6 July 2017 Article · Web & Cloud

LOD and LOV for Authorization Concepts

Archived. This content is no longer updated. It remains available for reference.

Source https://technology2.a-sit.at/en/publications/lod-and-lov-for-authorization-concepts/

Vocabularies to represent security relevant concepts.

Linked Open Data (LOD) and Linked Open Vocabularies (LOV) deal with the definition of reusable concepts, models, and architectures that facilitate the integration of data and services on a web scale. With the ever-growing heterogeneity of available standards and implementation approaches, such integration faces various barriers that make this process costly and less effective in practice. Open and reusable vocabularies aim to lower these barriers by providing the foundations for conceptual annotations that allow the abstraction and bridging of concepts among different entities and domains in a reusable, scalable and machine-readable manner. LOV, as one of the initiatives supporting the underlying paradigm, has emerged from the DataLift project and is supported by the Open Knowledge Foundation. LOV today represents the largest dataset that systematically gathers, analyzes and presents data about semantic vocabularies from different domains.

In this project, we examine the current state of vocabularies that support the annotation and integration of security-related concepts on the web. Based on our initial analysis, we establish a range of contributions that provide the underlying technical base for cross-domain application and exchange of data related to security processes. Our primary goal is to support authorization functionality, which allows the efficient permission management across different domains. We have structured and submitted our contribution to the LOV portal for further indexing and expert scrutiny.