

Public MetaMap Installation on Windows

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1 Introduction

A brief guide to installing MetaMap on Windows.

2 Prerequisites

To use the MetaMap distribution the following is required:

- A minimum of 12 gigabytes of free disk space.
- WinZip or tar to extract the distribution
- Java 6 JRE or SDK installed, you'll need to know the location of the installation of Java later when installing MetaMap.

3 Downloading

The distribution is available at the URL: http://metamap.nlm.nih.gov/download/public_mm_win32_main_2011.tar.bz2 .

When you click on the download link, you'll be taken to the UTS authentication website where you will be asked to login using your UTS username and password. Once you've logged in, the file will automatically download. Extract the distribution using WinZip.

4 An Important Note about Special Characters

Whenever possible, avoid the use of file and directory names that contain spaces, semi-colons, and most other punctuation; MetaMap and its associated programs can have problems reading names composed with such characters.

5 Graphical Install

Using Windows Explorer find the "public_mm" directory extracted from the distribution archive. Click on the icon with the name "Install MetaMap". The dialog will display an input box with the

label “Location of the Public MetaMap Directory:” filled in with the probable location where you’ve installed the distribution.



If the location is incorrect, you can change it by clicking the “Browse” button and using the file dialog to locate the directory or typing in the location in the input text box. When the “public_mm” location is set click the “Next” button to go to the next dialog.

The next dialog will display one of possible locations where the Java Runtime Environment (JRE) is installed. This information is obtained from the Windows Registry which was set when one of the JREs was installed.



If the JRE location displayed is not the one you wish to use, change it by clicking the “Browse” button and using the file dialog to locate the proper directory or type in the location in the input text box. When the proper JRE location is set click the “Next” button to go to the next dialog.

The next dialog will display a results of install.

```

74 Public MetaMap Install Complete.
G:/Projects/test/dfb/public_mm/bin/SKRenv.11 generated
G:/Projects/test/dfb/public_mm/bin/flip_variants generated
G:/Projects/test/dfb/public_mm/bin/mm_variants generated
G:/Projects/test/dfb/public_mm/bin/mm_tokenizer generated
G:/Projects/test/dfb/public_mm/bin/glean_mrcon generated
G:/Projects/test/dfb/public_mm/bin/SKRenv.10 generated
G:/Projects/test/dfb/public_mm/bin/SKRrun.10 generated
G:/Projects/test/dfb/public_mm/bin/metamap2011.TEMPLATE generated
G:/Projects/test/dfb/public_mm/bin/metamap.TEMPLATE generated
G:/Projects/test/dfb/public_mm/bin/metamap10.custom generated
G:/Projects/test/dfb/public_mm/bin/metamap11 generated
G:/Projects/test/dfb/public_mm/bin/SKRrun.11 generated
G:/Projects/test/dfb/public_mm/bin/metamap10 generated
Setting up test suite:
G:/Projects/test/dfb/public_mm/TestSuite/runTest_2011.bat generated
G:/Projects/test/dfb/public_mm/TestSuite/runTest_2011.sh generated
Checking for required datafiles
Trying to fix any lexicon text files that may have been converted from lf to crlf...
Converting: G:/Projects/test/dfb/public_mm/lexicon/data/lexiconStatic2010
Converting: G:/Projects/test/dfb/public_mm/lexicon/data/lexiconStatic2011
required files ok.
Checking for optional datafiles (WSD)
optional files ok.
Main Public MetaMap Install complete.

Public MetaMap Install complete.

```

If no errors are present in the log you can close the installation program by pressing the “Finish” button. After that, skip to the section on running MetaMap.

6 Terminal Based Install

To start a “Command Prompt” window on Windows XP use:

Start Menu -> All Programs -> Accessories -> Command Prompt

In the command prompt window cd to the public_mm directory in the directory where you downloaded MetaMap.

```
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
```

```
C:\Documents and Settings\enzo>g:
```

```
G:\>cd test\public_mm
```

The next step of the installation will require your entering two paths:

1. The full pathname (including the drivename) of the folder where the MetaMap distribution was unpacked; this path should end with "public_mm", e.g., /g/Test/Download/public_mm

Be sure to have these two paths available before running the installation program.

```
G:public_mm>set PWD=G:\test\public_mm
```

```
Enter basedir of installation [G:/test/public_mm]:
bindir: G:/test/public_mm/bin
Basedir is set to G:/test/public_mm.
```

