

Compliance with metadata

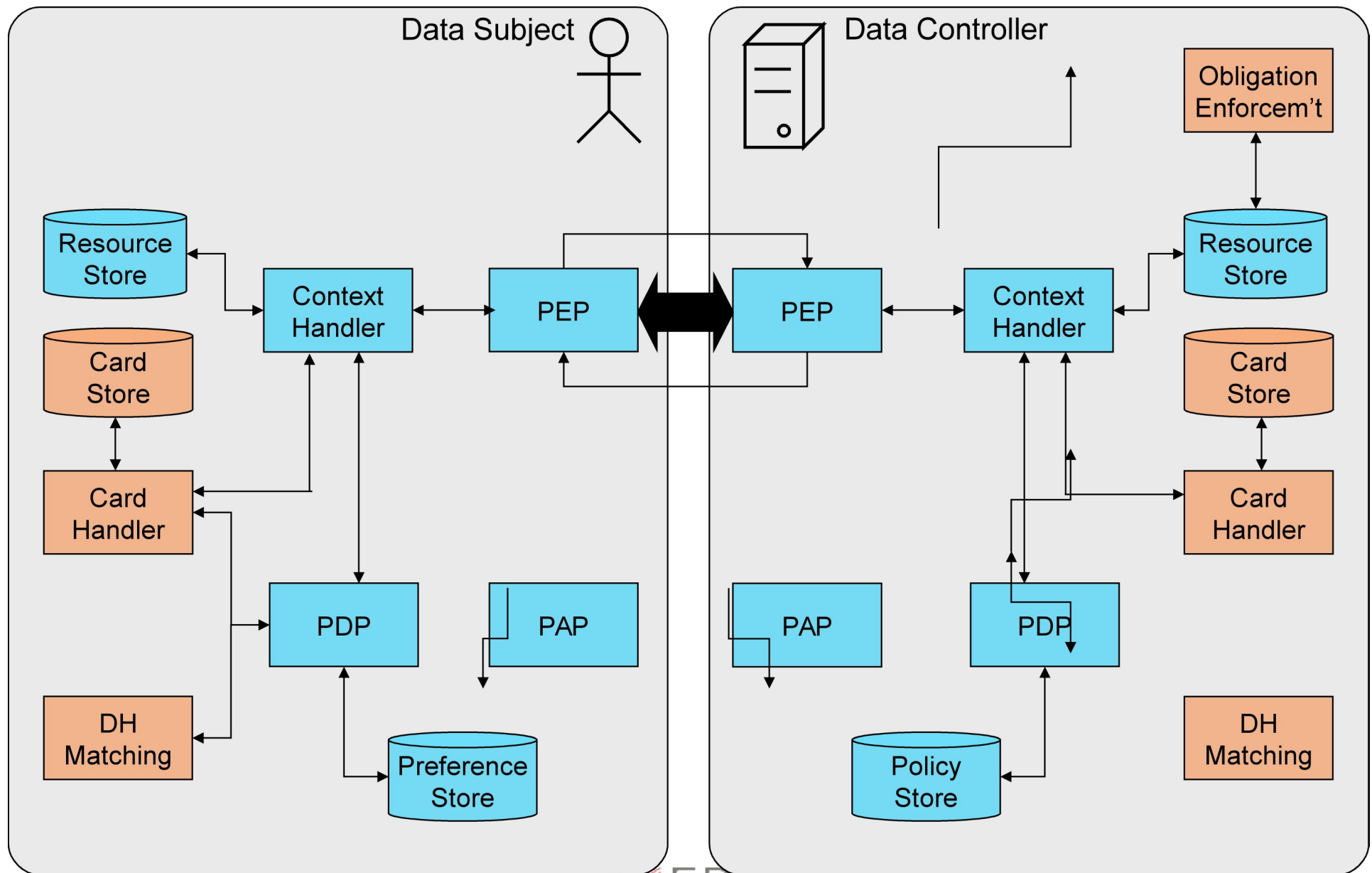
IRIS 2017 Salzburg
by
Rigo Wenning
ERCIM/W3C Legal
counsel



