15926 Test Cases : TopBraid Guide

David Price

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TopBraid Free Edition

- Go to www.topquadrant.com and select "Download" at top of page

- When you reach the page where you can download choose "Product" where you can select "Free Edition" and then your "OS" (Linux, Mac, Windows) and "32-64 bit" (select 64 if you have a modern PC).

- After download, unarchive and run setup or install in an executable folder. Note that TopBraid is a Java application.
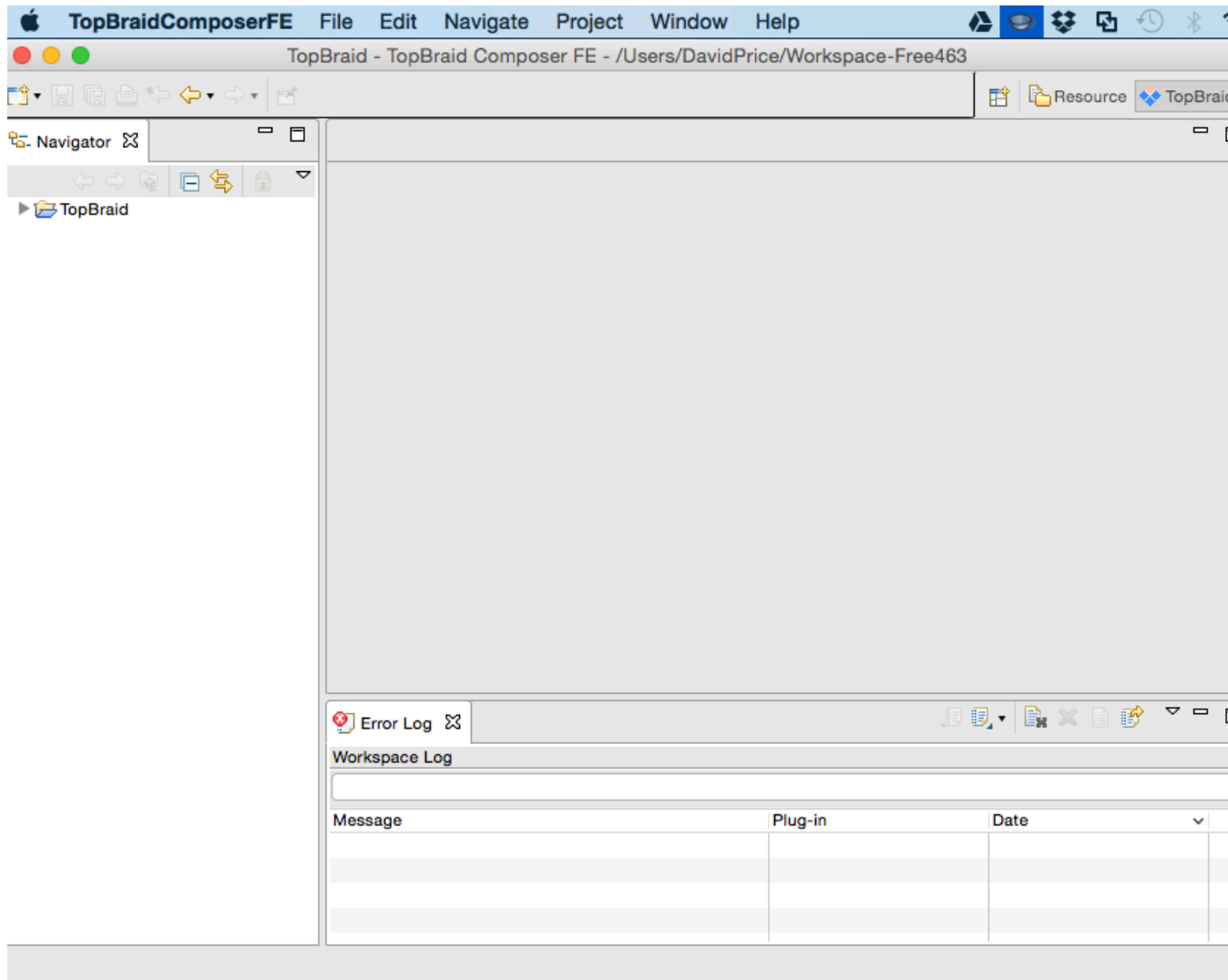
Installation

- After download, un-archive and install. Web page Installation Instructions :
  - Start by unzipping the download file to a folder. TopBraid Composer can be installed in any folder with write access. Installing into the Program Files folder is not recommended, as some versions of Windows restrict access to this folder. Double-click the executable file named "TopBraid Composer".
- There is Help at:
  - http://www.topquadrant.com/knowledge-assets/product-documentation/#tbcdoc
  - It is worth a few minutes looking at the "Getting Started Guide" if you are not familiar with eclipse-based tools.

Usage

- The following screenshots show how to get the 15926 test case project imported. They are taken from a Mac, so you may not see exactly the same user interface as shown in the screenshots.