The WSD Server requires Sun's Java Runtime Environment (JRE); Sun's Java Developer Kit (JDK) will work as well. if the command: "which" java returns /usr/local/jre1.4.2/bin/java, then the JRE resides in /usr/local/jre1.4.2/.

```
Where does your distribution of Sun's JRE reside?
Enter home path of JRE (JDK) [/c/Program Files/Java/jdk1.6.0_12]:
G:/public_mm/WSD_Server/config/disambServer.cfg generated
G:/public_mm/WSD_Server/config/log4j.properties generated
Setting up bin directory scripts:
G:/public_mm/bin/BuildDataFiles generated
G:/public_mm/bin/dfbuilder.profile generated
G:/public_mm/bin/LoadDataFiles generated
G:/public_mm/bin/loaddatafiles.sh generated
G:/public_mm/bin/rundatafiles.sh generated
G:/public_mm/bin/skrmedpostctl generated
G:/public_mm/bin/wsdserverctl generated
G:/public_mm/bin/mmserver11.bat generated
G:/public_mm/bin/builddatafiles.sh generated
G:/public_mm/bin/form_opt generated
G:/public_mm/bin/metamap11.bat generated
G:/public_mm/bin/skrmedpostctl_start.bat generated
G:/public_mm/bin/skrmedpostctl_stop.bat generated
```

```

G:/public_mm/bin/wsdserverctl_start.bat generated
G:/public_mm/bin/wsdserverctl_stop.bat generated
G:/public_mm/bin/mmserver11 generated
G:/public_mm/bin/testapi.sh generated
G:/public_mm/bin/testapi.bat generated
G:/public_mm/bin/SKRenv.11 generated
G:/public_mm/bin/flip_variants generated
G:/public_mm/bin/mm_variants generated
G:/public_mm/bin/mm_tokenizer generated
G:/public_mm/bin/glean_mrcon generated
G:/public_mm/bin/filter_mrconso generated
G:/public_mm/bin/SKRenv.10 generated
G:/public_mm/bin/SKRrun.10 generated
G:/public_mm/bin/metamap2011.TEMPLATE generated
G:/public_mm/bin/metamap.TEMPLATE generated
G:/public_mm/bin/metamap10.custom generated
G:/public_mm/bin/metamap11 generated
G:/public_mm/bin/SKRrun.11 generated
G:/public_mm/bin/metamap10 generated
Setting up test suite:
G:/public_mm/TestSuite/buildTestSuite09.sh generated
G:/public_mm/TestSuite/runTest_2009.sh generated
G:/public_mm/TestSuite/runTest_2010.sh generated
Checking for required datafiles

Public MetaMap Install Settings:

Public MetaMap basedir: G:/public_mm
Public MetaMap Program Dir: G:/public_mm/bin
Java Home dir: /c/Program Files/Java/jdk1.6.0_12
G:\public_mm>

```

7 Running MetaMap

Start a “Command Prompt” window and start a Bourne shell in it and cd to the public_mm directory:

```

Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

```

```

C:\Documents and Settings\enzo>g:
G:\>cd test\public_mm

```

Make sure the bin directory of the Java installation directory that you specified during the install is in your path. You can check the path by inspecting the PATH environment variable:

```

G:\public_mm> set PATH
Path=c:\Program Files\Microsoft Visual Studio 9.0\ ...
...

```

If it is not in your path, you can add it using the `export` command. For example:

```
G:\public_mm> set PATH=%PATH%;%JAVA_HOME%\bin
```

Replace “AftSeT-JAVA_HOME-TeSTfA” with the installation directory you specified during the install.

