Zero-Config Installation Notes

for Materials Data Curation System

These notes are for requirement 1.A7 of the Product Backlog (<http://goo.gl/ce9SNz>)

**For Operating Systems:**

Mac, Unix, Linux

**Prerequisites**

Python 2.7.2 (brew install python)

pip (python get-pip.py)

**Setup:**

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>

Checkout MGI repository into ~/Develop/Workspaces

cd ~/Develop

mkdir Env

pip install virtualenvwrapper (<http://virtualenvwrapper.readthedocs.org/en/latest/>)

export WORKON\_HOME=~/Develop/Envs

mkdir -p $WORKON\_HOME

source /usr/local/bin/virtualenvwrapper.sh

mkvirtualenv mgi

**For MongoDB (in a new terminal):**

cd ~/Develop/Workspaces/mgi/mdcs/

export WORKON\_HOME=~/Develop/Envs

source /usr/local/bin/virtualenvwrapper.sh

workon mgi

cd <PROJECT PATH>\mdcs

mkdir data

cd data

mkdir ts

mkdir db

Run MongoDB:

mongod --dbpath data/db/

**For Apache Jena (in a new terminal):**

cd ~/Develop/Workspaces/mgi/mdcs/

export WORKON\_HOME=~/Develop/Envs

source /usr/local/bin/virtualenvwrapper.sh

workon mgi

We need to compile and run the rdfserver.java file

cd <PROJECT PATH>/mdcs/rdf

javac -classpath "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 '/Users/ssy/Develop/Workspaces/mgi/mdcs/data/ts' -project\_uri 'http://www.example.com/'

To query the RDF DB:

sh fuseki-server --loc=/Users/ssy/Develop/Workaces/mgi2/mgi/mdcs/data/ts /ts

**For Django (in a new terminal):**

cd ~/Develop/Workspaces/mgi/mdcs

export WORKON\_HOME=~/Develop/Envs

source /usr/local/bin/virtualenvwrapper.sh

workon mgi

pip install Django (<https://docs.djangoproject.com/en/1.6/topics/install/>)

pip install mongoengine (<http://docs.mongoengine.org/guide/installing.html>)

pip install django-auth-ldap (<http://pythonhosted.org/django-auth-ldap/>)

pip install django-dajax (<http://django-dajax.readthedocs.org/en/latest/installation.html>)

pip install xlrd (needed for Microsoft Excel to HDF5 translation/mapping)

pip install xmltodict (<https://github.com/martinblech/xmltodict>)

pip install pyzmq (<https://github.com/zeromq/pyzmq>)

pip install lxml (<http://lxml.de/>)

pip install djangorestframework (<http://www.django-rest-framework.org/>)

pip install django-rest-framework-mongoengine (<https://pypi.python.org/pypi/django-rest-framework-mongoengine>)

pip install django-rest-swagger (<https://github.com/marcgibbons/django-rest-swagger>)

(for now: add the templates to mongodb by uncommenting the lines under curate(request) inside mgi/views.py and load the curate page once. Make sure to add comments back on).

update SITE\_ROOT inside settings.py to correct path of site

example:

SITE\_ROOT = '/Users/ssy/Develop/Workspaces/mgi/mdcs'

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

Run software:

python manage.py runserver

**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/>