

OPC Semantifier

**A web-based tool to semantify
the knowledge of standards**

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Overview

- Hierarchical classification standards that were not initially designed to be used as ontologies exist in many domains...
- For example: OPC UA.

Overview (ii)

- OPC UA defines a common infrastructure model to facilitate the information exchange between machines.
- **OPC Semantifier** is a web-based tool to create ontologies from OPC UA standard.

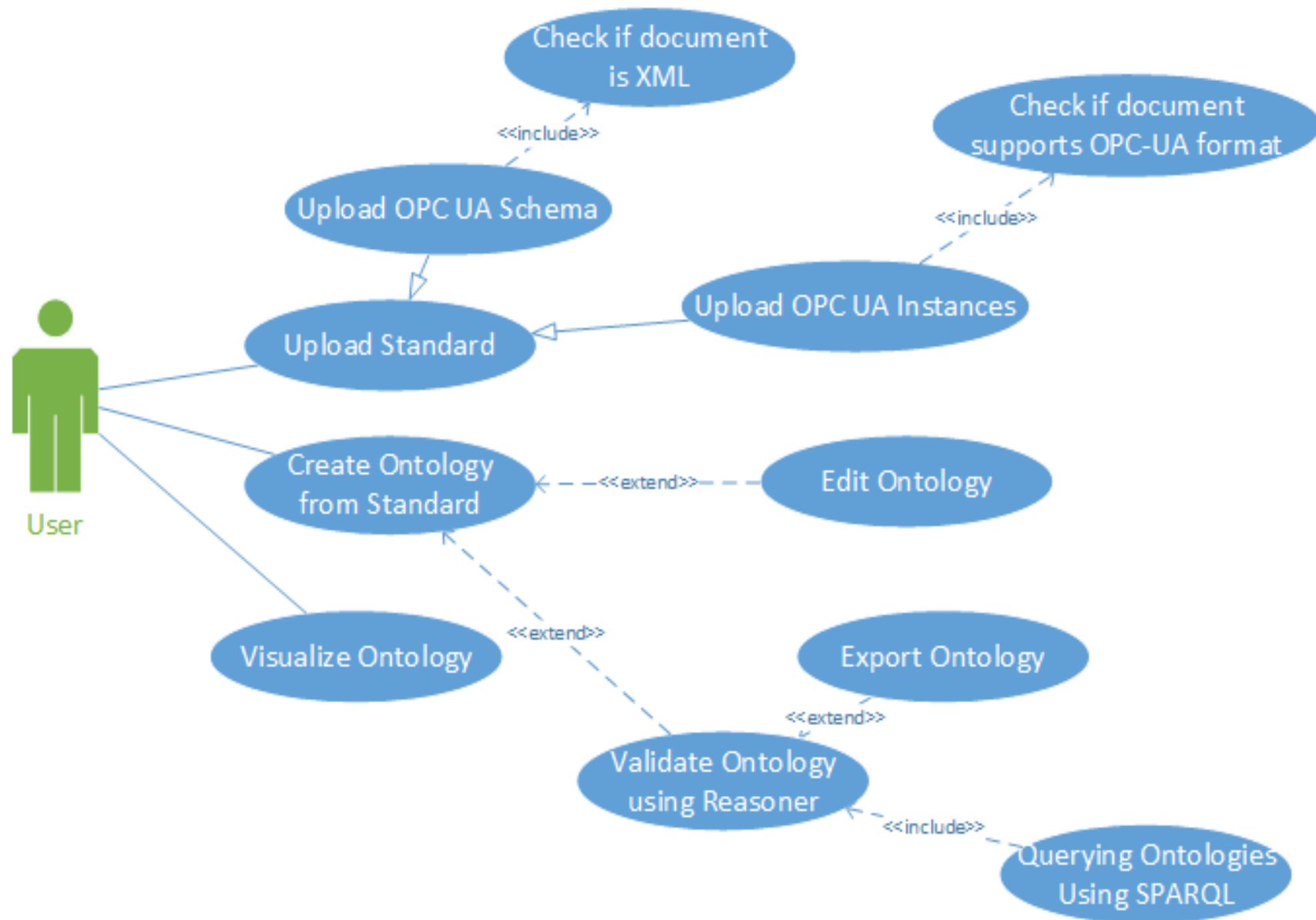


Functional requirements

- **Upload OPC UA files**
 - Schema and Instances
- **Validate XSD/XML files**
 - Be sure that XSD (**Schema** files) are a valid XML
 - XML **Instances** must comply with the Schema definition
- **Validate ontologies**
 - Using a reasoner
- **Create ontologies from standard**
 - Similar work: SKOS2OWL (**GenTax**)

Functional requirements (ii)

- **Visualize ontologies**
- **Edit ontologies**
- **Management and storage of ontologies**
- **SPARQL query support**



Non-functional requirements

- **Handle different format files:**
 - OWL (.owl, .owx, .rdf)
 - RDF/XML (.xml)
 - Turtle (.ttl)
- **Handle large files**
 - Visualize a reasonable number of nodes
- **Responsive interface**
 - Using Bootstrap

Questions?