Carnot Setup

- scp Carnot.zip cannata@aevum.cs.utexas.edu:
- ssh -l cannata aevum.cs.utexas.edu
- unzip Carnot.zip
- cd Carnot
- vi CarnotRE/restful_start.py - set port to the port number for your group in http://www.cs.utexas.edu/~cannata/dbms/Project/Initial%20Project%20Review%20Schedule.pdf, i.e., app.run(host='0.0.0.0', port=Your Port Number)
- vi setup_WDB_store.txt – change –name WDB to –name WDBXX where XX is your group number on the schedule (e.g. A1), change localhost port number to your port number + 1, change the admin port number to your port number + 9, e.g.,
  
  ### Begin WDB Script ###
  configure -name WDBA1
  plan deploy-zone -name "WDB_zone" -rf 1 -wait
  plan deploy-sn -dc zn1 -host localhost -port 5001 -wait
  plan deploy-admin -sn sn1 -port 5009 -wait
  pool create -name WDBPool
  pool join -name WDBPool -sn sn1
  topology create -name WDBTopology -pool WDBPool -partitions 2
  plan deploy-topology -name WDBTopology -wait
  ### End WDB Script ###

- mv setup_WDB_store.txt setup_WDBXX_store.txt where XX is where XX is your group number on the schedule (e.g. A1)
- export INSTALLATION_ROOT="." - INSTALLATION_ROOT needs to be set to the folder in which the dist directory exists.
- dist/bin/jython
- Run the following commands in jython after changing the 2\textsuperscript{nd} and 3\textsuperscript{rd} arguments to connectTo (see bold below) appropriately,
  
  - connOracleNoSQL = connectTo 'OracleNoSQL 'WDBA1' 'localhost:5001' 'native_mode' 'A0'
  - SIM on connOracleNoSQL 'CLASS sim_dept (DEPT_ID:INTEGER, REQUIRED ; NAME :STRING ; LOCATION :STRING ; employees :sim_project_emp, MV(DISTINCT), INVERSE IS department ; projects :sim_project, MV(DISTINCT), INVERSE IS department ; manager :sim_manager, INVERSE IS department ;);
  - SIM on connOracleNoSQL 'INSERT sim_dept (DEPT_ID := 69 , NAME := "ENGINEERING", LOCATION := "AUSTIN"),'
  - SIM on connOracleNoSQL 'from sim_dept retrieve *,';
  - Ctl-d to exit jython
- To remove the Oracle NoSQL database, try the following after making the appropriate name changes
  
  - pkill -9 java
  - skipper$ rm -rf WDBA1_db WDBA1_STORE
Carnot REST Server Setup

- **dist/bin/jython CarnotRE/restful_start.py** – you should get the following except with your port number:
  - SLF4J: Class path contains multiple SLF4J bindings.
  - SLF4J: Found binding in [jar:file:/v/filer4b/v41q001/cannata/Carnot/dist/javalib/slf4j-jcl-1.6.1.jar!/org/slf4j/impl/StaticLoggerBinder.class]
  - SLF4J: Found binding in [jar:file:/v/filer4b/v41q001/cannata/Carnot/dist/javalib/slf4j-log4j12-1.6.4.jar!/org/slf4j/impl/StaticLoggerBinder.class]
  - SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
  - log4j:WARN No appenders could be found for logger (io.netty.util.internal.logging.InternalLoggerFactory).
    - log4j:WARN Please initialize the log4j system properly.
  - log4j:WARN See http://logging.apache.org/log4j/1.2/faq.html#noconfig for more info.
  - * Running on http://0.0.0.0:5000/* (Press CTRL+C to quit)
Running Carnot in rdf mode for Option D
(Don’t use ; at the end of statements)

• **export INSTALLATION_ROOT="."** - INSTALLATION_ROOT needs to be set to the folder in which the dist directory exists.

• **dist/bin/jython**

• Run the following commands in jython after changing the 2<sup>nd</sup> and 3<sup>rd</sup> arguments to connectTo (see bold below) appropriately,
  - connOracleNoSQL = connectTo 'OracleNoSQL' 'WDBA1' 'localhost:5001' 'native_mode' 'A0' # to create the database if needed
  - connOracleNoSQL = connectTo 'OracleNoSQL' 'WDBA1' 'localhost:5001' 'rdf_mode' 'A0' # too clear the database
  - connOracleNoSQL = connectTo 'OracleNoSQL' 'WDBA1' 'localhost:5001' 'rdf_mode_mode' 'A0' nodebug
  - SIM on connOracleNoSQL 'INSERT sim_dept (DEPT_ID := 69, NAME := "ENGINEERING", LOCATION := "AUSTIN")'
  - SIM on connOracleNoSQL 'from sim_dept retrieve *'
  - RDF on connOracleNoSQL 'a b c d'
  - results = SPARQL on connOracleNoSQL 'select ?g ?s ?p ?o where { GRAPH ?g { ?s ?p ?o } }'
  - for r in results:
    - ... print r
    - ...
    - Ctl-d to exit jython

• **To remove the Oracle NoSQL database, try the following after making the appropriate name changes**
  - pkill -9 java
  - skipper$ rm -rf WDBA1_db WDBA1_STORE