Title: Access Control Enforcement for Selective Disclosure of Linked Data

Speaker: Romuald Thion, LIRIS/UCBL

The Semantic Web technologies enable Web-scaled data linking between large RDF repositories. However, it happens that organizations cannot publish their whole datasets but only some subsets of them, due to ethical, legal or confidentiality considerations. Different user profiles may have access to different authorized subsets. In this case, selective disclosure appears as a promising incentive for linked data. In this paper, we show that modular, fine-grained and efficient selective disclosure can be achieved on top of existing RDF stores. We use a data-annotation approach to enforce access control policies. Our results are grounded on previously established formal results proposed in a previous entitled Inference Leakage Detection for Authorization Policies over RDF Data (https://hal.archives-ouvertes.fr/hal-01183118).We present an implementation of our ideas and we show that our solution for selective disclosure scales, is independent of the user query language, and incurs reasonable overhead at runtime.