First time opening TBC

Note : You can ask for Help
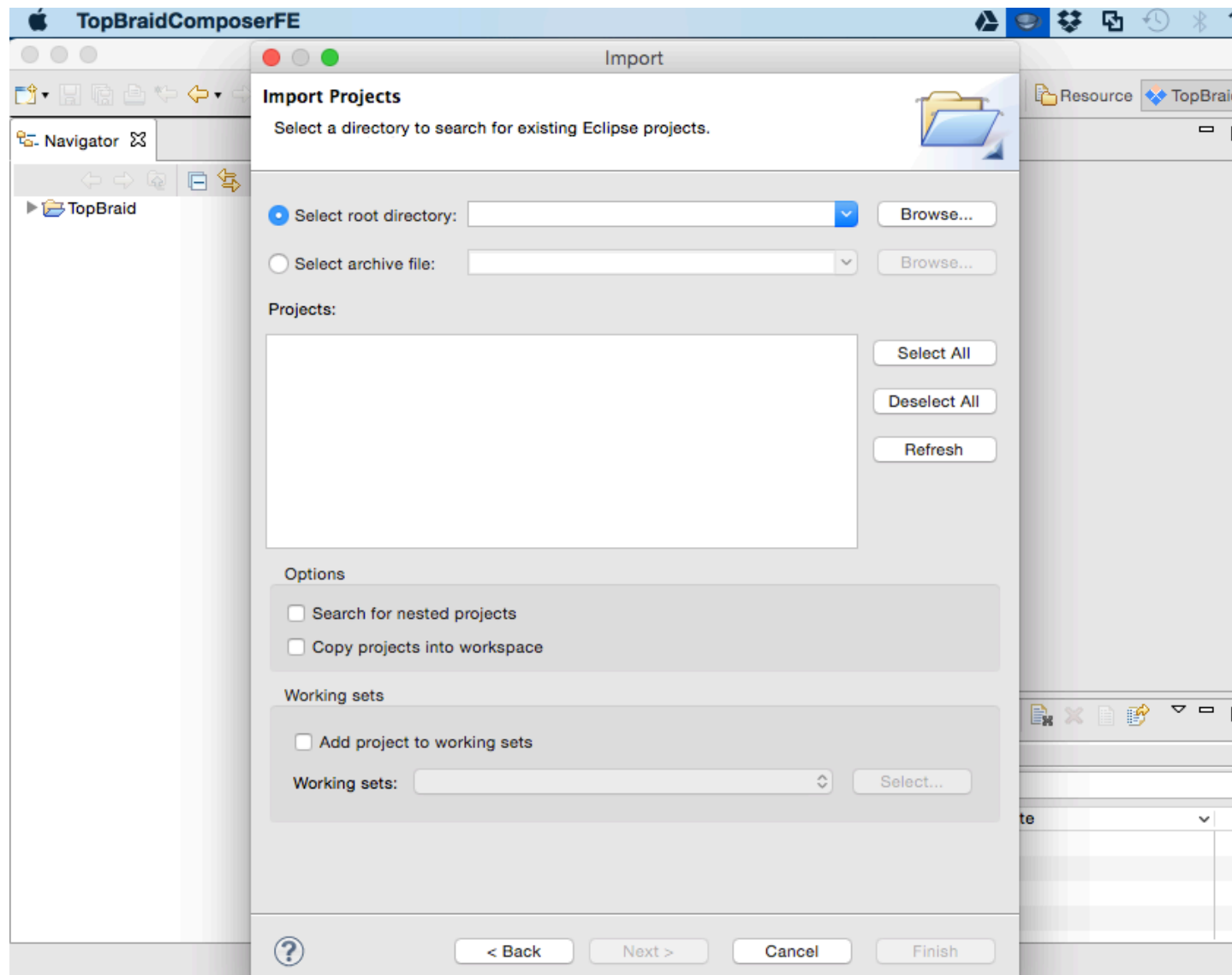
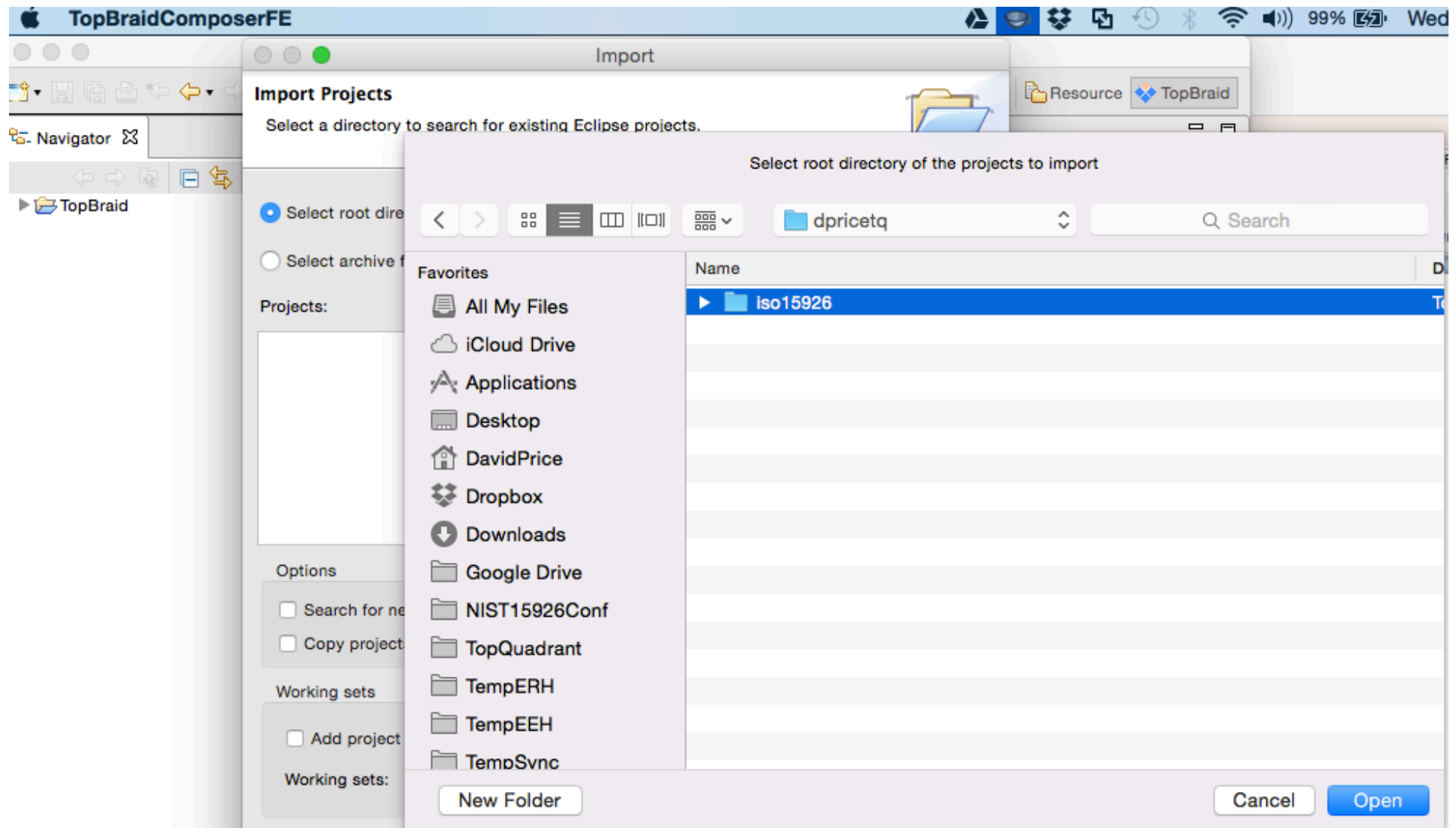