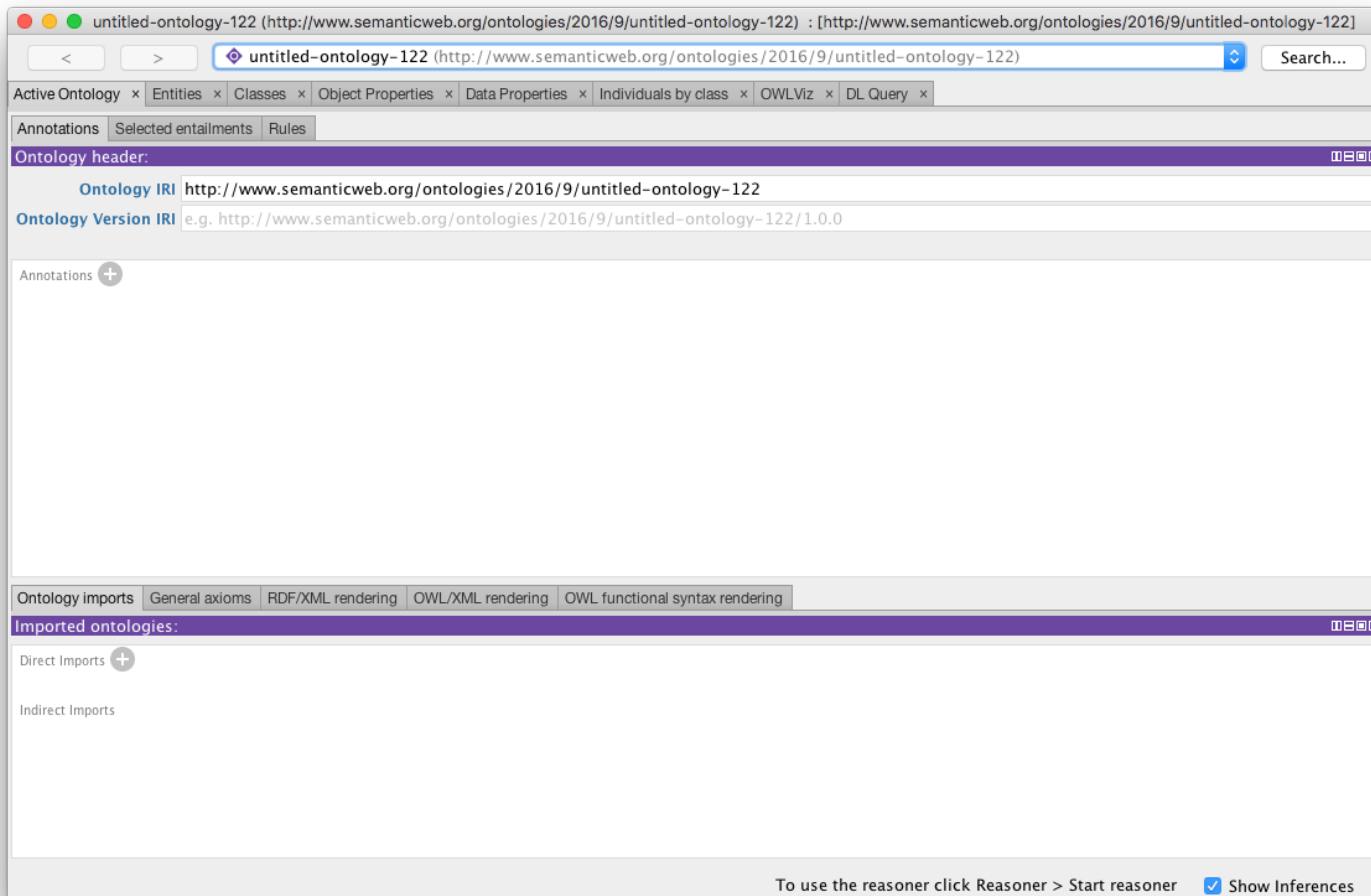




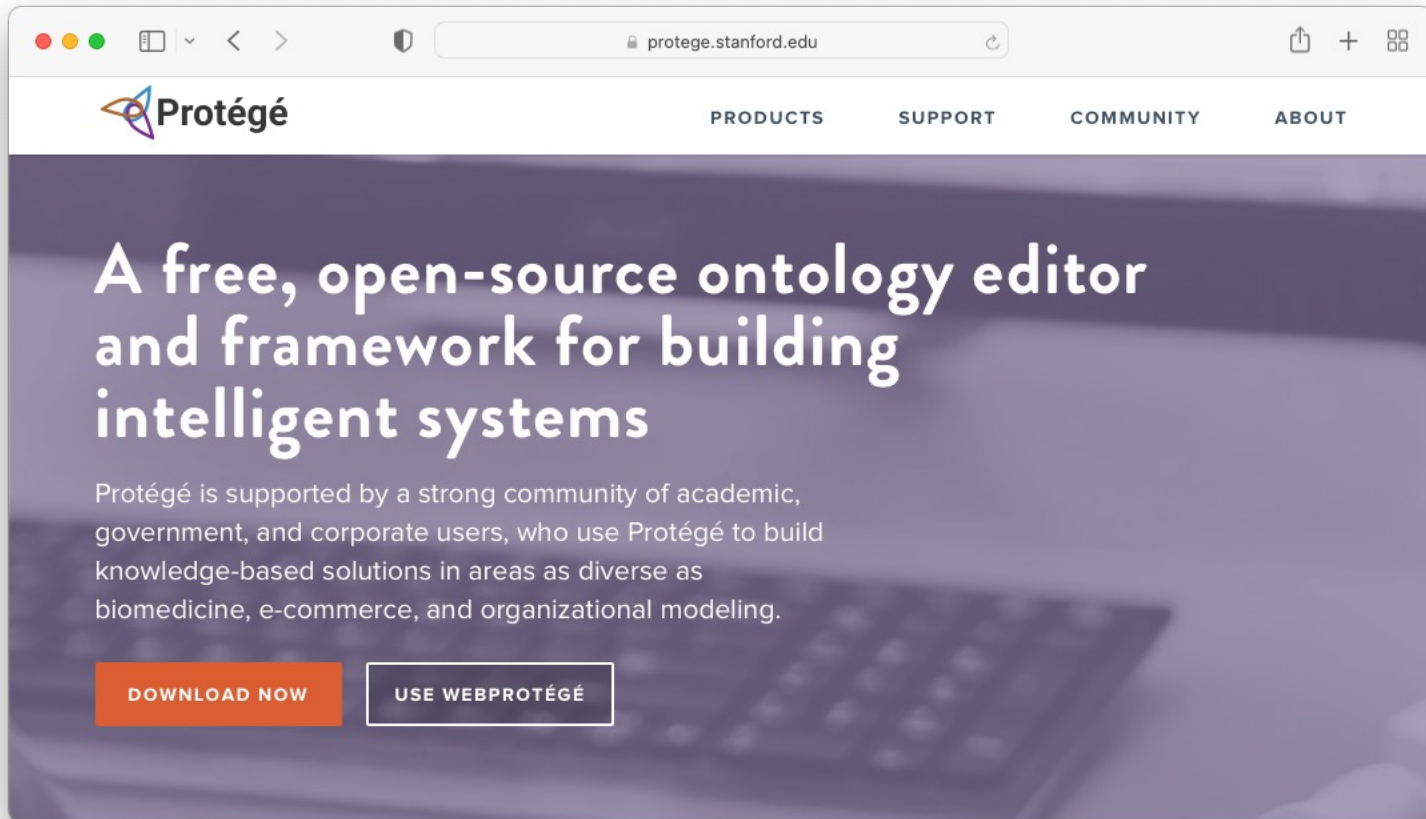
# Ontology Editors (2)

# IDEs for Ontologies

## Installing and using Protege



# http://protege.stanford.edu



- Click download which will get a version for your system (e.g., Protégé.app for a Mac)
- You'll have an option of also getting a platform-independent version that will require the Java Runtime Environment

# Protégé out of the box

- Standard features include
  - W3C standards compliant
  - Customizable user interface
  - Visualization support
  - Ontology refactoring support
  - Direct interface to reasoners
  - Highly pluggable architecture
  - Cross compatible with WebProtégé
- There are other plug-ins that you can install



# Protégé with family.ttl

The screenshot displays the Protégé web interface for the 'family' ontology. The browser address bar shows the URL 'family (http://example.org/family/) : [/Users/finin/Desktop/DEMO/family.ttl]'. The main content area is divided into several panels:

- Object property hierarchy: hasChild:** A tree view on the left showing the hierarchy of object properties. The 'hasChild' property is highlighted in blue. Other properties shown include 'ancestorOf', 'parentOf', 'childOf', 'hasAncestor', 'hasParent', 'hasGrandParent', and 'spouse'.
- Annotations: hasChild:** A panel showing the annotations for the 'hasChild' property. It lists 'rdfs:range: Person' with a yellow dot next to the 'Person' class name.
- Description: hasChild:** A panel showing the description of the 'hasChild' property. It includes several sections with expandable (+) and collapse (-) icons:
  - Equivalent To:** 'parentOf'
  - SubProperty Of:** 'ancestorOf'
  - Inverse Of:** 'childOf'
  - Domains (intersection):** 'Person'
