Title

Benchmarking Geospatial RDF Stores

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Abstract

The Web of data has recently started being populated with geospatial data. A representative example of this trend is the work of Ordnance Survey which makes various official geospatial datasets from the United Kingdom available as linked data. The availability of linked geospatial data has motivated research on geospatial extensions of SPARQL (e.g., stSPARQL and GeoSPARQL) and geospatial RDF stores (e.g., Strabon, Parliament etc.). In this talk we present a functional and performance benchmark which is used to compare the functionality and performance of most of the geospatial RDF stores that are available today. Although there have been various well-known benchmarks for SPARQL query processing, there is currently only a single proposal for benchmarking geospatial RDF stores. We hope that our ideas will motivate others to work on this interesting problem as well.

The work presented is being carried out in the context of European FP7 project TELEIOS which addresses the need for scalable access to petabytes of Earth Observation data and the effective discovery of knowledge hidden in them. TELEIOS has made significant progress in the development of state-of-the-art techniques in Scientific Databases, Linked Geospatial Data and Image Mining and has applied them to the management of Earth Observation data.

This is joint work with my students George Garbis and Kostis Kyzirakos.