Provenance Aware Faceted Search

Peter Fox, Stephan Zednik, Deborah McGuinness, Patrick West, and Zhenning Shangguan

Rensselaer Polytechnic Institute, World Tetherless Constellation, Troy, United States (pfox@cs.rpi.edu, +15182764464)

Scientific information systems are expanding in many ways including providing access to more diverse information from potentially many sources. As informatics systems become more pervasive and simultaneously more diverse, the need for more sophisticated search capabilities grows. We
introduce some search requirements that arise from our work on multiple interdisciplinary virtual observatory and scientific data workflow settings. We have gathered requirements for faceted search and have implemented faceted search in these science settings using a few different technical infrastructures.
We will present use cases where search that is informed by provenance information is critical. We will describe some initial implementations and also highlight some more advance provenance-aware search features including customizable facets, facet negation, facets as views, and semantic filtering.