the YTEX\_HOME/ytex/config/desc/ytex.properties file that contains the parameters defined for the ms sql database configuration. Use/edit the example files provided in the same directory to define all the parameters correctly for the sqlserver db. Here, YTEX\_HOME is the directory containing the ytex installation directory.
4. In ytex.properties, define umls.catalog and umls.schema, and set them to the catalog (database) and schema where the umls should be installed.
5. Run the ant script build-mssql-umls.xml, and specify the directory which contains the META and NET directories via the rrf.home option. Open a command prompt, change to the YTEX\_HOME/data directory, and execute the following command:

ant -Drrf.home=c:\temp\2010AB -f build-mssql-umls.xml all

here, the c:\temp\2010AB is the directory containing the META and NET folders. This folder is defined as rrf.home variable in the script and provided as a command-line parameter.

This does the following:

* create umls database tables
* convert RRF files into tab-delimited UCS2 files
* import the tab-delimited files using bcp
* create indices for newly created tables

<http://code.google.com/p/ytex/wiki/UMLS_SQL_SERVER>

The above steps would complete the UMLS installation. Please follow the steps to completely install Ytex before running the applications.