A SPECIAL vision for enabling privacy through Linked Data

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W3C Workshop on Privacy and Linked Data
17/04/2018
SPECIAL Overview

Aims
SPECIAL Overview
Objectives

• 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
The SPECIAL Policy Language
Starting Points

- Collected data
- Purpose of data collection and processing
- How is data processed
- Where are collected data and profiles stored
- For how long are the data stored
- Disclosure to third parties

Transparency & Compliance

Who ▶ When

Why ▶ What

How ▶ Where

Starting Points
The SPECIAL Policy Language
Existing Vocabularies

• **FOAF, vCard** and **schema.org** offer vocabularies for modeling static personal data to describe persons, agents

• **DICOM** for healthcare metadata has dynamic attributes relevant to fitness and health, such as heart rate

• **NeoGeo** vocabulary, the **GeoSPARQL** vocabulary or the **WGS84 Geo Positioning** vocabulary can be used for location data

• **P3P** working group published an RDF vocabulary for expressing the concepts of **P3P** including a categorization of personal data and purposes

• **ODRL** provides means to model actions, prohibitions, and obligation to describe policies and consent

• **OWL Time** provides means to describe the time and duration of processing, duration of consent, logging events

• **PROV** provides an excellent starting point for modeling the provenance of consent and data processing actions
The SPECIAL Policy Language

More Details

The SPECIAL Usage Policy Language

version 0.1

Unofficial Draft 06 April 2018

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Abstract

This document specifies usage policy language of SPECIAL. The usage policy language is meant to express both the data subjects' consent and the data usage policies of data controllers in formal terms, understandable by a computer, so as to automatically verify that the usage of personal data complies with data subjects' consent.

The ontology defined in this document is publicly available at http://www.specialprivacy.eu/tngs/usage-policies.

Project deliverables

Deliverable 6.1 - SPECIAL website set up (M3)

Deliverable 6.1

This document provides an overview of the initial SPECIAL project website as it stands at Project Month 3.

Deliverable 1.2 - Legal requirements for a privacy enhancing Big Data V1 (M6)

Deliverable 1.2

This is the report providing details of all legal and ethical considerations, as a main input for the SPECIAL privacyaware platform.

Deliverable 3.1 - Initial setup of policy aware Linked Data architecture and engine (M6)