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. 3 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.semanticweb.org/ontologies/geo#GeographicLocation
› http://www.semanticweb.org/ontologies/theatre#Person
› http://www.semanticweb.org/ontologies/theatre#CreativeWork

Results for P05: Defining wrong inverse relationships. 1 case 1 case Critical

Two relationships are defined as inverse relations when they are not necessarily inverse.

• This pitfall appears in the following elements:
› http://www.semanticweb.org/ontologies/theatre#hasTheatre may not be inverse of http://www.semanticweb.org/ontologies/theatre#locatedIn

Results for P10: Missing disjointness. Ontology* Important

The ontology lacks disjoint axioms between classes or between properties that should be defined as disjoint. This pitfall is related with the guidelines provided in [6], [2] and [7].

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

Results for P12: Equivalent properties not explicitly declared. 1 case

1 case

Important

The ontology lacks information about equivalent properties (owl:equivalentProperty) in the cases of duplicated relationships and/or attributes.

• The following relations could be defined as equivalent:
› http://www.semanticweb.org/ontologies/geo#locatedIn, http://www.semanticweb.org/ontologies/theatre#locatedIn

Results for P13: Inverse relationships not explicitly declared. 6 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.semanticweb.org/ontologies/theatre#takesPlaceAt
• This pitfall appears in the following elements:
› http://www.semanticweb.org/ontologies/theatre#takesPlaceAt
› http://www.semanticweb.org/ontologies/theatre#hasTimePeriod
› http://www.semanticweb.org/ontologies/theatre#hasPlayInFestival
› http://www.semanticweb.org/ontologies/theatre#hasLocation
› http://www.semanticweb.org/ontologies/theatre#hasRoleInProduction
› http://www.semanticweb.org/ontologies/theatre#hasEmployment

Results for P19: Defining multiple domains or ranges in properties. 6 cases

Critical

The domain or range (or both) of a property (relationships and attributes) is defined by stating more than one rdfs:domain or rdfs:range statements. In OWL multiple rdfs:domain or rdfs:range axioms are allowed, but they are interpreted as conjunction, being, therefore, equivalent to the construct owl:intersectionOf. This pitfall is related to the common error that appears when defining domains and ranges described in [7].

• This pitfall appears in the following elements:
› http://www.semanticweb.org/ontologies/theatre#participatesIn
› http://www.semanticweb.org/ontologies/theatre#hasTheatre
› http://www.semanticweb.org/ontologies/theatre#hasParticipant
› http://www.semanticweb.org/ontologies/theatre#hasStartDate
› http://www.semanticweb.org/ontologies/theatre#hasEndDate
› http://www.semanticweb.org/ontologies/theatre#atTime

Results for P36: URI contains file extension.

Ontology*

Minor

This pitfall occurs if file extensions such as ".owl", ".rdf", ".ttl", ".n3" and ".rdfxml" 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 conformace bagde suggested is "Critical 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">
<img src="http://oops.linkeddata.es/resource/image/oops_critical.png"
alt="Critical pitfalls were found" height="69.6" width="100" /></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).

[3] Gómez-Pérez, A. (1999).

[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:

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

Advanced evaluation

How to cite OOPS!

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