# And it appears in your browser
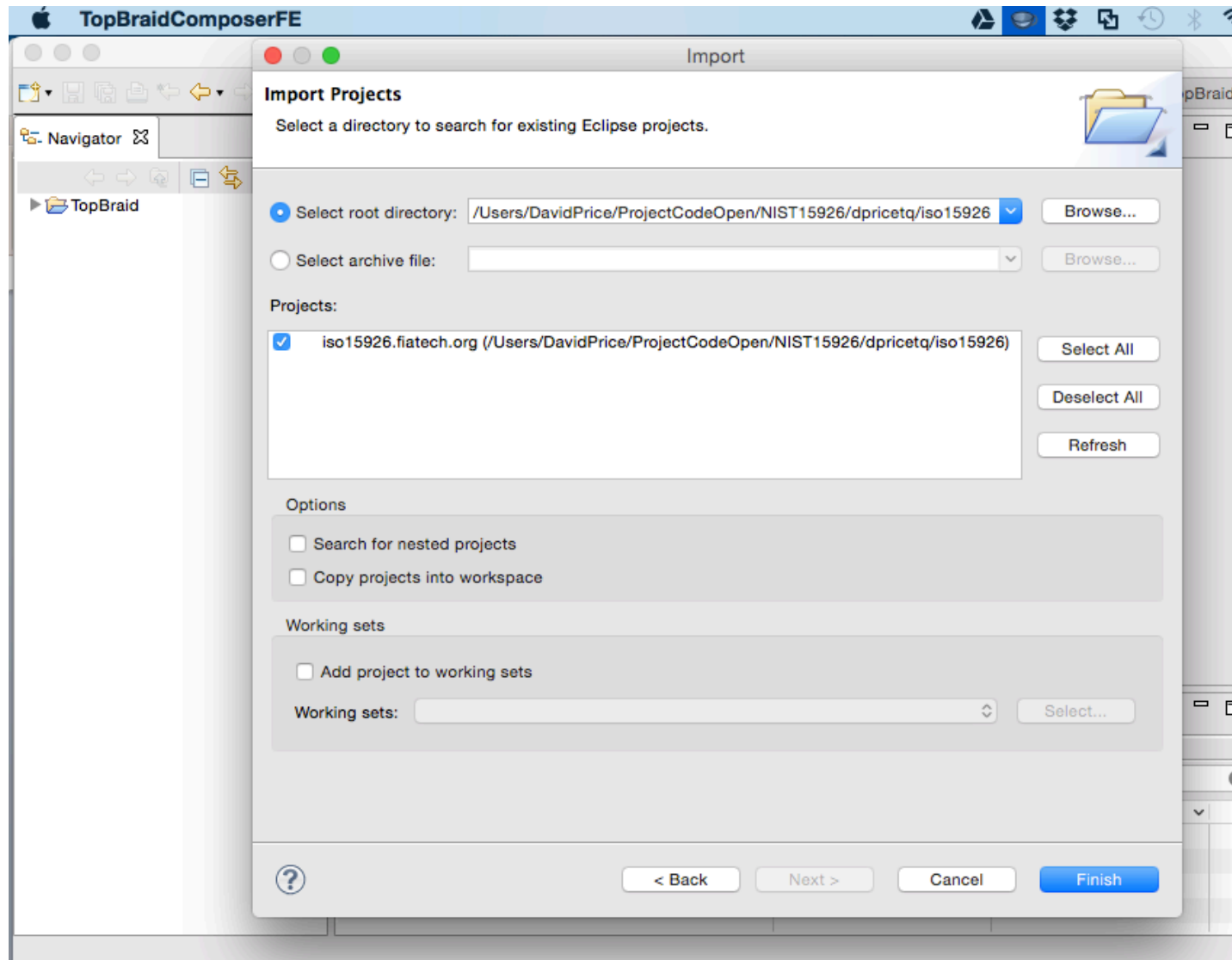
Choose File, then Import

