## Ontology Best Practices - Checklist Summary

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| --- | --- | --- | --- | --- | --- |
| **Rules** | **Description** | **More explanations** | **Difficulty**  **(\*, \*\*, \*\*\*)** | **Status (Done, In progress) ?** | **Estimated time** |
| **Rule 1** | Finding a good **ontology name** | Find an explicit name for your ontology, we frequently see “unnamed.owl”! | \* |  |  |
| **Rule 2** | Finding a good **ontology namespace** | Ideally on PURL or W3id.  Otherwise, think about the server hosting the ontology (e.g., http://knoesis.org/ontology/nameOntology#) | \*\* |  | 15 mins |
| **Rule 3** | Sharing your **ontology online** | Accessible with an URL (http://knoesis.org/ontology/nameOntology#)  No server? Push the ontology code on Github?  No server? we can host the ontology code on the LOV4IoT server (but is the ontology stable version?) | \*\* |  |  |
| **Rule 4** | Adding **ontology metadata** | This is important to later reference the ontology on ontology catalogs, or even to provide automatic ontology visualization, ontology documentation, etc. | \* |  |  |
| **Rule 5** | Adding rdfs:label, rdfs:comment, dc:description for each concept and property | This is important to later provide automatic ontology visualization, documentation, etc.  Some tools prefer dc:description, check which ones (e.g., LODE?). | \* |  |  |
| **Rule 6** | All classes should start with an uppercase and properties with a lowercase. | To follow usual software and ontology development guidelines. | \* |  |  |
| **Rule 7** | Submitting your ontology to **ontology catalogs** | Ontology catalogs: LOV, LOV4IoT, BioPortal.  It depends on your applicative domain. | \*\* |  |  |
| **Rule 8** | Reusing and linking ontologies | Reuse an existing concepts and properties from an existing ontology/namespace (e.g., ssn:Device)  Otherwise add owl:EquivalentClass, owl:sameAs, owl:equivalentProperty, etc. | \*\*\* |  |  |
| **Rule 9** | **Deferenceable URI**: copy paste the namespace URL of your ontology in a web browser to get the code | Important to automatize the tasks to automatically retrieve the ontology code for automatic analysis of ontologies | \*\* |  |  |
| **Rule 10** | Checking **syntax validator** | TripleChecker tool is an easy web service to use.  It can check incorrect use of ontologies.  Other tools: OWL Validator, RDF Validator, etc. | \* |  |  |
| **Rule 11** | Adding **ontology documentation** | Ontology documentation can be done automatically with easy to use tools by using their web services if you have labels and comments. E.g., LODE, Widoco, Parrot. | \* |  |  |
| **Rule 12** | Adding **ontology visualization** | Usage of the WebVOWL tool to provide the ontology visualization automatically. | \* |  |  |
| **Rule 13** | Improving **Ontology Design** | Usage of the Oops tool to improve the ontology design. | \*\*\* |  |  |