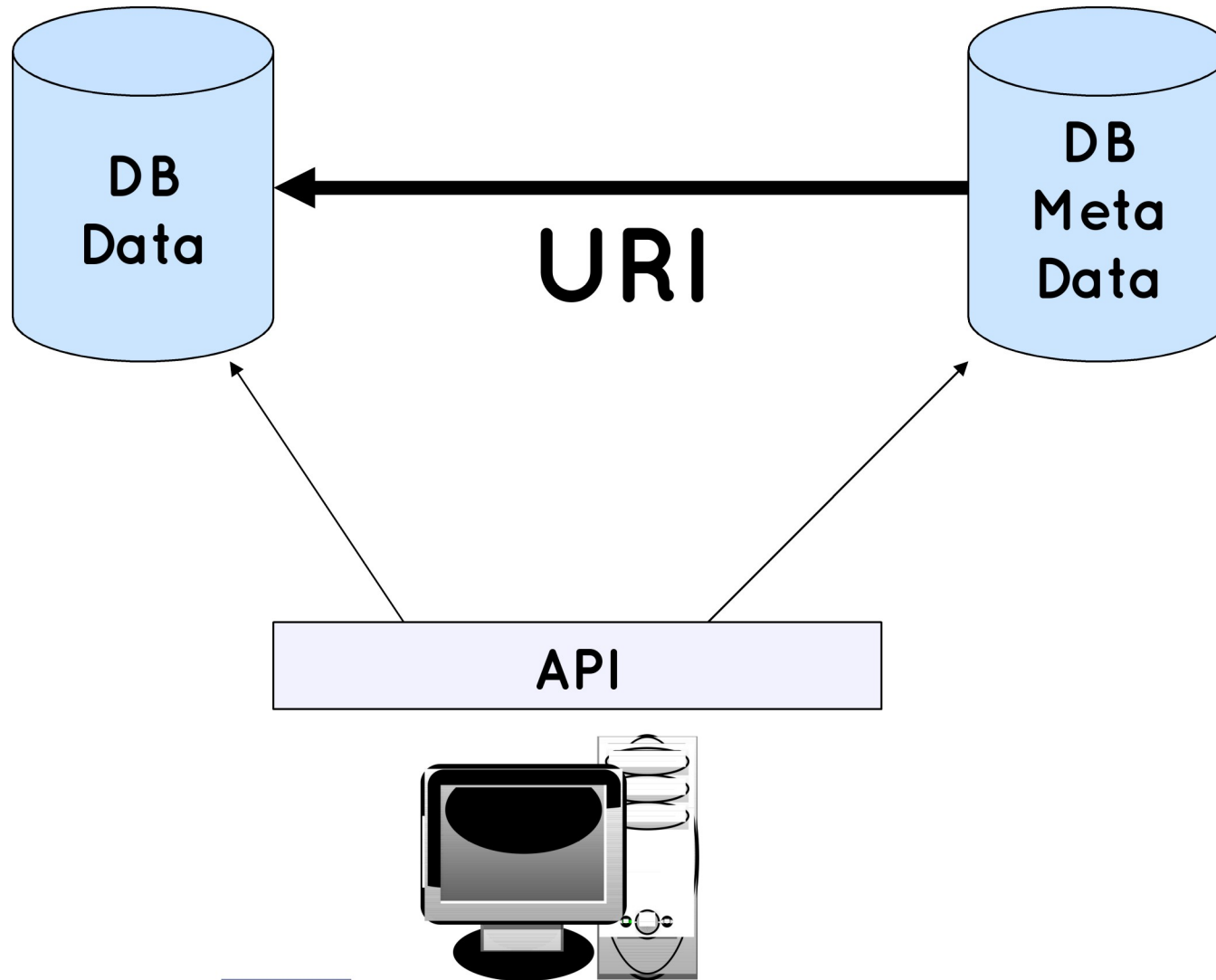
Corporate compliance

- Policy on reporting & Notification
- Data access policies & global data handling
- Rights management
- Client relation management
- Global skills management
- Provenance
- Data quality

