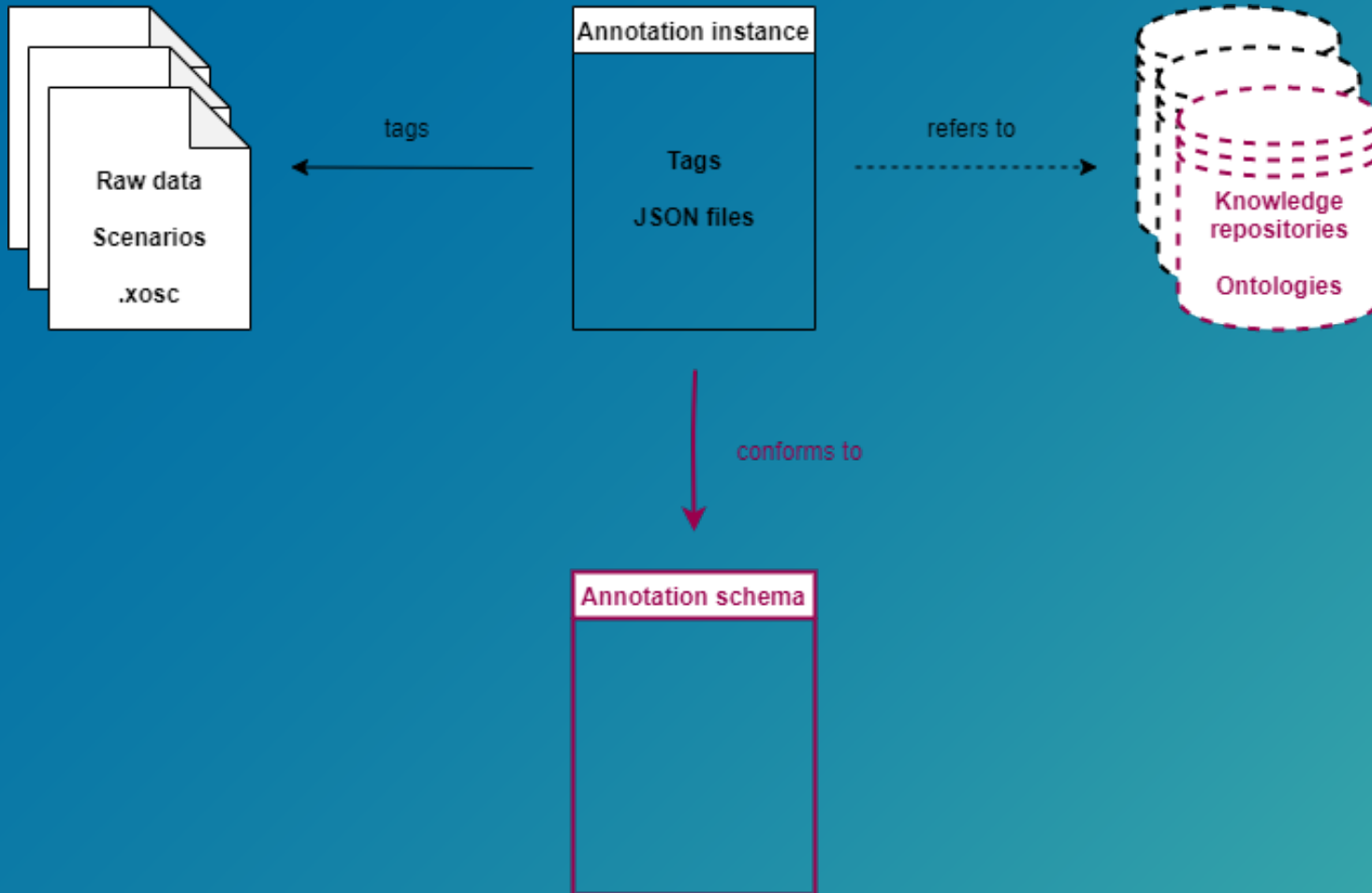


Intro To Scenario Tagging

OpenLABEL V1.0.0 Release Webinar

Intro to Scenario Tagging

OpenLABEL V1.0.0



Documentation:

- Presents the ontology providing the set of standardized ASAM OpenLABEL scenario tags.
- Explains the semantics and the logic governing the semantics of the ASAM OpenLABEL scenario tags.
- Documents the annotation schema to which valid ASAM OpenLABEL scenario tagging annotation instances should conform to.
- Explains the mechanisms that govern the reference to external knowledge repositories, such as ontologies, that organize and define the semantics of the labels.

OpenLABEL V1.0.0 Scenario Tagging

example.xosc

```
<?xml version="1.0" encoding="utf-8"?>
<OpenSCENARIO>
  <FileHeader revMajor="1"
    revMinor="0"
    date="2020-06-16T10:00:00"
    description="Example Scenario"
    author="John Doe">
  </fileHeader>
  </ManeuverGroup>
  <StartTrigger>
    <ConditionGroup>
      <Condition name="ExampleCondition"
        delay="0" conditionEdge="rising">
        <ByValueCondition>
          <SimulationTimeCondition value="0"
            rule="greaterThan" />
        </ByValueCondition>
        </Condition>
      </ConditionGroup>
    </StartTrigger>
  </Act>
  </Story>
  <Story name="CutInStory">
    <Act name="CutInAct">
      <ManeuverGroup maximumExecutionCount="1"
        name="CutInSequence">
      <Actors selectTriggeringEntities="false">
        <EntityRef entityRef="CutInVehicle" />
      </Actors>
    </Act>
  </Story>
</OpenSCENARIO>
```