Start another “Command Prompt” window and then start the MedPost Tagger in the window:

```
C:\Documents and Settings\enzo>g:
```

```
G:\>cd test\public_mm
```

```
G:\Projects\test\dfb\public_mm\MedPost-SKR\Tagger_server>cd ..\..
```

```
G:\Projects\test\dfb\public_mm>bin\skrmedpostctl_start.bat
```

```
G:\Projects\test\dfb\public_mm>set BASEDIR=g:\Projects\test\dfb\public_mm
```

```
G:\Projects\test\dfb\public_mm>set MEDPOSTDIR=g:\Projects\test\dfb\public_mm\MedPost-SKR
```

```
G:\Projects\test\dfb\public_mm>set CLASSPATH=g:\Projects\test\dfb\public_mm\MedPost-SKR\
Tagger_server\lib\taggerServer.jar;g:\Projects\test\dfb\public_mm\MedPost-SKR\Tagger_server\lib
```

```
G:\Projects\test\dfb\public_mm>set SERVERDIR=g:\Projects\test\dfb\public_mm\MedPost-SKR\Tagger_
```

```
G:\Projects\test\dfb\public_mm>set DATADIR=g:\Projects\test\dfb\public_mm\MedPost-SKR\data
```

```
G:\Projects\test\dfb\public_mm>set PID_FILE=g:\Projects\test\dfb\public_mm\MedPost-SKR\Tagger_s
```

```
G:\Projects\test\dfb\public_mm>set LOG_FILE=g:\Projects\test\dfb\public_mm\MedPost-SKR\Tagger_s
```

```
G:\Projects\test\dfb\public_mm>set ERR_FILE=g:\Projects\test\dfb\public_mm\MedPost-SKR\Tagger_s
```

```
G:\Projects\test\dfb\public_mm>set LEXDBFILE=g:\Projects\test\dfb\public_mm\MedPost-SKR\data\le
```

```
G:\Projects\test\dfb\public_mm>set NGRAMFILE=g:\Projects\test\dfb\public_mm\MedPost-SKR\data\ng
```

```
G:\Projects\test\dfb\public_mm>set SERVERPORT=1795
```

```
G:\Projects\test\dfb\public_mm>set JVMOPTIONS=-Dtaggerserver.port=1795
```

```
-DlexFile=g:\Projects\test\dfb\public_mm\MedPost-SKR\data\lexDB.serial
```

```
-DngramOne=g:\Projects\test\dfb\public_mm\MedPost-SKR\data\ngramOne.serial
```

```
G:\Projects\test\dfb\public_mm>cd g:\Projects\test\dfb\public_mm\MedPost-SKR\Tagger_server
```

```
G:\Projects\test\dfb\public_mm\MedPost-SKR\Tagger_server>java
```

```
-Dtaggerserver.port=1795
```

```
-DlexFile=g:\Projects\test\dfb\public_mm\MedPost-SKR\data\lexDB.serial
```

```
-DngramOne=g:\Projects\test\dfb\public_mm\MedPost-SKR\data\ngramOne.serial
```

```
-cp g:\Projects\test\dfb\public_mm\MedPost-SKR\
```

```
Tagger_server\lib\taggerServer.jar;g:\Projects\
test\dfb\public_mm\MedPost-SKR\Tagger_server\lib\mps.jar taggerServer
```

IMPORTANT: It is necessary to run the both the Tagger server, the WSD server, and MetaMap in separate windows to prevent a condition in which the shell shuts down the servers after MetaMap is exited.

If you want to run the WSD Server start it in another "Command Prompt" window similarly to the way you started the Tagger server:

```
C:\Documents and Settings\enzo>g:
G:\>cd test\public_mm
G:\test\public_mm>bin\wsdserverctl_start.bat
loading properties file G:/public_mm/WSD_Server/config/disambServer.cfg
```

In the first command prompt window you should be able to run MetaMap:

```
G:\test\public_mm> bin\metamap11.bat
/g/Test/public_mm/bin/SKRrun.11 /g/Test/public_mm/bin/metamap11.BINARY.MINGW32_NT-5.1 -L 2011 -
Berkeley DB databases (NLM 2011AA strict model) are open.
Static variants will come from table varsan in G:/public_mm/DB/DB.NLM.2011AA.strict.
Derivational Variants: Adj/noun ONLY.
Accessing lexicon G:/public_mm/lexicon/data/lexiconStatic2011.
Variant generation mode: static.
```

```
metamap11.binary.mingw32_nt-5.1 (2011AA)
```

```
Control options:
  lexicon_year=2011
  mm_data_year=2011AA
|: obstructive sleep apnea
|:
```

```
Processing 00000000.tx.1: obstructive sleep apnea
Established connection to Tagger Server on localhost.
Processing 00000000.tx.1: obstructive sleep apnea
```

```
Phrase: "obstructive sleep apnea"
```

```
Meta Candidates (9):
```

```
1000 Obstructive sleep apnoea (Sleep Apnea, Obstructive) [Disease or Syndrome]
 901 Apnea, Sleep (Sleep Apnea Syndromes) [Disease or Syndrome]
 827 APNOEA (Apnea) [Finding,Pathologic Function]
 827 Sleep [Organism Function]
 827 Obstructive (Obstructed) [Functional Concept]
 827 Apnea (Apnea Adverse Event) [Finding]
 793 Sleeping (Asleep) [Finding]
 755 Sleepy [Finding]
 727 Sleeplessness [Sign or Symptom]
```

```
Meta Mapping (1000):
```

1000 Obstructive sleep apnoea (Sleep Apnea, Obstructive) [Disease or Syndrome]
|:

8 Java API users

For information on the Java API see, README_javapi.html (also at: http://metamap.nlm.nih.gov/README_javapi.html).