Extending R2RML to a source-independent mapping language for RDF

RML broadens R2RML

**Global - As - View (GAV)** generic approach

**Focus on the mappings** independently of the source structure

**Source-agnostic** & standard mapping procedure to deploy raw data in RDF

**Contingent data integration** & interlinking at primary stage

**Limited initial learning costs**

Custom-defined mappings' definition reuse

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**Extensions**

- **Extending resources' mapping**
  - relational databases → structured data
- **Extending RDF triples mapping**
  - row mapping → resources mapping
- **Multiple entities per resource**
- **Extending the logical resources**
  - column-valued term map → resource-valued term map
- **Integrated mapping**

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**Airport.csv**

id, city, stop, latitude, longitude
6523, Brussels, 645, 50.901389, 4.484444
mapped by

```
<#AirportMapping>, <#TransportMapping>, <#LocationMapping>
```

**Transport.xml**

```xml
<transport>
  <bus id="25">
    <route>
      <stop id="645">
        International Airport
      </stop>
      <stop id="651">
        Conference center
      </stop>
    </route>
  </bus>
</transport>
```

mapped by

```
<#TransportMapping>
```

**Venue.json**

```json
{
  "venue": {
    "latitude": "51.0500000",
    "longitude": "3.7166700"
  },
  "location": {
    "continent": "EU",
    "country": "BE",
    "city": "Brussels"
  }
}
```

mapped by

```
<#VenueMapping>, <#LocationMapping>
```

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http://mmlab.be/users/andimou/rml.ttl
http://semweb.mmlab.be