# Protégé Guidelines

The owl file produced using Protègè, in order to be accepted by the RDF-OWL importer provided by the API Layer of the DI platform, has to respect some guidelines.

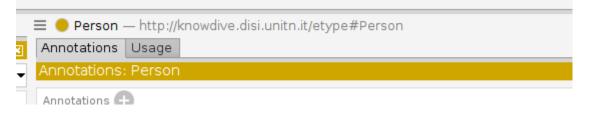
### **Elements IRI**

Each new element modeled (classes (etypes), data properties and object properties) have to be added in Protègè using a single static IRI:

#### http://knowdive.disi.unitn.it/etype#

Examples:

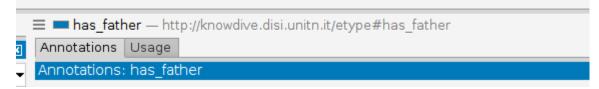
Class: Person -> http://knowdive.disi.unitn.it/etype#Person



Data property: has\_name -> http://knowdive.disi.unitn.it/etype#has\_name



Object property: has\_father -> http://knowdive.disi.unitn.it/etype#has\_father

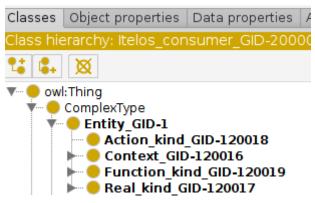


Always check that this IRI is defined for the new elements added in the schema using Protègè.

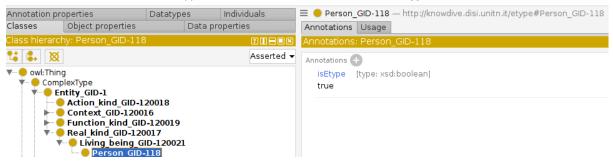
|  | Create a new Data property | 8 |  |  |
|--|----------------------------|---|--|--|
| Name   | has_name                   |   |  |  |
| IRI http://knowdive.disi.unitn.it/etype#has_name |                            |   |  |  |
|  | New entity options         | s |  |  |
|  | OK Annulla                 |   |  |  |

# **ETypes definition**

• Each EType has to be defined, in the hierarchy, under one of the subclasses of Entity\_GID\_1.



• Once created, each EType has to contain the annotation isEtype.



• Such annotation must have value true and the Type xsd:boolean

|  | Person_GID-118                                    | 8 |
|--|---|---|
|  | Literal Entity IRI   IRI Editor   Property values |   |
| GID<br>hasIdProperty<br>hasUnitOfMeasure<br>ISEtype<br>owl:backwardCompatibleWith<br>owl:deprecated<br>owl:incompatibleWith<br>owl:priorVersion<br>owl:versionInfo<br>rdfs:comment<br>rdfs:comment | true  |   |
| rdfs:isDefinedBy   | Type 🛑 xsd:boolean 🔹 Lang                         |   |
|  | OK Annulla  |   |

#### Data properties name

Each data and object properties names must start with "has\_". Example:

• the name properties of class Person will be named: has\_name

## Data types allowed

The Data Types used to define the data properties ranges are limited. in particular only the following are allowed:

- numeric : int, float, long
- text: string
- date: datetime
- true or false: boolean

# **Existing ETypes and Properties**

Do not modify any existing ETypes and (data, object) properties already defined in the base structure owl file. Ignore the elements in the base structure you don't need or you don't understand.

### **RDF** Import

The etypes imported will not be updated by a second import, thus data and object properties will be imported together with the relative etype definition/import (no update of properties of already existing etypes).