Existing Project into Workspace
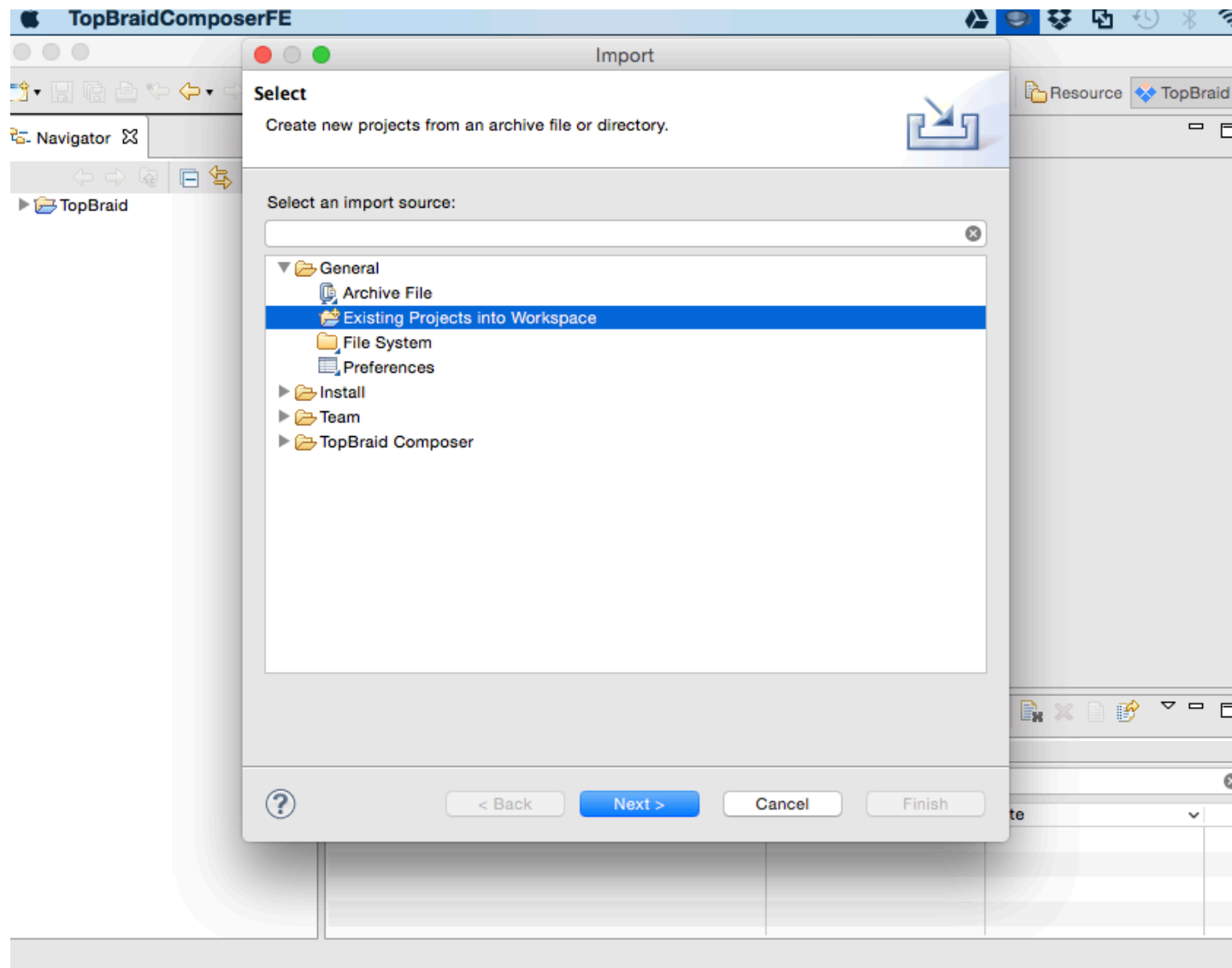
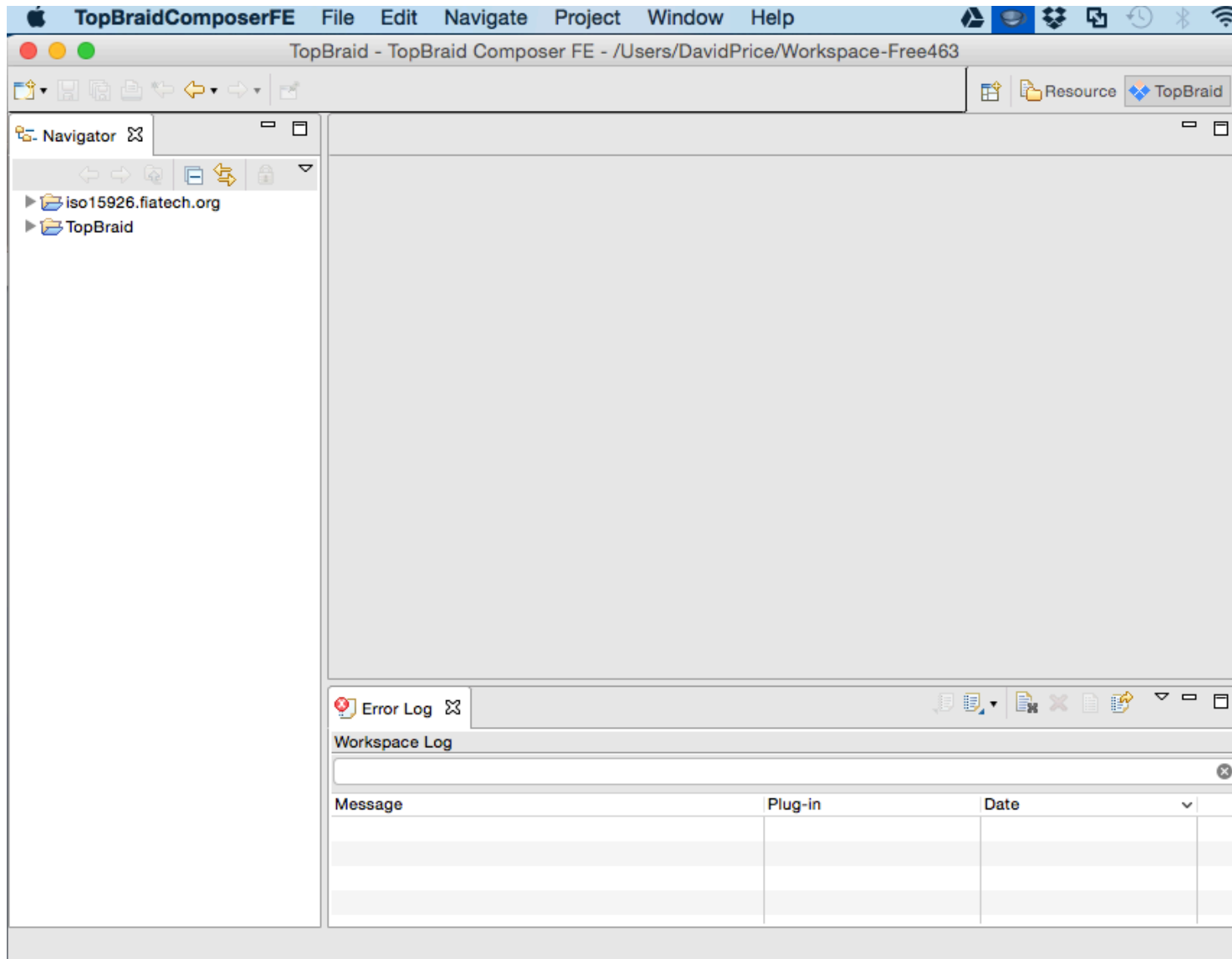# Choose Select root directory, and then