The SPECIAL Policy Log Vocabulary

A vocabulary for privacy-aware logs, transparency and compliance

Javier D. Fernández, Piero Bonatti, Wouter Dullaert, Sabrina Kirrane, Uros Milosevic, Axel Polleres

W3C Workshop on Privacy and Linked Data 18/04/2018

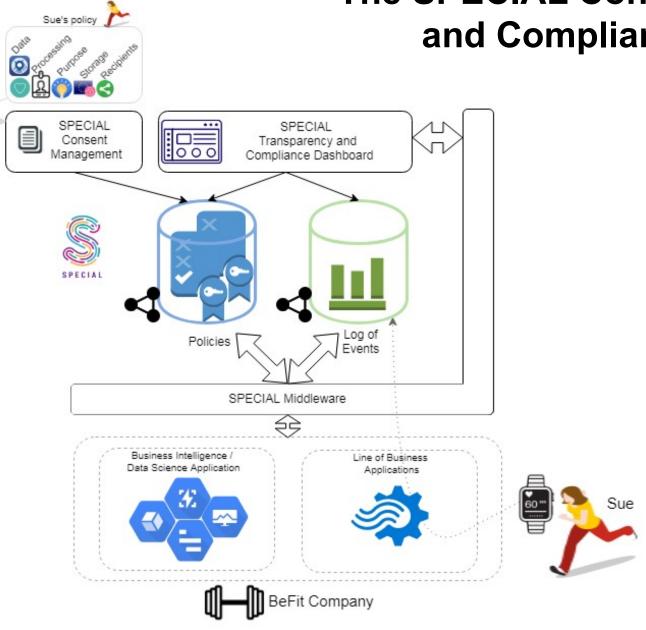




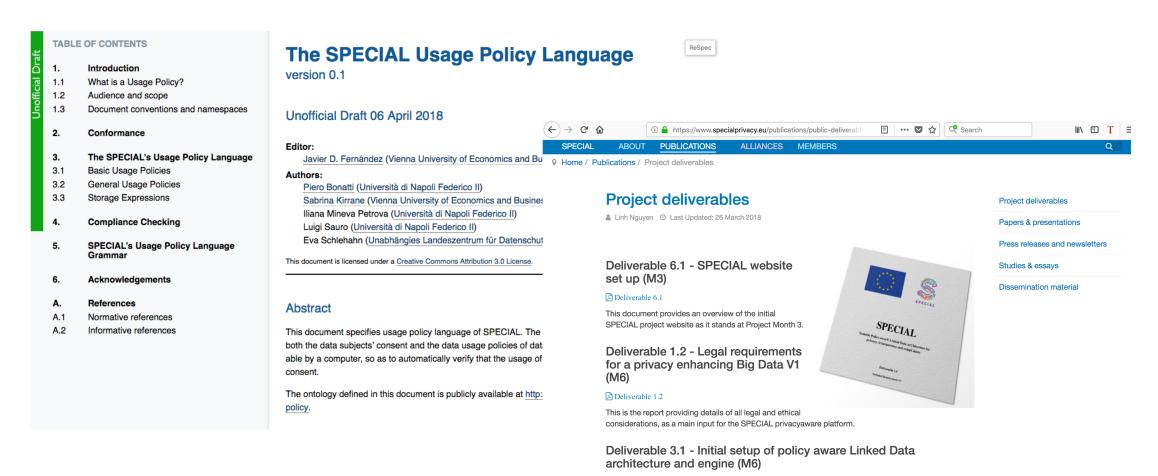


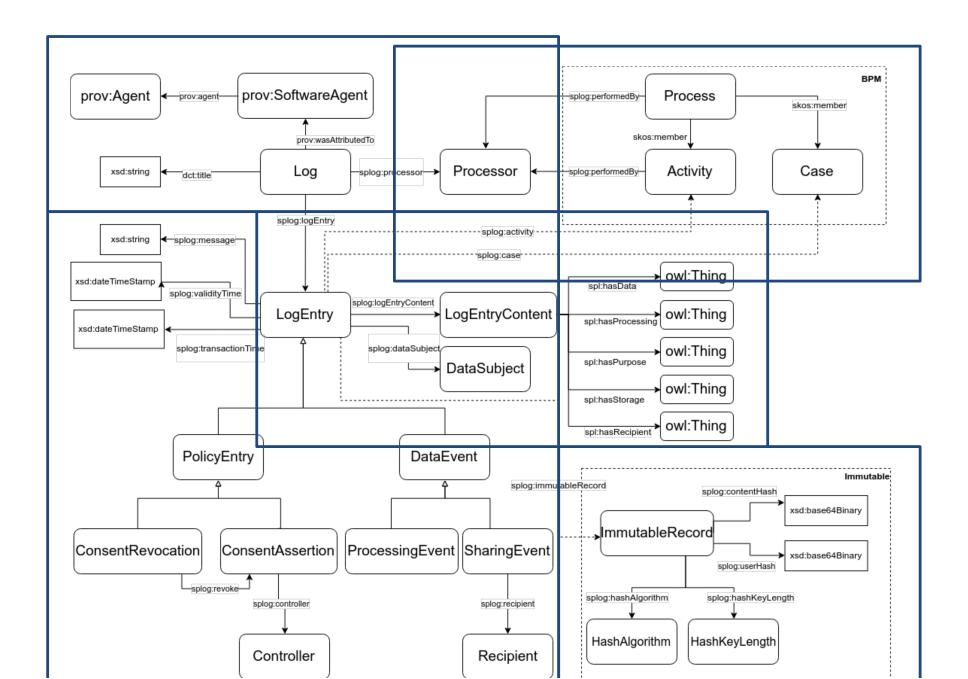


The SPECIAL Consent, Transparency and Compliance framework



- Record data processing and sharing events
- We have developed a vocabulary for the logs (SPLOG)
 - http://purl.org/specialprivacy/splog





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```
befit:BeFitLog a splog:Log;
dct:title "Log of BeFitDatabaseEurope"@en;
dct:description "This contains events on BeFitDatabaseEurope
tracking devices geo-located in Europe"@en;
dct:issued "2018-02-14"^^xsd:date;
prov:wasAttributedTo befit:BeFitDatabaseEurope;
splog:processor befit:Us.
```

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befit:BeFitLog splog:logEntry befit:entry3918.

```
befit:entry3918 a splog:ProcessingEvent;
                        "Collection of new device position"@en;
  dct:title
                        befit:Sue;
  splog:dataSubject
  dct:description
                        "We collected a new position of your BeFit
              device in our database in Europe"@en;
  splog:transactionTime
                            "2018-01-10T13:20:50Z"^^xsd:dateTimeStamp;
  splog:validityTime
                        "2018-01-10T13:20:00Z"^^xsd:dateTimeStamp;
  splog:message
                        "Tracking position by GPS... collected!";
  splog:eventContent
                        befit:content3918;
```

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```
befit:content3918 a splog:LogEntryContent;
dct:description "Location data are collected by a BeFit device
only for the health purpose of the service"@en;
spl:hasData svd:Location;
spl:hasProcessing befit:SensorGathering;
spl:hasPurpose befit:HealthTracking;
spl:hasStorage [has:location svl:OurServers];
spl:hasRecipient [a svr:Ours].
```

befit:SensorGathering rdfs:subClassOf svpr:Collect . befit:HealthTracking rdfs:subClassOf svpu:Health .

- Record data processing and sharing events
- We have developed a vocabulary for the logs (SPLOG)
 - http://purl.org/specialprivacy/splog
- We have a running prototype (ESWC 2018)



Discussion

- lack of specific and standard vocabularies for representing privacy-related events
- It should be possible to describe the event content at different granularities
 - from a simple taxonomy (stating the type of data, processing, etc.), to the most fine-grained description of the actual data associated to the event;
- Interoperability/standard APIs
 - different systems within a company and/or different companies
 - Use case example: cyber-physical social systems





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