  - Ranges (intersection):** (empty)
  - Disjoint With:** (empty)
- Characteristics:** A list of checkboxes for property characteristics:
  - Functional
  - Inverse functional
  - Transitive
  - Symmetric
  - Asymmetric
  - Reflexive
  - Irreflexive

At the bottom right of the interface, there is a status bar with the text 'To use the reasoner click Reasoner > Start reasoner' and a checked checkbox for 'Show Inferences'.

# Protégé with peeps.ttl

The screenshot displays the Protégé web interface for the ontology file `peeps.ttl`. The browser address bar shows the URL `https://raw.githubusercontent.com/finin/peeps/master/peeps.ttl`. The interface is divided into several panes:

- Class hierarchy:** Shows a tree structure starting from `owl:Thing`. The `foaf:Person` class is expanded, showing its subclasses: `Adult` (highlighted in blue), `Man`, `Minor`, and `Woman`. `Man` and `Minor` have their own subclasses: `Boy`. `schema:Person` is also listed as a subclass.
- Annotations: Adult:** Lists two annotations:
  - `rdfs:label` with the value "Adult person".
  - `rdfs:comment` with the value "An Adult is a Person whose age is 18 or older."
- Description: Adult:** Shows the logical definition of the class:
  - Equivalent To:** `Person and (hasAge some xsd:int[>= 18])`
  - SubClass Of:** `Person`
  - General class axioms:** (None listed)
  - SubClass Of (Anonymous Ancestor):**
    - `hasParent exactly 1 Woman`
    - `foaf:Person`
    - `schema:Person`
    - `hasParent exactly 1 Man`

At the bottom right, there are status indicators: "To use the reasoner click Reasoner > Start reasoner", a checked "Show Inferences" checkbox, and a warning icon.

# For more information

- See Stanford's [Protégé wiki](#) and the [Protégé 5 Documentation](#)