tags

example.json

```
{
  "openlabel": {
    "metadata": {
      "schema_version": "1.0.0",
      "tagged_file": "../resources/scenarios/example.xosc"
    },
    "ontologies": {
      "0": {
        "uri": "https://openlabel.asam.net/V1-0-0/ontologies/openlabel_ontology_scenario_tags.ttl"
      }
    },
    "tags": {
      "0": {
        "type": "RoadTypeMinor",
        "ontology_uid": "0"
      },
      "1": {
        "type": "MotionCutIn",
        "ontology_uid": "0"
      },
      "2": {
        "type": "scenarioVersion",
        "ontology_uid": "0",
        "tag_data": {
          "text": [
            {
              "type": "value",
              "val": "1.0"
            }
          ]
        }
      }
    }
  }
}
```

refers to

openlabel_ontology_scenario_tags.ttl

```
@base <https://openlabel.asam.net/V1-0-0/ontologies/> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .

<RoadTypeMinor> a rdfs:Class ;
rdfs:subClassOf <DrivableAreaType> .

<MotionCutIn> a rdfs:Class ;
rdfs:subClassOf <BehaviourMotion> .

<scenarioVersion> a rdfs:Property ;
rdfs:label "Scenario version"@en ;
rdfs:domain <Scenario> ;
rdfs:range rdfs:Literal .
```

conforms to

openlabel_json_schema.json

```
{
  "openlabel": {
    "properties": {
      "metadata": {...},
      "ontologies": {...},
      "tags": {...}
    }
  }
}
```



Association for Standardization of
Automation and Measuring Systems

JSON Schema Scenario Tagging Structure

OpenLABEL V1.0.0

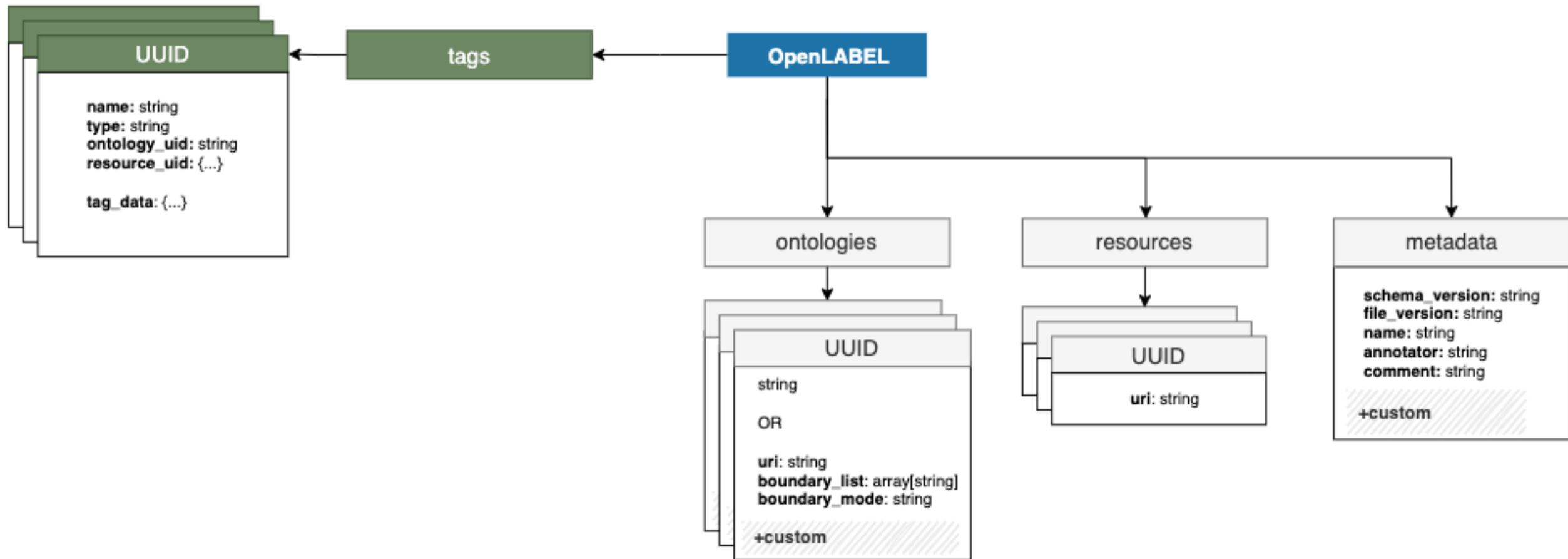


Figure 64. ASAM OpenLABEL labeling structure

Scenario Tagging Standardized Tags

Tags are delivered as a file expressed in RDF Turtle Syntax

ODD Tags

Operational Domain Design (ODD) tags: ODD tags describe the environmental conditions and road features present in a scenario, such as rainfall and junction. The ASAM OpenLABEL ODD tags are aligned with and share their definitions with the BSI PAS 1883 ODD Taxonomy,

Behaviour Tags

Behavior tags: Behavior tags describe the types of road users and the behaviors exhibited by them in a scenario, such as a pedestrian who is walking

Admin Tags

Administration tags: Administration tags describe things about a scenario which cannot or may not easily be derived from a scenario, such as the creation date of a scenario

Thank you for your attention!

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