

Evaluation results

There are three levels of importance in pitfalls according to their impact on the ontology:

- **Critical** It is crucial to correct the pitfall. Otherwise, it could affect the ontology consistency, reasoning, applicability, etc.
- **Important** Though not critical for ontology function, it is important to correct this type of pitfall.
- **Minor** It is not really a problem, but by correcting it we will make the ontology nicer.

Pitfalls detected:

Results for P04: Creating unconnected ontology elements.

4 cases

Minor

Ontology elements (classes, object properties and datatype properties) are created isolated, with no relation to the rest of the ontology.

- This pitfall appears in the following elements:
 - > http://www.example.org/test#Cl_Organization
 - > http://www.example.org/test#Cl_GeographicalLocation
 - > http://www.example.org/test#Cl_MedicalFacility
 - > http://www.example.org/test#Cl_Event

Results for P08: Missing annotations.

76 cases

Minor

This pitfall consists in creating an ontology element and failing to provide human readable annotations attached to it. Consequently, ontology elements lack annotation properties that label them (e.g. rdfs:label, lemon:LexicalEntry, skos:prefLabel or skos:altLabel) or that define them (e.g. rdfs:comment or dc:description). This pitfall is related to the guidelines provided in [5].

- The following elements have neither rdfs:label or rdfs:comment (nor skos:definition) defined:
 - > http://www.example.org/test#Cl_Location
 - > http://www.example.org/test#Cl_Employee
 - > http://www.example.org/test#Cl_Doctor
 - > http://www.example.org/test#Cl_MedicalDegree
 - > http://www.example.org/test#Cl_ArticleCollection
 - > http://www.example.org/test#Cl_Organization
 - > http://www.example.org/test#Cl_PersonDegree
 - > http://www.example.org/test#Cl_Hospital

> http://www.example.org/test#Cl_GeographicalLocation
> http://www.example.org/test#Cl_SeminarOccurrence
> http://www.example.org/test#Cl_Nurse
> http://www.example.org/test#Cl_MedicalFacility
> http://www.example.org/test#Cl_StudyEvent
> http://www.example.org/test#Cl_City
> http://www.example.org/test#Cl_TimePoint
> http://www.example.org/test#Cl_UnionRoleAssignment
> http://www.example.org/test#Cl_UnionGroup
> http://www.example.org/test#Cl_ArticlePresentation
> http://www.example.org/test#Cl_SeniorDoctor
> http://www.example.org/test#Cl_Seminar
> http://www.example.org/test#Cl_CD
> http://www.example.org/test#Cl_Role
> http://www.example.org/test#Cl_EvaluationEvent
> http://www.example.org/test#Cl_Publication
> http://www.example.org/test#Cl_SeminarEvent
> http://www.example.org/test#Cl_Event
> http://www.example.org/test#Cl_Person
> http://www.example.org/test#Cl_Book
> http://www.example.org/test#Cl_EmploymentEvent
> http://www.example.org/test#Cl_Union
> http://www.example.org/test#Cl_Degree
> http://www.example.org/test#Cl_Union
> http://www.example.org/test#Cl_Degree
> http://www.example.org/test#Cl_TimePeriod
> http://www.example.org/test#Cl_Article
> http://www.example.org/test#Cl_UnionMembership
> http://www.example.org/test#Cl_Country
> http://www.example.org/test#P_occursAt
> <http://www.example.org/test#containsArticle>
> http://www.example.org/test#P_isInCity
> http://www.example.org/test#conducts_evaluation_event
> <http://www.example.org/test#hasPresentedArticle>
> <http://www.example.org/test#hasEmploymentEventAtHospital>
> <http://www.example.org/test#hasEmployee>
> <http://www.example.org/test#hasUnion>
> <http://www.example.org/test#isDegreeOfStudyEvent>
> <http://www.example.org/test#locatedInCity>
> <http://www.example.org/test#isLocatedIn>
> <http://www.example.org/test#hasTimePoint>
> <http://www.example.org/test#hasSeminarPresentationEvent>
> <http://www.example.org/test#isPeriodOfStudyEvent>
> http://www.example.org/test#P_isOccurrenceOf
> <http://www.example.org/test#isBookVersionOf>
> <http://www.example.org/test#isAssignmentOfRole>
> <http://www.example.org/test#hasEmploymentEvent>
> <http://www.example.org/test#participatedInStudyEvent>
> <http://www.example.org/test#relatesToSeminar>
> <http://www.example.org/test#hasDegree>
> <http://www.example.org/test#hasPerson>
> <http://www.example.org/test#hasArticlePresentationEvent>
> <http://www.example.org/test#isAssignmentInUnionGroup>
> <http://www.example.org/test#tookPlaceAt>
> http://www.example.org/test#undergoes_evaluation_event
> <http://www.example.org/test#hasUnionRoleAssignment>

- > <http://www.example.org/test#hasUnionRoleAssignment>
- > http://www.example.org/test#publication_date
- > <http://www.example.org/test#hasEndDate>
- > http://www.example.org/test#P_hasDate
- > <http://www.example.org/test#cityName>
- > <http://www.example.org/test#title>
- > http://www.example.org/test#evaluation_text
- > <http://www.example.org/test#hasDate>
- > <http://www.example.org/test#hasNumberOfPages>
- > <http://www.example.org/test#timeValue>
- > <http://www.example.org/test#employmentStartDate>
- > <http://www.example.org/test#hasStartDate>
- > <http://www.example.org/test#startDate>
- > <http://www.example.org/test#degreeDate>
- > <http://www.example.org/test#countryName>

Results for P13: Inverse relationships not explicitly declared.

