Triplestore Setup

Fuseki

Fuseki is very easy to setup

1. Download latest jena-fuseki distribution tarball from http://www.apache.org/dist/jena/binaries/
2. Unpack the download archive
3. Start fuseki-server

```
curl -O http://www.apache.org/dist/jena/binaries/jena-fuseki-1.0.1-distribution.tar.gz
tar xvfz jena-fuseki-1.0.1-distribution.tar.gz
cd jena-fuseki-1.0.1
./fuseki-server --update --mem /test
```

Fuseki should be running at http://localhost:3030/

If you want to change the port on which Fuseki runs, you can add the "–port" option to the run command (e.g. ./fuseki-server **--port 3131** --update --mem /test).

To access the SPARQL query form, go to http://localhost:3030/control-panel.tpl and select your datasource (in this case /test).

- This allows you to perform SPARQL queries or updates, or upload an RDF file to replace the contents of the triplestore.

Sesame

Sesame requires a little more setup to run with the tests, since by default it uses the same port as Fedora. To setup Sesame with Tomcat running on an alternate port:

- Download Tomcat from http://tomcat.apache.org/download-70.cgi and unpack the downloaded archive.

```
$ curl -L -O https://dist.apache.org/repos/dist/release/tomcat/tomcat-7/v7.0.42/bin/apache-tomcat-7.0.42.tar.gz
$ tar xvfz apache-tomcat-7.0.42.tar.gz
```

- Edit the Tomcat configuration file (`apache-tomcat-7.0.42/conf/server.xml`) to use a different port (e.g., 8081 instead of 8080).
- Download Sesame from http://sourceforge.net/projects/sesame/files/Sesame%202/
- Unpack Sesame and move the Sesame WAR file into the Tomcat webapps directory, then start Tomcat.

```
$ curl -L -O http://sourceforge.net/projects/sesame/files/Sesame%202/2.7.7/openrdf-sesame-2.7.7-sdk.tar.gz
$ tar xvfz openrdf-sesame-2.7.7-sdk.tar.gz
$ cp openrdf-sesame-2.7.7/war/openrdf-sesame.war apache-tomcat-7.0.42/webapps/
$ apache-tomcat-7.0.42/bin/startup.sh
```

Sesame should now be running at: http://localhost:8080/openrdf-sesame/system/overview.view

Before you can load data or perform queries, you must create a repository. You can do this using OpenRDF Workbench, a companion webapp to Sesame which provides the ability to manage repositories, perform SPARQL queries, etc. To deploy this webapp, copy the OpenRDF Workbench WAR file to the Tomcat webapps directory:

```
$ cp openrdf-sesame-2.7.5/war/openrdf-workbench.war apache-tomcat-7.0.42/webapps/
```

Then you can create a new repository at http://localhost:8081/openrdf-workbench/repositories/NONE/create, and query the test repository at http://localhost:8081/openrdf-workbench/repositories/test/query.

Alternatively, you can use the Sesame console application to create a repository from the command line:

```
$ openrdf-sesame-2.7.5/bin/console.sh
> connect http://localhost:8081/openrdf-sesame.
> create native.
Repository ID [native]: test
Repository title [Native store]: test store
Triple indexes [spoc,posc]: spoc,posc
Repository created
> exit.
Disconnecting from http://localhost:8081/openrdf-sesame/
```

Notes

- You may need to set the Sesame data directory in your Tomcat7 configuration (e.g. /etc/default/tomcat7)

```
JAVA_OPTS="${JAVA_OPTS} -Dinfo.aduna.platform.appdata.basedir=/tmp/sesame"
```

Documentation

- http://www.openrdf.org/documentation.jsp