Scalable Policy-aware Linked Data Architecture for privacy, transparency and compliance

H2020-ICT-2016-1 Big Data PPP: privacy-preserving Big Data technologies (ICT-18-2016) call
Technological problem - General Data Protection Regulation supporting consent and transparency

- Draft of the regulation: 7/22/2012
- Revisions in the draft: 3/12/2013
- Discussions in the EU Council: 5/19/2014
- EU Council finalises the chapters: 8/6/2015
- Trilogue starts: 6/24/2015
- Trilogue agrees: 12/17/2015
- Comes into force: 5/15/2018
Companies whose business models rely on personal data

Data subjects who would like to declare, monitor and optionally revoke their (often not explicit) preferences on data sharing

Regulators who can leverage technical means to check compliance with the GDPR
Technological problem - General Data Protection Regulation supporting consent and transparency
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- Policy management framework
  - Gives users control of their personal data
  - Represents access/usage policies and legislative requirements in a machine readable format

- Transparency and compliance framework
  - Provides information on how data is processed and with whom it is shared
  - Allows data subjects to take corrective action

- Scalable policy-aware Linked Data architecture
  - Build on top of the Big Data Europe (BDE) platform scalability and elasticity mechanisms
  - Extended BDE with robust policy, transparency and compliance protocols
- **Big Data Europe** scalability and elasticity
- **PrimeLife** policy languages, access control policies, release policies and data handling policies
Blockchain Opportunities & Challenges

- Link events
- Interoperability
- Immutability

- Authentication & Access Control
- Protection of trade secrets
- Non-repudiation

- Logging incorrect data
- Not logging the data at all
- Rectification and erasure
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