

GNIS to RDF  
Center of Excellence for Geographic Information Systems  
United States Geological Survey

- The Geographic Names Information System (GNIS) is the Federal standard for geographic nomenclature. The U.S. Geological Survey developed the GNIS for the U.S. Board on Geographic Names, a Federal inter-agency body chartered by public law to maintain uniform feature name usage throughout the Government and to promulgate standard names to the public. The GNIS is the official repository of domestic geographic names data; the official vehicle for geographic names use by all departments of the Federal Government; and the source for applying geographic names to Federal electronic and printed products of all types. See <http://geonames.usgs.gov> for additional information.

Source: <https://catalog.data.gov/dataset/u-s-geographic-names-information-system-gnis>

- GNIS2RDF is code that converts the data from pipe-delimited text (.txt) to RDF. The .zip file of the code is available at the URL: <http://cegis.usgs.gov/ontology.html>. To run this code you will require Eclipse or any other JAVA based IDE(Integrated Development Environment). Go to Files and directly import this zip file. The imported project should look like Figure 1.

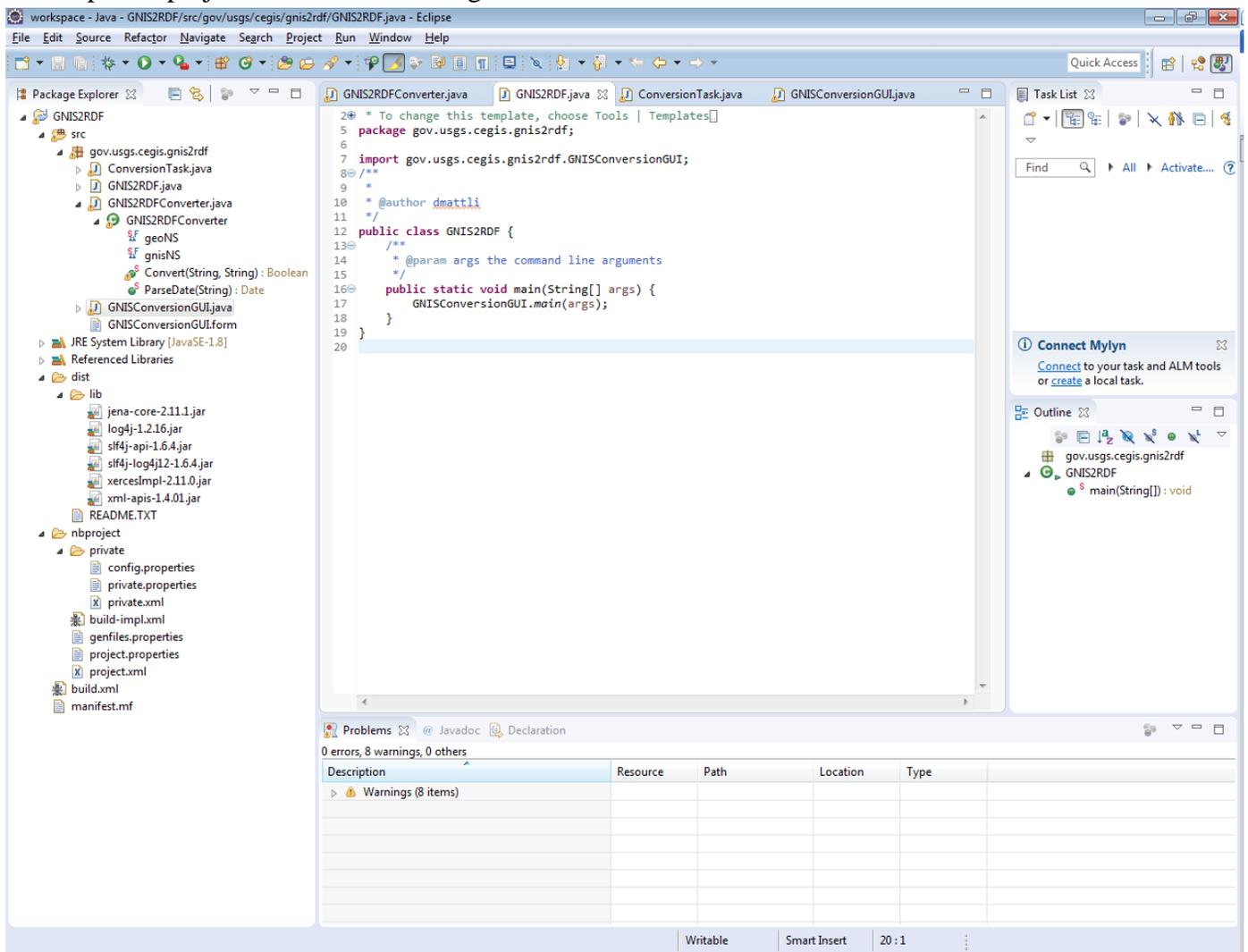


Figure 1 GNIS2RDF Project

