Verification of issue: Error while loading Ontology to Protege #562

After generating the documentation of the ontology by running the widoco.py script including the latest changes in the versioning process we observe the following:

1. The ontology.ttl file generated as part of the serialization process, presents a wrong output.
For example, the accrualPeriodicity is defined as both: Data and Object Property

```
### https://w3id.org/idsa/core/accrualPeriodicity
<https://w3id.org/idsa/core/accrualPeriodicity> rdf:type owl:ObjectProperty ;
                                    rdfs:domain <https://w3id.org/idsa/core/DigitalContent> ;
                                    rdfs:range <https://w3id.org/idsa/core/Frequency> .


### https://w3id.org/idsa/core/action
<https://w3id.org/idsa/core/action> rdf:type owl:ObjectProperty ;
                                    rdfs:domain [ rdf:type owl:Class ;
                                            owl:unionOf ( <https://w3id.org/idsa/core/Rule>
                                                          <https://w3id.org/idsa/core/UsageControlObject>
                                                        )
                                            ] ;
                                    rdfs:range <https://w3id.org/idsa/core/Action> .
```

```
#################################################################
#    Data properties
#################################################################


### http://purl.org/dc/terms/accrualPeriodicity
<http://purl.org/dc/terms/accrualPeriodicity> rdf:type owl:DatatypeProperty .
```

We know that ids:accrualPeriodicity is defined in DigitalContent.ttl as follows:

```
ids:accrualPeriodicity # consider irregular updates as well
    a owl:DatatypeProperty;
    rdfs:subPropertyOf dct:accrualPeriodicity ;
    rdfs:label "Accrual periodicity"@en;
    rdfs:comment "The regular period with which items are added to a
    collection."@en ;
    rdfs:domain ids:DigitalContent;
    rdfs:range ids:Frequency;
    .
```
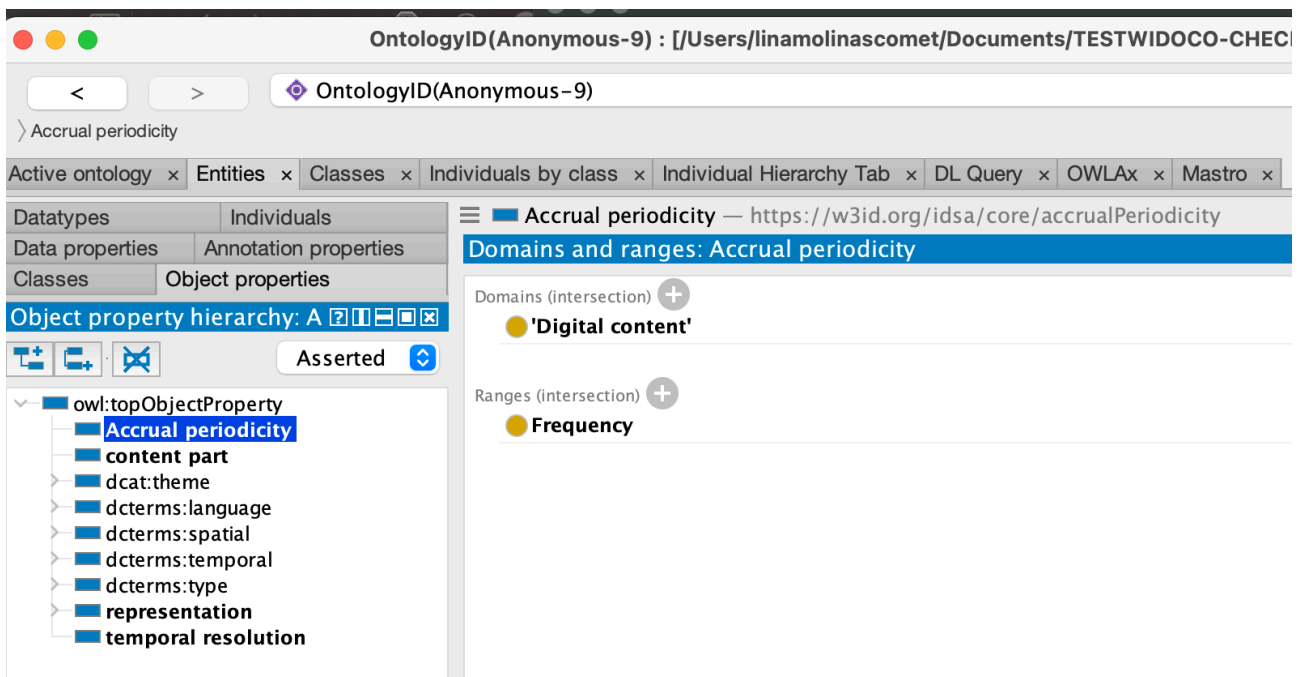
Which indicates is a owl:DatatypeProperty.

