

Local setup of Solr and querying using solr R package, on Mac OSX

This material is based on this blog post: <http://risnandar.wordpress.com/2013/09/08/how-to-install-and-setup-apache-lucene-solr-in-osx/>

1. If you don't have homebrew installed, install homebrew by doing `brew install homebrew`. If you have homebrew skip to step 2.
2. Install solr by doing `brew install solr`. This installed solr v.4.5.1
3. Navigate in your terminal to an example Solr database: `cd /usr/local/Cellar/solr/4.5.1/libexec/example/`
4. Start solr: `java -jar start.jar`
5. Navigate in your browser to <http://localhost:8983/solr/#/>
6. Navigate in your terminal to `cd /usr/local/Cellar/solr/4.5.1/libexec/example/exampldocs/`, then execute `./post.sh vidcard.xml` in that directory. This inserts some data into the example database.

Try this query in your browser: <http://localhost:8983/solr/select?q=:&wt=json>

And we can now use the `solr` R package to query the Solr database to get raw JSON data:

```
url <- 'http://localhost:8983/solr/select'
solr_search(q='*:*', base=url, raw=TRUE)
```

```
[1] "{\"responseHeader\":{\"status\":0,\"QTime\":1,\"params\":{\"start\":\"0\",
\\q\\\":\\\":*:*\",\\wt\\\":\\\"json\\\"}},\\response\":{\"numFound\":2,\"start\":0,\"docs\"
:[{\\id\\\":\\\"EN7800GTX/2DHTV/256M\\\",\\name\\\":\\\"ASUS Extreme N7800GTX/2DHTV (256 MB)\\\"
,\\manu\\\":\\\"ASUS Computer Inc.\\\",\\manu_id_s\\\":\\\"asus\\\",\\cat\\\":[\\\"electronics\\\",
\\graphics card\\\"],\\features\\\":[\\\"NVIDIA GeForce 7800 GTX GPU/VPU clocked at 486MHz\\\"
,\\256MB GDDR3 Memory clocked at 1.35GHz\\\",\\PCI Express x16\\\",\\Dual DVI connectors,
HDTV out, video input\\\",\\OpenGL 2.0, DirectX 9.0\\\"],\\weight\\\":16.0,\\price\\\":479.95,
\\price_c\\\":\\\"479.95,USD\\\",\\popularity\\\":7,\\store\\\":\\\"40.7143,-74.006\\\",\\inStock\\\"
:false,\\manufacturedate_dt\\\":\\\"2006-02-13T00:00:00Z\\\",\\_version_\\\":1455773551158099968},
{\\id\\\":\\\"100-435805\\\",\\name\\\":\\\"ATI Radeon X1900 XTX 512 MB PCIE Video Card\\\",\\manu\\\"
:\\\"ATI Technologies\\\",\\manu_id_s\\\":\\\"ati\\\",\\cat\\\":[\\\"electronics\\\",\\graphics card\\\"],
\\features\\\":[\\\"ATI RADEON X1900 GPU/VPU clocked at 650MHz\\\",\\512MB GDDR3 SDRAM
clocked at 1.55GHz\\\",\\PCI Express x16\\\",\\dual DVI, HDTV, svideo, composite out\\\",
\\OpenGL 2.0, DirectX 9.0\\\"],\\weight\\\":48.0,\\price\\\":649.99,\\price_c\\\":\\\"649.99,
USD\\\",\\popularity\\\":7,\\inStock\\\":false,\\manufacturedate_dt\\\":\\\"2006-02-13T00:00:00Z\\\",
\\store\\\":\\\"40.7143,-74.006\\\",\\_version_\\\":1455773551214723072}}}\n"
attr(,"class")
[1] "sr_search"
attr(,"wt")
[1] "json"
```

Or parsed data to a data.frame (just looking at a few columns for brevity):

```
solr_search(q='*:*', base=url)[,c(1:3)]
```

	id	name	manu
1	EN7800GTX/2DHTV/256M	ASUS Extreme N7800GTX/2DHTV (256 MB)	ASUS Computer Inc.
2	100-435805	ATI Radeon X1900 XTX 512 MB PCIE Video Card	ATI Technologies

Local setup of Solr on Windows and Linux

I'm a Mac user, so I'm not too familiar with Windows and Linux, but will get to this soon, or send a pull request with instructions in this file.