

For the Hackathon project HC-04

Ontology Summit Website Development

(b) the underlying technology

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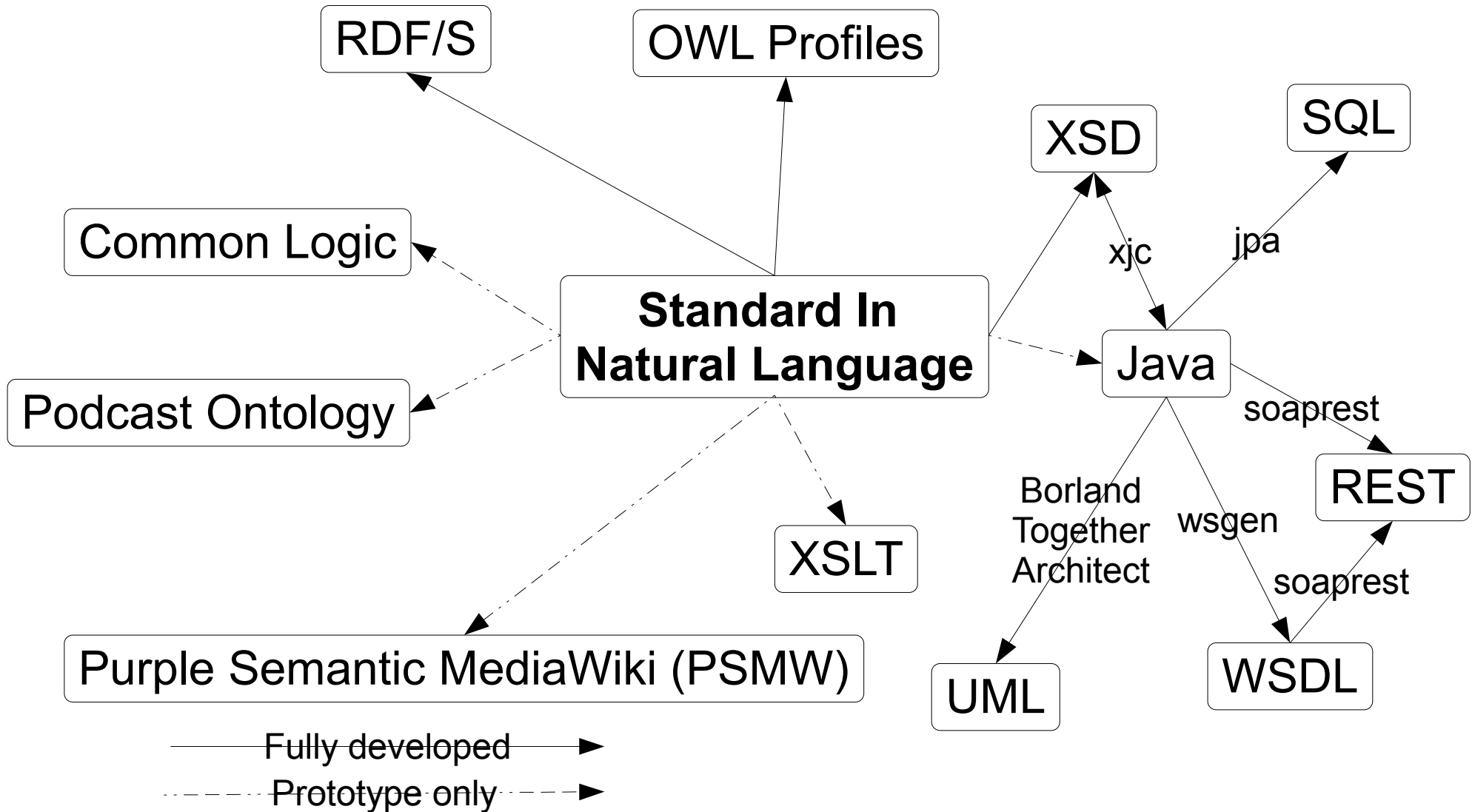
Adding Semantics to the Ontology Summit Website

- Ontology Summit Survey with underlying semantics using PSMW
- Ontology Summit Website based on an ontology for collaborative systems
- Migration of existing content from PurpleWiki to Purple Semantic MediaWiki (PSMW)

Purple Semantic MediaWiki (PSMW)

- MediaWiki is the technology of Wikipedia and related web sites.
- **Semantic Media Wiki** is a large (\$100M+) EU project based in Karlsruhe.
- The Halo project provided the **Halo extension**.
- Purple numbers provide fine-grained access via the **PMWX** project at Northeastern University.