choose Browse to find test cases on your computer
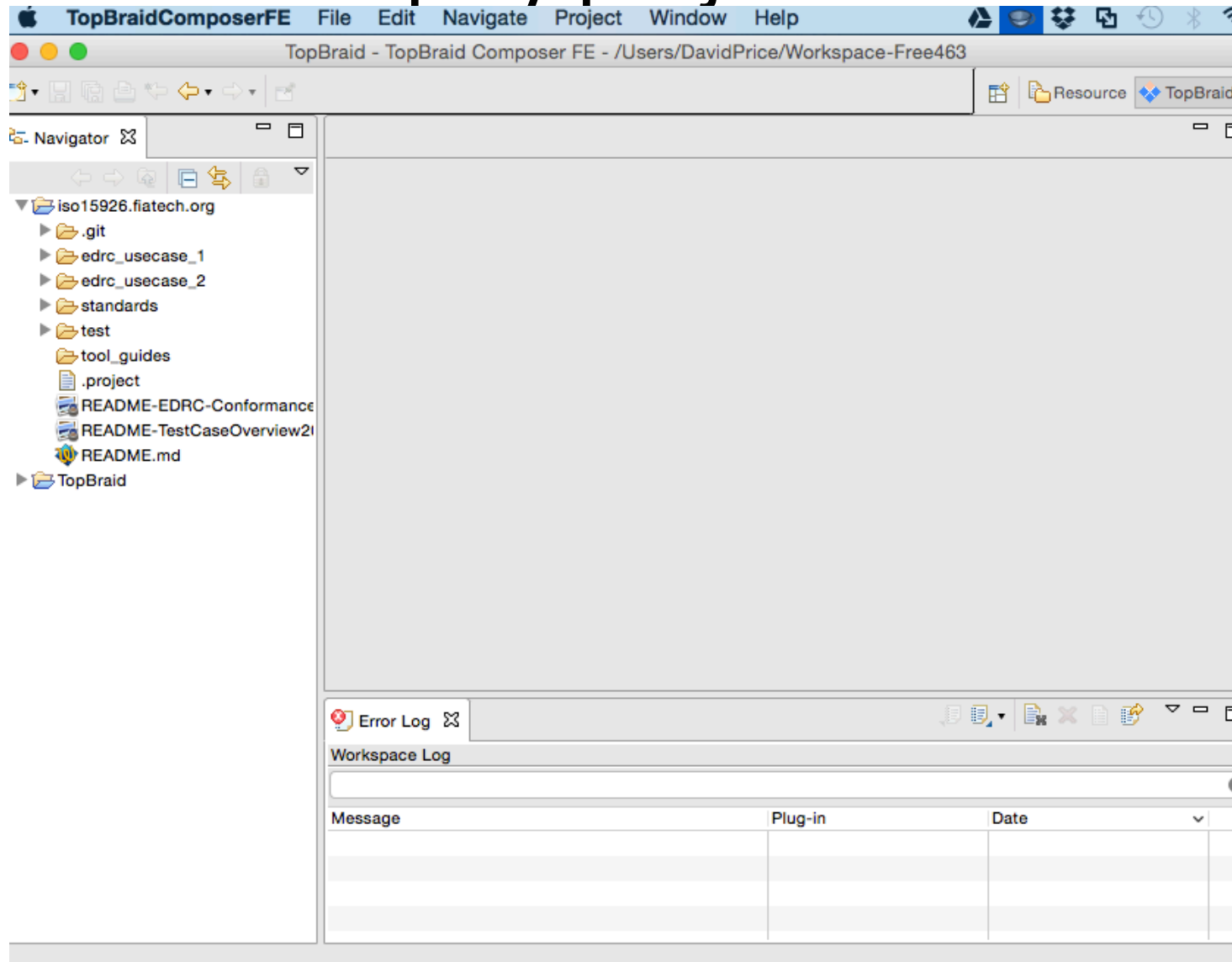
Navigate to find where you downloaded the test cases and choose Open