However, by looking at the same file (DigitalContent.ttl) in Protege, we observe that **ids:accrualPeriodicity** is treated as an Object Property, and **dct:accrualPeriodicity** as a Data Property
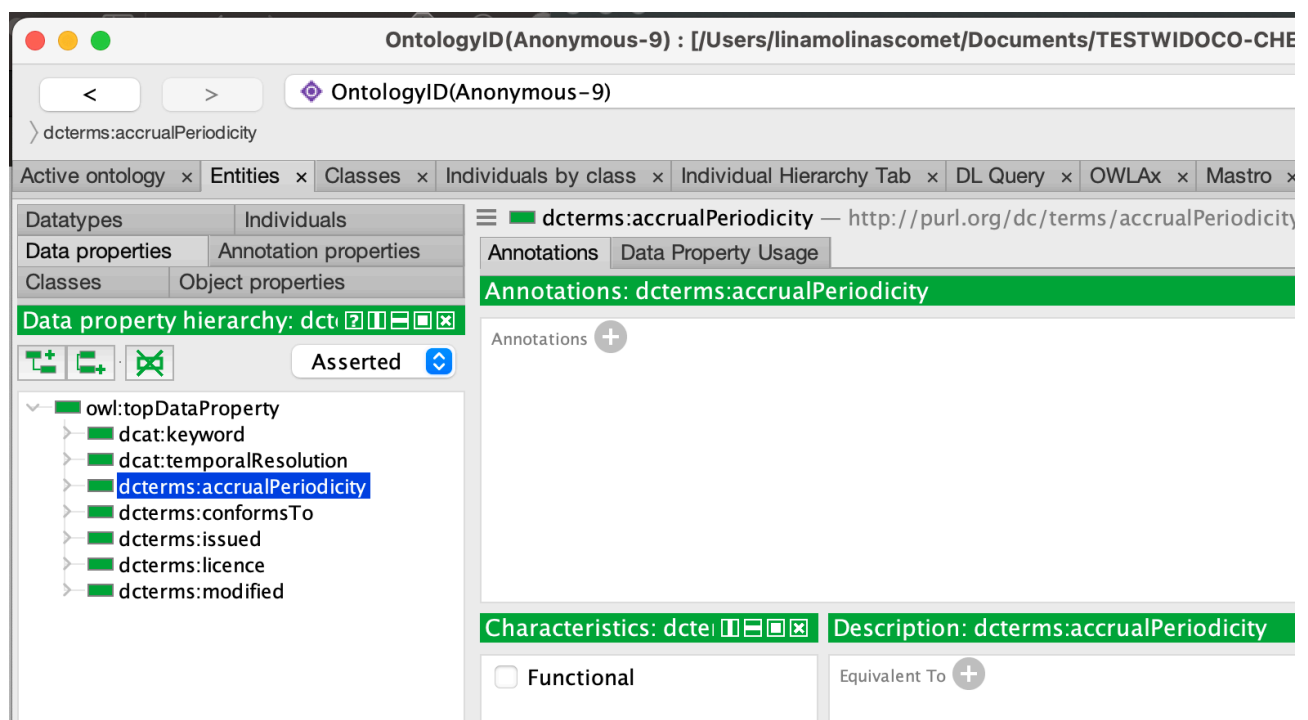
We take the widoco.py version before versioning and run it for version 4.1.0 of our ontology.