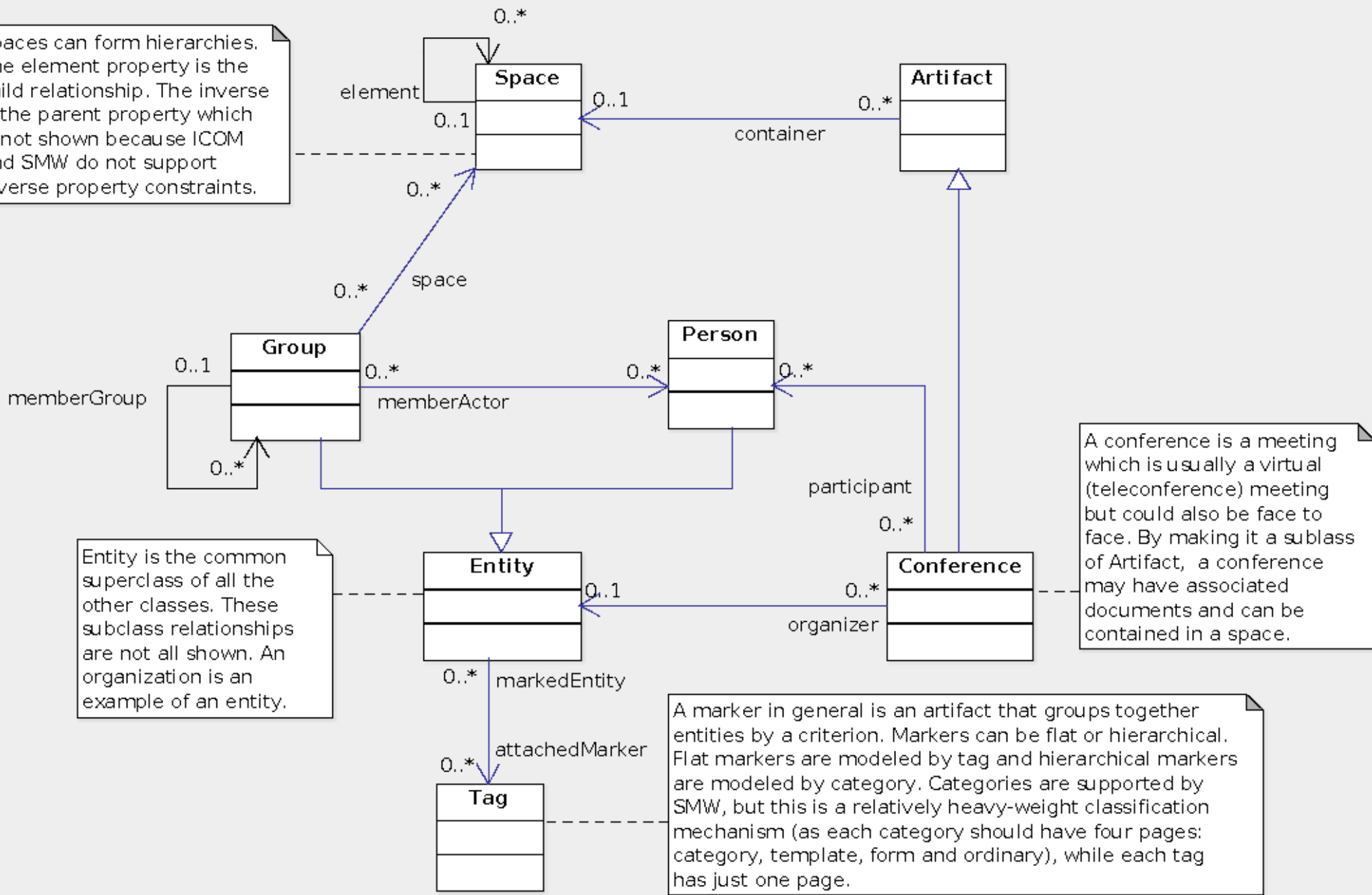
Ontology Mappings



Generated PSMW Pages

- Ontology is a subset of the ICOM ontology together with the `OntologySummit2013_Survey` class.
- For each class in the ontology:
 - Template (to specify the properties of the class)
 - Form (to create new instances of the class)
 - Category (SMW classification mechanism)
 - Ordinary page
- For each property in the ontology:
 - Property (for defining the type of the property)
- Translator uses web services to upload/update the generated pages.

Ontology Summit Website Ontology



Spaces can form hierarchies. The element property is the child relationship. The inverse is the parent property which is not shown because ICOM and SMW do not support inverse property constraints.

Entity is the common superclass of all the other classes. These subclass relationships are not all shown. An organization is an example of an entity.

A conference is a meeting which is usually a virtual (teleconference) meeting but could also be face to face. By making it a subclass of Artifact, a conference may have associated documents and can be contained in a space.

A marker in general is an artifact that groups together entities by a criterion. Markers can be flat or hierarchical. Flat markers are modeled by tag and hierarchical markers are modeled by category. Categories are supported by SMW, but this is a relatively heavy-weight classification mechanism (as each category should have four pages: category, template, form and ordinary), while each tag has just one page.