After Selecting root directory, you should see iso15926.fiatech.org Project, then select Finish

Import complete

Navigator pane, select little arrow to display project folders

Double-click to open a test case ttl file, note that you can resize the panes
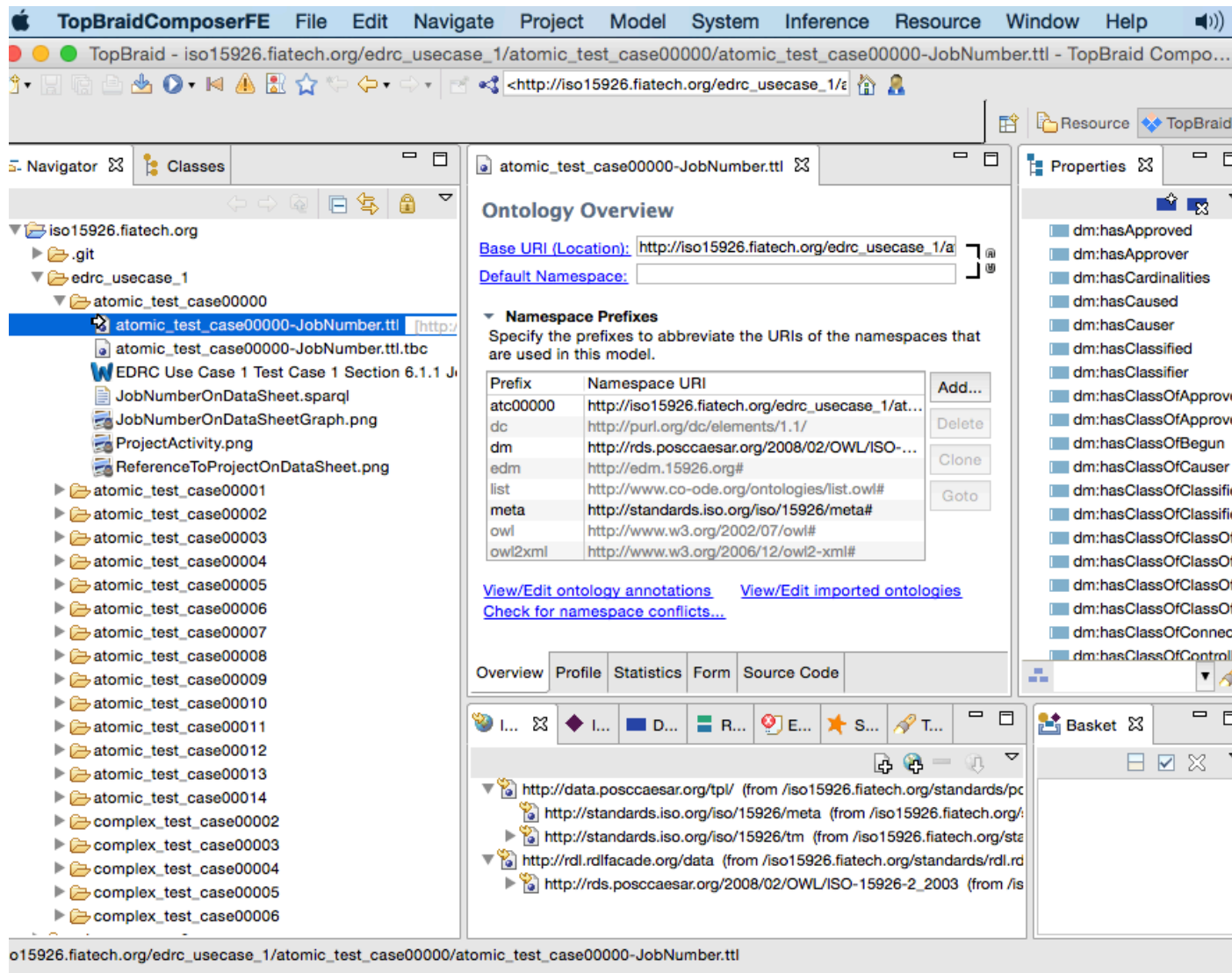
Select Classes pan and arrow to show classes under owl:Thing

