# Ytex Installation

***Prerequisites to installing Ytex:***

1. Full UMLS DB installation on either Mysql/Oracle/MS SQLServer.
2. Alternatively, use the small subset of the UMLS that comes with the Ytex distribution for demonstration purposes. For production use, [we suggest that you install UMLS locally](http://www.nlm.nih.gov/research/umls/implementation_resources/scripts/README_RRF_MySQL_Output_Stream.html)

If you have not done so already, obtain a UMLS License and create a UMLS Technology Services (UTS) Account, available free of charge: <https://uts.nlm.nih.gov/home.html>

Download the YTEX UMLS Database Archive from <http://umlsdownload.ytex-nlp.org/secure/index.jsp>. A valid UTS Login is required.

The files would need to be downloaded and extracted all into the same folder.

1. Database set up:

YTEX supports MS SQL Server 2008, MySQL version 5.x, and Oracle versions 10gR2 and above. To set up database objects, the installation requires database-specific utilities:

MS SQL Server: [SQL Server Tools](http://www.microsoft.com/downloads/details.aspx?familyid=08E52AC2-1D62-45F6-9A4A-4B76A8564A2B&displaylang=en) and [SQL Server Command-Line Utilities](http://www.microsoft.com/downloads/en/details.aspx?FamilyId=C6C3E9EF-BA29-4A43-8D69-A2BED18FE73C&displaylang=en)

Oracle: SQL\*Plus and SQL\*Loader

MySQL: mysql installation

Database User and Schema.

Follow the db installation instructions for UMLS in Mysql and Ms sql server provided in UMLS installation document.

JDK 1.6 DOWNLOAD and set up environment variables for JAVA\_HOME.

***Ytex installation procedure:***

1. Download ytex-with-dependencies-v4.0.zip or above from <http://code.google.com/p/ytex/> . Extract into an ytex installation folder. A ytex folder containing all the necessary files is created will be created. This folder is referred to as YTEX\_HOME.
2. Download LVG 2011 Archive: lvg2011lite.tgz from <http://lexsrv3.nlm.nih.gov/LexSysGroup/Projects/lvg/current/web/download.html> into the same parent folder containing the ytex directory.
3. Download mysql-connector-java-5.1.9.jar and sqljdbc\_3.0.jar files into the ytex parent folder for Mysql installation.
4. Browse and open ytex/setenv.cmd file and edit the paths to JAVA\_HOME, and the paths to the database folders containing the executables such as mysql.exe for MySQL and sqlcmd.exe and bcp.exe for sqlserver. Edit any other necessary paths that would reflect your environment.

**windows** : edit YTEX\_HOME\setenv.cmd

**linux** : move YTEX\_HOME/ytex.profile to ${HOME}/ytex.profile

1. Create YTEX\_HOME\config\desc\ytex.properties: In this file, you specify the database connection parameters. Use YTEX\_HOME\config\desc\ytex.properties.<db type>.example as a template. If you have UMLS installed on your database, specify the umls.schema and umls.catalog properties. For oracle, set the change the db.isolationLevel property to READ\_COMMITTED (to be fixed in a future version).

Execute the setup script.

**windows**: Open a command prompt, navigate to YTEX\_HOME, and execute setup script:

cd /d c:\clinicalnlp\ytex   
setup all

**linux**: From a shell, cd to the YTEX\_HOME directory, set the environment, make sure necessary scripts are executable, and execute the ant script:

chmod u+x ${HOME}/ytex.profile   
cd ${HOME}/clinicalnlp/ytex   
chmod u+x ../apache-ant-1.8.0/bin/ant   
chmod u+x \*.sh   
. ${HOME}/ytex.profile   
ant -buildfile build-setup.xml -Dytex.home=${YTEX\_HOME} all > setup.out 2>&1 &   
tail -f setup.out

This will call the ant script build-setup.xml, which does the following:

Unpacks lvg data files

Generates configuration files from templates

Sets up Semantic Search Web Application

The semantic search web application will be deployed to a tomcat server under YTEX\_HOME\web\catalina.

Sets up YTEX Database Objects

The installation executes SQL scripts located in the YTEX\_HOME\data directory, and imports umls tables (if they are not already in the database). All YTEX database objects will be dropped and recreated. If this is the initial installation, ignore the errors about objects not existing when they are being dropped.

1. Open and query the tables in the DB to check if all the tables have been properly created and the necessary data loaded into them.

This is the basic installation for running the ytex applications for production purposes.