Installation Instructions (Windows)

for Materials Data Curation Project

**Setup:**

**For python:**

1. Download python 2.7 for windows 32bits (<https://www.python.org/download/>)
2. Add to PATH:

C:\Python27\

C:\Python27\Scripts

**For pip:**

We need pip to do the installation of the required dependencies. pip requires setuptools and it has to be installed first, before pip can run: <http://www.pip-installer.org/en/latest/installing.html>

1. Download get-pip.py
2. In a command prompt :

python get-pip.py

**For the virtual environment:**

1. In a command prompt:

pip install virtualenvwrapper-win

1. Add environment variable (Win 7 :Start, right click on Computer, Properties, click on Advance system settings in the left panel, go to advanced tab, Environment Variables…, New)

WORKON\_HOME=%USERPROFILE%\Develop\Envs

1. In a command prompt and then :

mkdir %WORKON\_HOME%

cd %WORKON\_HOME%

mkvirtualenv mgi

1. To use the environment:

workon mgi (the prompt will change and become mgi. You should always see the mgi prompt when installing new packages)

**Configure MongoDB:**

Please follow general instructions provided in the file called MongoDB Configuration.

**For Jena:**

1. Be sure that the folder <PROJECT PATH>\mdcs\data exists and contains a folder named ts. Otherwise, in a command prompt:

cd <PROJECT PATH>\mdcs

1. Be sure that a jdk7 is installed on your computer and that it is in your path. In a command prompt, the following command should display the version of javac (1.7.\*):

javac –version

Otherwise:

* Download a jdk7 from <http://www.oracle.com/technetwork/java/javase/downloads/jdk7-downloads-1880260.html>
* Install the jdk
* Add C:\Program Files\Java\jdk1.7.0\_60\bin to your path.

1. In a command prompt:

cd <PROJECT PATH>\mdcs\rdf

javac -cp “lib/\*” RdfServer.java SparqlServer.java JenaServers.java

java -cp “lib/\*;.” JenaServers -rdfserver\_endpoint “tcp://127.0.0.1:5555” -sparqlserver\_endpoint “tcp://127.0.0.1:5556” -tdb\_directory <TS PATH> -project\_uri <PROJECT URI>

Command Example: C:\Users\<username>\workspace\MDCS\_PROJECT\mdcs\rdf>java -cp "lib/\*;." JenaServers -rdfserver\_endpoint "tcp://127.0.0.1:5555" -sparqlserver\_endpoint "tcp://127.0.0.1:5556" -tdb\_directory "C:\Users\<username>\workspace\MDCS\_Project\mdcs\data\ts" -project\_uri “http://www.example.com/”

**Install all required python packages:**

Use the file called Required Python Packages to install them in their good version. If you are using a virtual environment, make sure it is activated before starting the installation. Instructions specific to Windows platform can be found below.

**For ldap:**

1. Install the django-auth-ldap package:
   1. Download django-auth-ldap package from pypi (<https://pypi.python.org/pypi/django-auth-ldap/1.2.0>)
   2. In a command prompt:

cd PATH\_TO\_django-auth-ldap\_FOLDER

python setup.py install build

1. Configure settings.py with LDAP information

**For lxml:**

1. Download lxml from pypi (<https://pypi.python.org/pypi/lxml/2.3>)
   1. Use the Windows link for Python 2.7 : lxml-2.3.win32-py2.7.exe (win32)
2. Run the installer
   1. If you use a virtual environment.

You can’t change the destination folder set in the installer so you will have to install the package in the specified folder (C:\Python27\Lib\site-packages\) and then copy the lxml directories from C:\Python27\Lib\site-packages\ to %USERPROFILE%\Develop\Envs\mgi\Lib\site-packages.

**Running the MDCS for the first time:**

1. Run mongodb (if not already running). In a command prompt :

mongod --config /path/to/mdcs/conf/mongodb.conf

1. python manage.py syncdb

Answer yes to:

You just installed Django's auth system, which means you don't have any superusers defined.

Would you like to create one now? (yes/no):yes

**To Run the software:**

1. Run mongodb (if not already running). In a command prompt :

mongod --config /path/to/mdcs/conf/mongodb.conf

1. Run Jena. In a command prompt :

java -cp “lib/\*;.” JenaServers -rdfserver\_endpoint “tcp://127.0.0.1:5555” -sparqlserver\_endpoint “tcp://127.0.0.1:5556” -tdb\_directory <path/to/mdcs/data/ts> -project\_uri <”http://www.example.com”>

1. Run the MDCS. In a command prompt :

workon mgi

cd path/to/mdcs

python manage.py runserver

To be able to access the system **remotely**, instead of using python manage.py runserver, use: python manage.py runserver 0.0.0.0:<port>

**Access:**

For Materials Data Curation System, Go to: <http://127.0.0.1:8000/>

For Materials Data Curation Administration, Go to: <http://127.0.0.1:8000/admin/>