W3C Community Group
Knowledge Graph Construction

http://w3id.org/kg-construct
W3C Community Group - Knowledge Graph Construction

162 participants (~25 active)

Bi-weekly meetings

http://w3id.org/kg-construct
http://github.com/kg-construct
Towards the RML standardization

- Five on-going specs:
  - RML-Core: Schema transformations
  - RML-IO: Source and target
  - RML-CC: Collection and containers
  - RML-FNML: Data transformation functions
  - RML-star: RDF-star

- Modular approach

- Unification of prefixes ~> w3id.org/rml/
RML-Core: Schema transformations

http://github.com/kg-construct/rml-core
http://w3id.org/rml/core/spec
RML-IO: Source and target

http://github.com/kg-construct/rml-io
http://w3id.org/rml/io/spec
RML-CC: Collections and containers

http://w3id.org/rml/cc/spec
http://github.com/kg-construct/rml-cc
RML-FNML: Functions

http://w3id.org/rml/fnml/spec
http://github.com/kg-construct/rml-fnml
RML-star
# Feature comparison

<table>
<thead>
<tr>
<th></th>
<th>R2RML</th>
<th>Previous RML</th>
<th>New RML</th>
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</thead>
<tbody>
<tr>
<td>Schema transformations</td>
<td>Schema transformations</td>
<td>Extended schema transformation</td>
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<tr>
<td>RDBs</td>
<td>Heterogeneous input data formats</td>
<td>Heterogeneous input data formats and target output</td>
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<td>Link to FnO</td>
<td>Module for functions</td>
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<td>Collections and containers</td>
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<td>RDF-star generation</td>
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</tbody>
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Complete set of resources per module

- Specifications
- OWL ontologies
- SHACL shapes for mapping validation
- Test cases
- Backwards compatibility

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<table>
<thead>
<tr>
<th>Ontology</th>
<th>Serialization</th>
<th>License</th>
<th>Language</th>
<th>Links</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RML-Core</td>
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<td>Core ontology that defines the necessary resources to create a mapping.</td>
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<tr>
<td>RML-ID: Source and Target</td>
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<td>Ontology module that allows the description of input data sources and target outputs.</td>
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<tr>
<td>RML-CC: Collections and Containers</td>
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<td>Ontology module that allows the generation of collections and containers.</td>
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<td>RML-FNML: Functions</td>
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<td>Ontology module that allows the application of data transformation functions.</td>
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<td>RML-Star</td>
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<td>Ontology module that allows the construction of RDF-star graphs.</td>
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</tbody>
</table>

http://w3id.org/rml/portal
…but we are not done!

Continuously looking for:

- Feedback on current work
- Opinions about current open issues
- Uncovered use cases
- And more importantly → Engines to implement the new specs!

Join us!

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