

SPECIAL: Scalable Policy-aware Linked Data arChitecture for prIvacy, trAnsparency and complIance

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SPECIAL builds on top of the Big Data Europe⁵ and PrimeLife⁶ projects, exploits their results, and further advances the state of the art of privacy enhancing technologies. Against this background, the vision of SPECIAL translates into the following, concrete activities and goals:

- A policy management framework, which ensures that data subjects can associate access and usage policies with their personal data and to support the derivation of policies for processed data. At the centre of this objective is the need for a policy language that is able to represent not only access/usage policies in machine readable format, but also legal rules, business rules, provenance data, and contextual information.
- A transparency and compliance framework, which generates an immutable record of events that are linked to data and associated policies. Encryption, hashing and digital signatures are required in order to ensure both the integrity and non-repudiation of policies and events.
- Both the policy management and the transparency and compliance frameworks are realised in the form of a scalable architecture. The proposed scalable policy-aware Linked Data architecture is evaluated under real-world conditions not only in terms of functionality, but also placing a strong emphasis on nonfunctional requirements, such as performance, scalability and security.

In the context of the PUT workshop, SPECIAL is particularly interested in sharing our policy language⁷, log vocabulary⁸, SPECIAL-K reference architecture⁹, and our platform demonstrator¹⁰ with the community.

⁵ <https://www.big-data-europe.eu/>

⁶ <http://primelife.ercim.eu/>

⁷ <http://purl.org/specialprivacy/policylanguage>

⁸ <http://purl.org/specialprivacy/splog>

⁹ <https://www.specialprivacy.eu/platform/special-k-reference-architecture>

¹⁰ <https://www.specialprivacy.eu/platform/link-to-the-latest-release>