

# PROTEGE 3.X VS 4.X

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What are the differences

# Differences

- Protege 3.x
  - Protege-Frames
  - OWL 1.0:
    - OWL and RDF
    - Protege-OWL API
  - SPARQL support
  - SWRL
  - Plugin framework developed at Stanford
  - UI pretty much customizable

## Protege 4.x

- No Protege-Frames
- OWL 2.0:
  - OWL and RDF
  - OWL API. Faster and works more closely with OWL
- SPARQL support from 4.2 (Window -> View -> Query Views)
- SWRL
- Plugin framework uses OSGi (plugin standard framework)
- UI «everything» is customizable
- Other:
  - Other property types: Assymetric, Reflexive, Irreflexive

# Other

- Different reasoning engines. 3.x has DIG and 4.x has FaCT++ and Hermit (bundled), though both support Pellet.
- The User Interface takes some time getting used to
- 4.x does not use project files, only OWL files

# Protege 4.2 – Close, but no cigar

## The good stuff:

- New plugins
- Ontology diff tool and merge tool
- Code generation tool
- Plugins and reasoning engine gives (me) minimal amount of conflicts

## The not so good stuff:

- It seems strange to have necessary and efficient conditions under «Subclass Of»
- Data restriction creator does not support ranged values (the reasoner will throw exception)
- Object restriction does not show individuals
- All in all: there is still a lot of manual writing, and some things does not seem logical

# References

- Stanford compares Protege 3.x and 4.x :  
[http://protegewiki.stanford.edu/wiki/Protege4Migration#Side\\_by\\_Side\\_Comparison](http://protegewiki.stanford.edu/wiki/Protege4Migration#Side_by_Side_Comparison)
- OWL 1.0: <http://www.w3.org/2004/OWL/>
- Owl 2.0: [http://www.w3.org/2007/OWL/wiki/OWL\\_Working\\_Group](http://www.w3.org/2007/OWL/wiki/OWL_Working_Group)