Select and open a .sparql file

Select All (cntl-a) and Copy (cntl-c) in .sparql file
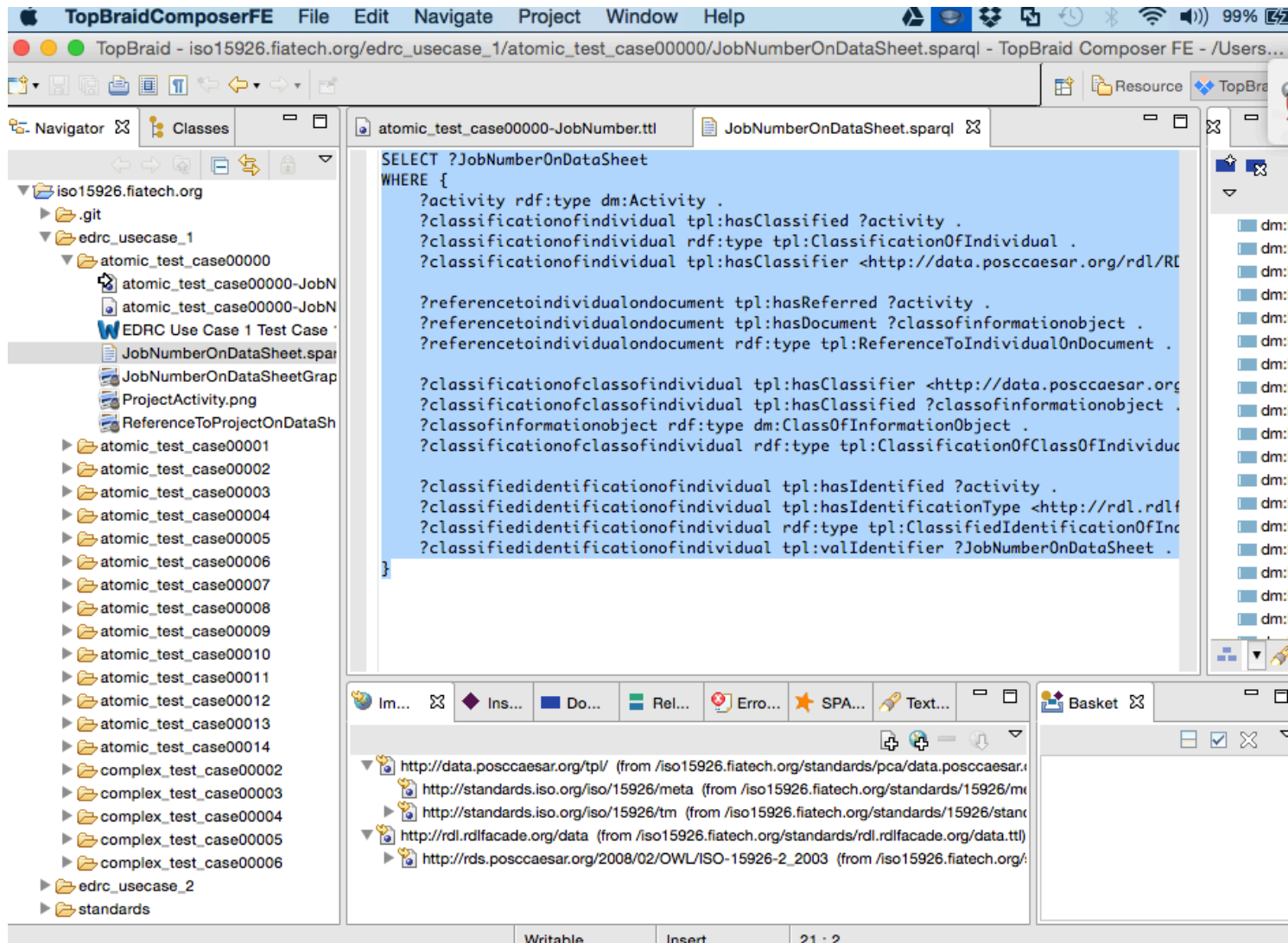
Select .ttl file and Paste (cntl-p) into SPARQL pane

