

## Ontology Best Practices - Checklist Summary

Rules	Description	More explanations	Difficulty (*, **, ***)	Status (Done, In progress) ?	Estimated time
<b>Rule 1</b>	Finding a good <b>ontology name</b>	Find an explicit name for your ontology, we frequently see "unnamed.owl"!	*		
<b>Rule 2</b>	Finding a good <b>ontology namespace</b>	Ideally on PURL or W3id. Otherwise, think about the server hosting the ontology (e.g., <a href="http://knoesis.org/ontology/nameOntology#">http://knoesis.org/ontology/nameOntology#</a> )	**		15 mins
<b>Rule 3</b>	Sharing your <b>ontology online</b>	Accessible with an URL ( <a href="http://knoesis.org/ontology/nameOntology#">http://knoesis.org/ontology/nameOntology#</a> )  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?)	**		
<b>Rule 4</b>	Adding <b>ontology metadata</b>	This is important to later reference the ontology on ontology catalogs, or even to provide automatic ontology visualization, ontology documentation, etc.	*		
<b>Rule 5</b>	Adding <code>rdfs:label</code> , <code>rdfs:comment</code> , <code>dc:description</code> for each concept and property	This is important to later provide automatic ontology visualization, documentation, etc.  Some tools prefer <code>dc:description</code> , check which ones (e.g., LODE?).	*		
<b>Rule 6</b>	All classes should start with an uppercase and properties with a lowercase.	To follow usual software and ontology development guidelines.	*		
<b>Rule 7</b>	Submitting your ontology to <b>ontology catalogs</b>	Ontology catalogs: LOV, LOV4IoT, BioPortal. It depends on your applicative domain.	**		
<b>Rule 8</b>	Reusing and linking ontologies	Reuse an existing concepts and properties from an existing ontology/namespace (e.g., <code>ssn:Device</code> )  Otherwise add <code>owl:EquivalentClass</code> , <code>owl:sameAs</code> , <code>owl:equivalentProperty</code> , etc.	***		
<b>Rule 9</b>	<b>Deferenceable URI</b> : copy paste the namespace URL of your	Important to automatize the tasks to automatically retrieve the ontology code for automatic analysis of ontologies	**		

	ontology in a web browser to get the code				
<b>Rule 10</b>	Checking <b>syntax validator</b>	TripleChecker tool is an easy web service to use. It can check incorrect use of ontologies. Other tools: OWL Validator, RDF Validator, etc.	*		
<b>Rule 11</b>	Adding <b>ontology documentation</b>	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.	*		
<b>Rule 12</b>	Adding <b>ontology visualization</b>	Usage of the WebVOWL tool to provide the ontology visualization automatically.	*		
<b>Rule 13</b>	Improving <b>Ontology Design</b>	Usage of the Oops tool to improve the ontology design.	***		