

Kolloquium Angewandte Informatik

SPARQL1.1 Updates and Entailment - Why the specification is silent about their interaction

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Abstract:

Updates in RDF stores have recently been standardised in the SPARQL 1.1 Update specification. However, computing answers entailed by ontologies in triple stores is usually treated orthogonal to updates. Even the W3C's recent SPARQL 1.1 Update language and SPARQL 1.1 Entailment Regimes specifications explicitly exclude a standard behaviour how SPARQL endpoints should treat entailment regimes other than simple entailment in the context of updates. In this talk, we outline different routes to close this gap. Restricting ourselves mostly to a relatively simple entailment regime (RDF Schema), we discuss possible semantics along with potential strategies for implementing them. We treat both, (i) materialised RDF stores, which store all entailed triples explicitly, and (ii) reduced RDF Stores, that is, redundancy-free RDF stores that do not store any assertional RDF triples (corresponding to DL-Lite ABox statements) entailed by others already. As it turns out, a one-size-fits-all semantics does not exist... We note and will discuss that the problem of updates under entailment regimes is closely related to Updates in Ontology-based-Data-Access (OBDA), where - as a survey of related literature shows - also no standard solution exist either.

Termin: Donnerstag, 26. Februar 2015, 10:00 Uhr

Ort: Englerstraße 11, 76131 Karlsruhe
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(Hinweise für Besucher: www.aifb.kit.edu/web/Kontakt)

Veranstalter: Institut AIFB, Forschungsgruppe Wissensmanagement

Zu diesem Vortrag lädt das Institut für Angewandte Informatik und Formale Beschreibungsverfahren alle Interessierten herzlich ein.

Andreas Oberweis, Hartmut Schreck, Detlef Seese, Wolffried Stucky, Rudi Studer (Org.)