Double-click a pane to make it full screen, and again to return to smaller view
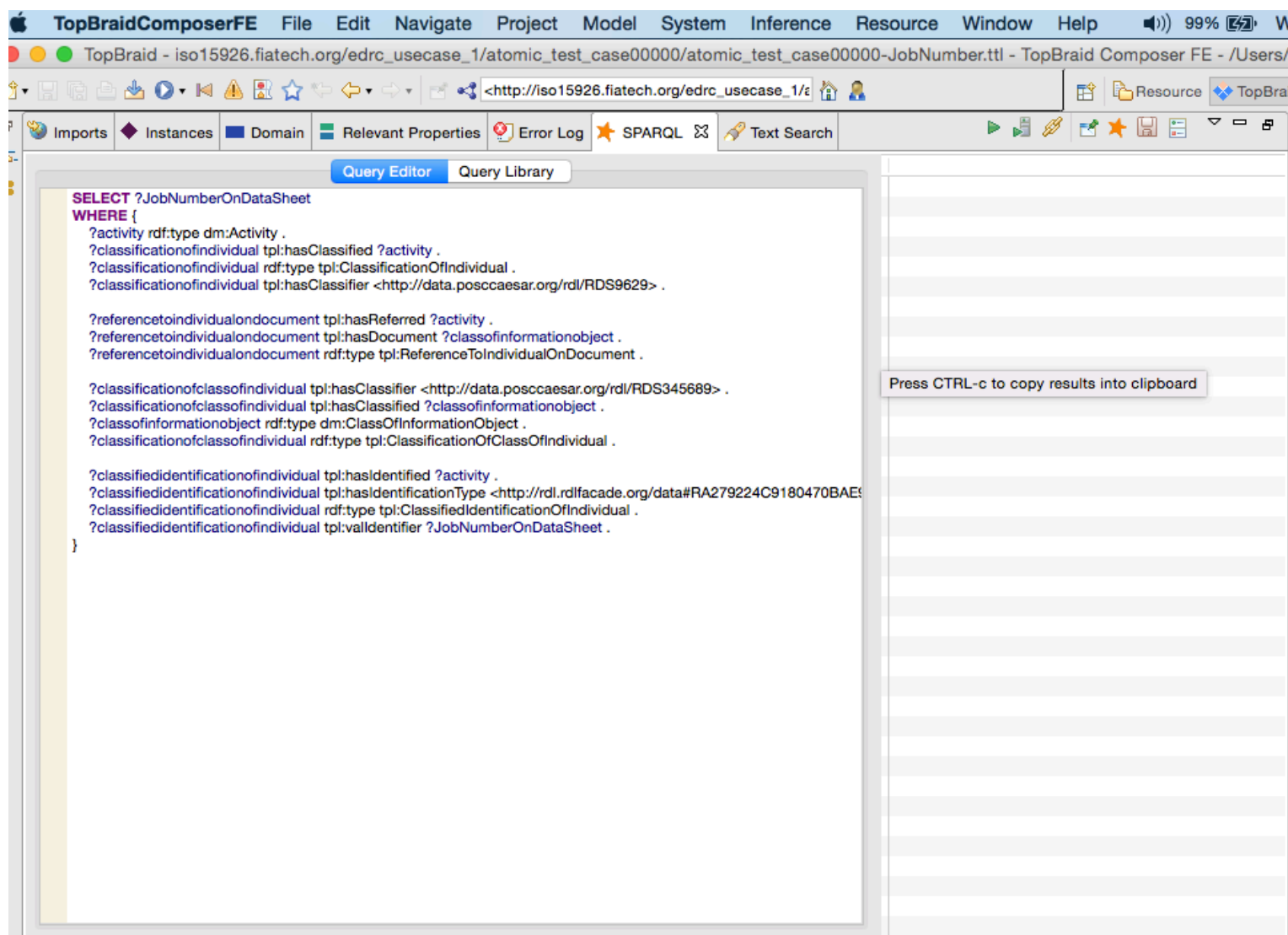
Press the Green Arrow to run the query and see results

Select a Class and see list of Instances in pane below

Double click on an instance to view

Can follow links, hold down cntl and URIs become active

Can also open linked instances in sub-form (hover over diamond for + and -)

W3C RDF Shape Constraint Language (SHACL)

- RDF Data Shapes Working Group
  - http://www.w3.org/2014/data-shapes/wiki/Main_Page
- Editor draft
  - https://w3c.github.io/data-shapes/shacl/
- Tutorial
  - http://www.topquadrant.com/technology/shacl/tutorial/

Review TopBraid 5.0 experimental SHACL support : shacl_job_number.ttl

Run SHACL over negative test case :
TEST_atomic_test_case00000-JobNumberNegative-shacl.ttl

Run SHACL example over negative test case

Constraint Violations reported here

Green Arrow Button means Go

The End