

Thoughts about RDF/LPG alignment

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RDF vs. LPG? No: RDF **and** LPG!

RDF-star WG is an effort to make it easier to do “statements about statements” in RDF

- this could be like “edge properties”, only more expressive...
- different views in the WG

Amazon OneGraph is an effort to have just “one graph” that can be seen as either RDF or LPG

- provides query language interoperability over different graph models
- now available: **openCypher over RDF** as a feature of Neptune Analytics

Nothing about schemas, however...

My work on adapting **PG-Schema for RDF** was an illuminating exercise

- translating PG-Schema to RDFS and SHACL
- SHACL cannot express everything PG-Schema can
- <https://www.lassila.org/publications/2024/lassila-kgc-2024-schemas-final.pdf>

RDF has no vocabulary for using edge properties in schemas

- RDF-star still needs to address this

In RDF we tend to "elevate" edges to be nodes if necessary

- generalized reification, not necessarily using the RDF standard reification

More schema considerations

Expressive power?

- RDF Schema has **no negation**, no restrictive constraints
- OWA vs. CWA

Composite datatypes

- CDTs are a bit awkward in RDF (for a reason)
- we (Neptune) have a proposal for how to use **RDF typed literals to do CDTs**

Questions?

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