- As shown in the figure, run this file GNIS2RDF.java. This file has the main function and hence running this file will generate a pop-up window as shown in figure 2.

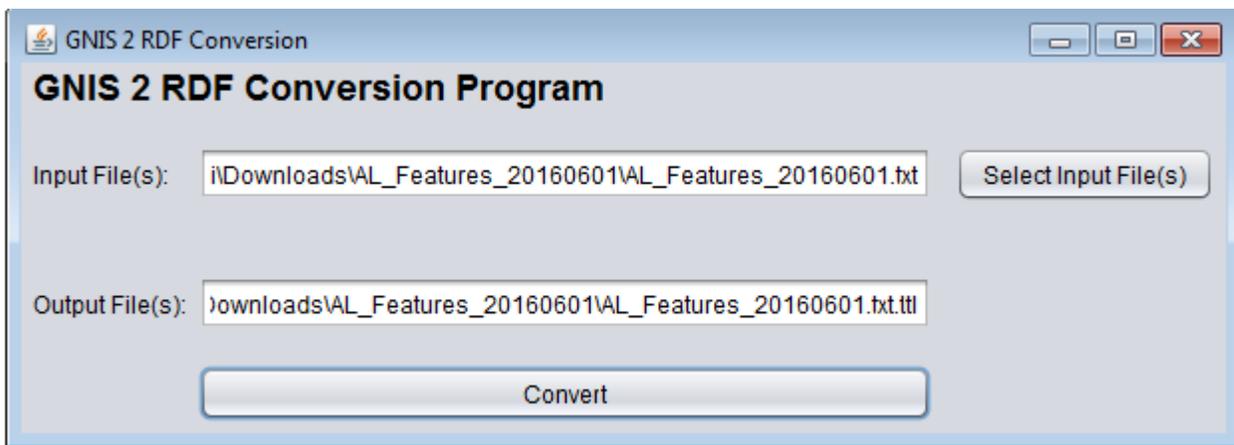


Figure 2 GNIS2RDF.java main class GUI

- **Note:** If importing the zip file gives you an error, right click on the project folder in the Package Explorer and go to Build Path -> Configure Build Path -> Java Build Path -> Libraries -> Add External JARS and include all the JAR files found in the Library folder along with this zip file. This will eliminate all the errors.
- Select the Input file which has the pipe-delimited text (.txt) format. These data files can be downloaded from the URI: [http://geonames.usgs.gov/domestic/download\\_data.htm](http://geonames.usgs.gov/domestic/download_data.htm). After giving the input file click on convert, and the program will convert the pipe-delimited text (.txt) file to a turtle file (in RDF format). This RDF turtle file can then be processed to other common formats such as XML or JSON by the procedure found on <http://cegis.usgs.gov/ontology.html>.  
**Note:** This code has been developed by **David Mattli**, and is working as on July 22, 2016. Latest datasets from [http://geonames.usgs.gov/domestic/download\\_data.htm](http://geonames.usgs.gov/domestic/download_data.htm) has been used for testing this code .