27 cases

Minor

This pitfall appears when any relationship (except for those that are defined as symmetric properties using owl:SymmetricProperty) does not have an inverse relationship (owl:inverseOf) defined within the ontology.

- This pitfall appears in the following elements:

- > http://www.example.org/test#P_occursAt
- > <http://www.example.org/test#containsArticle>
- > http://www.example.org/test#P_isInCity
- > http://www.example.org/test#conducts_evaluation_event
- > <http://www.example.org/test#hasPresentedArticle>
- > <http://www.example.org/test#hasEmploymentEventAtHospital>
- > <http://www.example.org/test#hasEmployee>
- > <http://www.example.org/test#hasUnion>
- > <http://www.example.org/test#isDegreeOfStudyEvent>
- > <http://www.example.org/test#locatedInCity>
- > <http://www.example.org/test#isLocatedIn>
- > <http://www.example.org/test#hasTimePoint>
- > <http://www.example.org/test#hasSeminarPresentationEvent>
- > <http://www.example.org/test#isPeriodOfStudyEvent>
- > http://www.example.org/test#P_isOccurrenceOf
- > <http://www.example.org/test#isBookVersionOf>
- > <http://www.example.org/test#isAssignmentOfRole>
- > <http://www.example.org/test#hasEmploymentEvent>
- > <http://www.example.org/test#participatedInStudyEvent>
- > <http://www.example.org/test#relatesToSeminar>
- > <http://www.example.org/test#hasDegree>
- > <http://www.example.org/test#hasDegree>
- > <http://www.example.org/test#hasPerson>
- > <http://www.example.org/test#hasArticlePresentationEvent>
- > <http://www.example.org/test#isAssignmentInUnionGroup>
- > <http://www.example.org/test#tookPlaceAt>
- > http://www.example.org/test#undergoes_evaluation_event
- > <http://www.example.org/test#hasUnionRoleAssignment>

Results for P22: Using different naming conventions in the ontology

Minor

The ontology elements are not named following the same convention (for example CamelCase or use of delimiters as "-" or "_"). Some notions about naming conventions are provided in [2].

*This pitfall applies to the ontology in general instead of specific elements.

Results for P36: URI contains file extension.

This pitfall occurs if file extensions such as ".owl", ".rdf", ".ttl", ".n3" and ".rdffoxml" are included in an ontology URI. This pitfall is related with the recommendations provided in [9].

*This pitfall applies to the ontology in general instead of specific elements.

Suggestions or warnings:

According to the highest importance level of pitfall found in your ontology the conformance badge suggested is "Minor pitfalls" (see below). You can use the following HTML code to insert the badge within your ontology documentation:



```
<p>
<a href="http://oops.linkeddata.es">
</a>
</p>
```

References

[1] Aguado-De Cea, G., Montiel-Ponsoda, E., Poveda-Villalón, M., and Giraldo-Pasmin, O.X. (2015).

[2] Noy, N. F., McGuinness, D. L., et al. (2001).

[1] Gómez-Pérez, A. (2007).

[4] Montiel-Ponsoda, E., Vila Suero, D., Villazón-Terrazas, B., Dunsire, G., Escolano Rodríguez, E., Gómez-Pérez, A. (2011). ▼

[5] Vrandecic, D. (2010). ▼

[6] Gómez-Pérez, A. (2004). ▼

[7] Rector, A., Drummond, N., Horridge, M., Rogers, J., Knublauch, H., Stevens, R., Wang, H., and Wroe, C. (2004). ▼

[8] Hogan, A., Harth, A., Passant, A., Decker, S., and Polleres, A. (2010). ▼

[9] Archer, P., Goedertier, S., and Loutas, N. (2012). ▼

[10] Bernes-Lee Tim. (2006). ▼

[11] Heath, T. and Bizer, C. (2011). ▼

[12] Vatant, B. (2012). ▼

Enter your ontology to scan:

Enter a URI:

Example: http://oops.linkeddata.es/example/swc_2009-05-09.rdf

Enter a direct input:

If you include just RDF code, the following Pitfalls will not be checked:
P36. URI contains file extension
P37. Ontology not available
P40. Namespace hijacking

Uncheck this checkbox if you don't want us to keep a copy of your ontology.

Scan

How to cite OOPS!

Poveda-Villalón, María, Asunción Gómez-Pérez, and Mari Carmen Suárez-Figueroa. "OOPS!(Ontology Pitfall Scanner!): An on-line tool for ontology evaluation." International Journal on Semantic Web and Information Systems (IJSWIS) 10.2 (2014): 7-34.

BibTex:

```
@article{poveda2014oops,
  title={{OOPS! (Ontology Pitfall Scanner!): An On-line Tool for Ontology Evaluation}},
  author={Poveda-Villal{\'o}n, Mar{\'i}a and G{\'o}mez-P{\'e}rez, Asunci{\'o}n and Su{\'a}rez-Figueroa, Mari Ca},
  journal={International Journal on Semantic Web and Information Systems (IJSWIS)},
  volume={10},
  number={2},
  pages={7--34},
  year={2014},
  publisher={IGI Global}
}
```



Escuela Técnica
Superior de
Ingenieros Informáticos



Universidad
Politécnica
de Madrid

Contact email: oops(at)delicias.dia.fi.upm.es. Latest revision April 2021