The result is the same as described in **point 1.**

We now change the definition of ids:accrualPeriodicity as the result of the Refactor IDS Model process in which we removed redundant definitions and proceed to first check it on Protégé
As we can observe, there are no internal ids:accrualPeriodicity definition, nor a reference to the external dct:accrualPeriodicity.
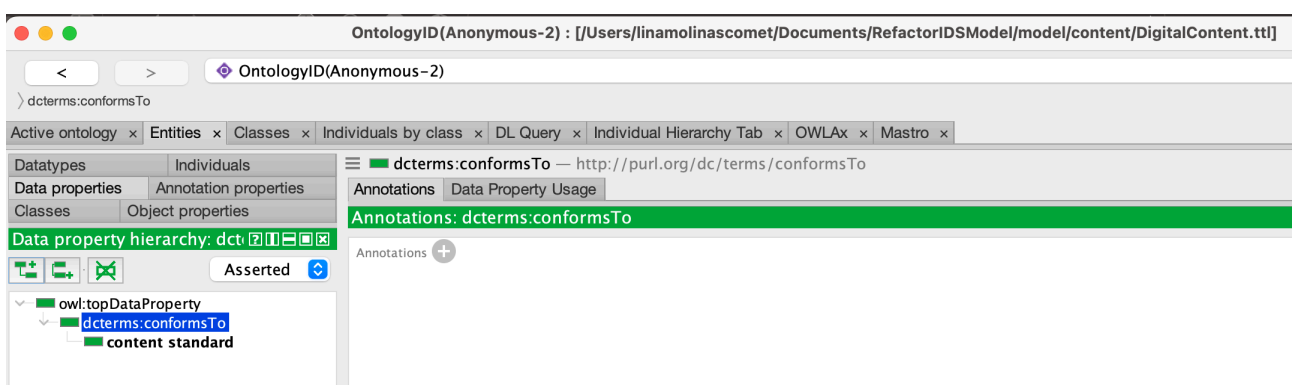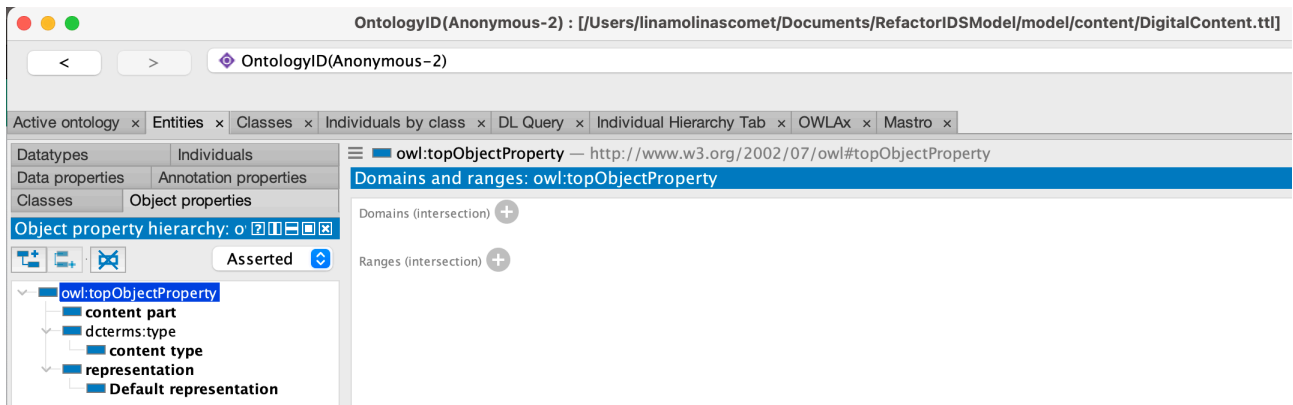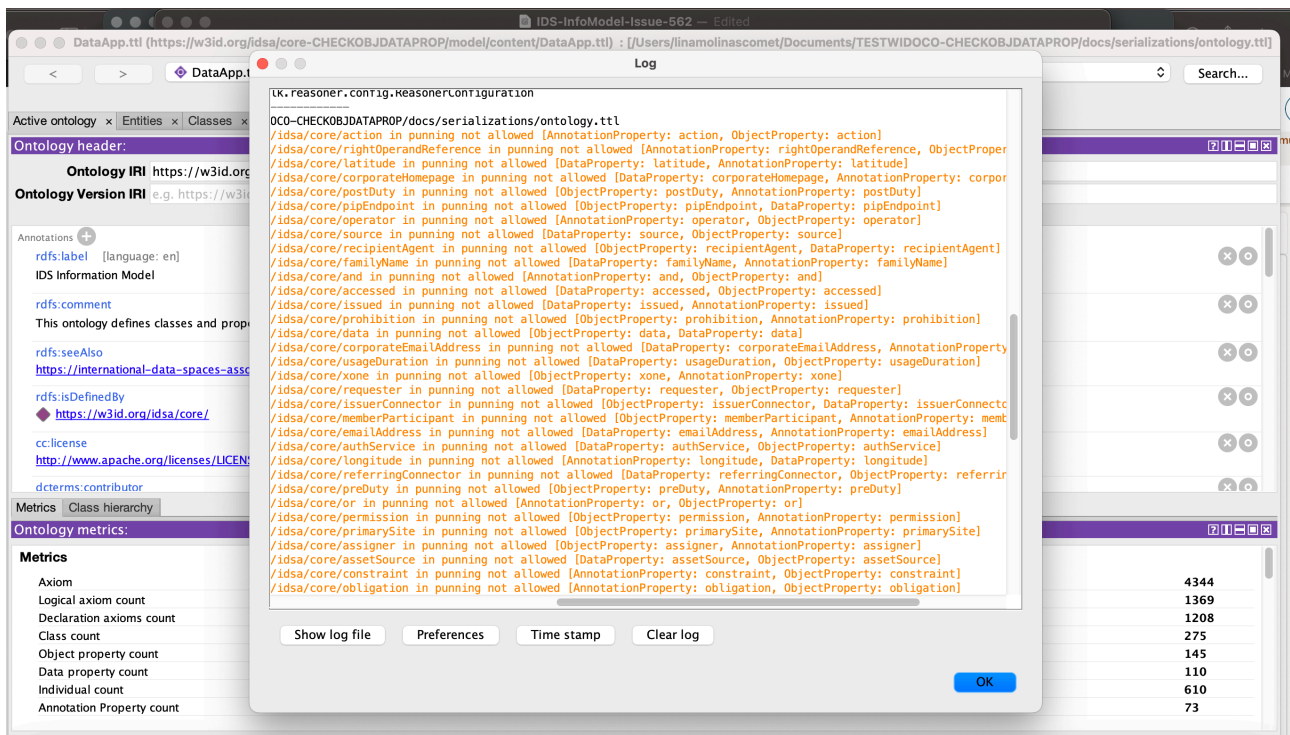
Now we generate documentation and generalization with the old version of the widoco.py script. The results are as follows:
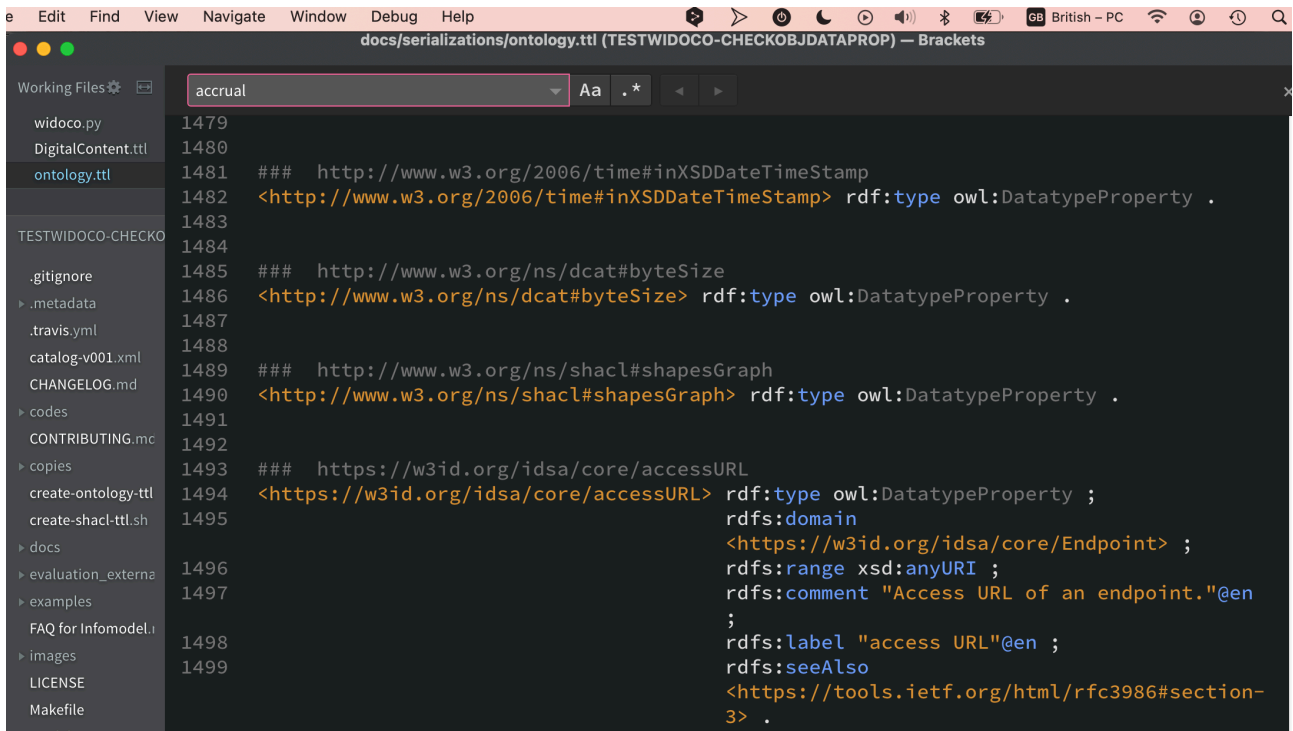
Also, when loading the new ontology.ttl file, there is no warning regarding the illegal redefinition of the accrualPeriodicity property:

We replace the old widoco.py script with the latest one, resulting in the following:

The local changes are not reflected in the ontology.ttl file as in the script we are taking the model files from the repository, and only consider released versions. The latest version 4.1.0 does not yet consider the changes from the refactoring process implemented based on the issue: **Refactor identified refactoring options for the IDS information model #490**

```
37   # Get files from the repository by release tag (the last release) and build
     directories
38 ▼ def get_files_from_repository():
39       url_api = 'https://api.github.com/repos/International-Data-Spaces-
         Association/InformationModel/releases'
40
```