Expected complexity



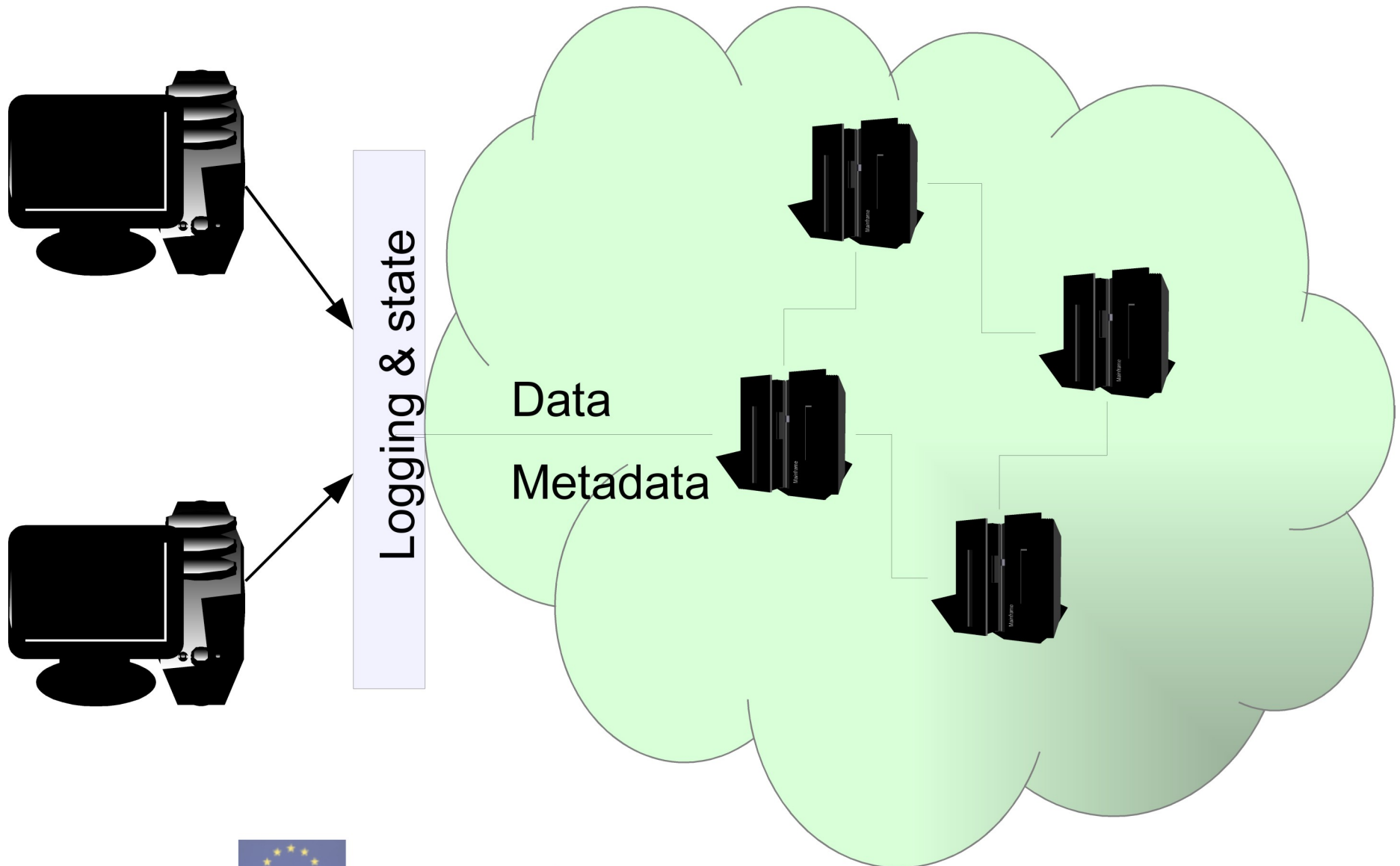
Actual complexity



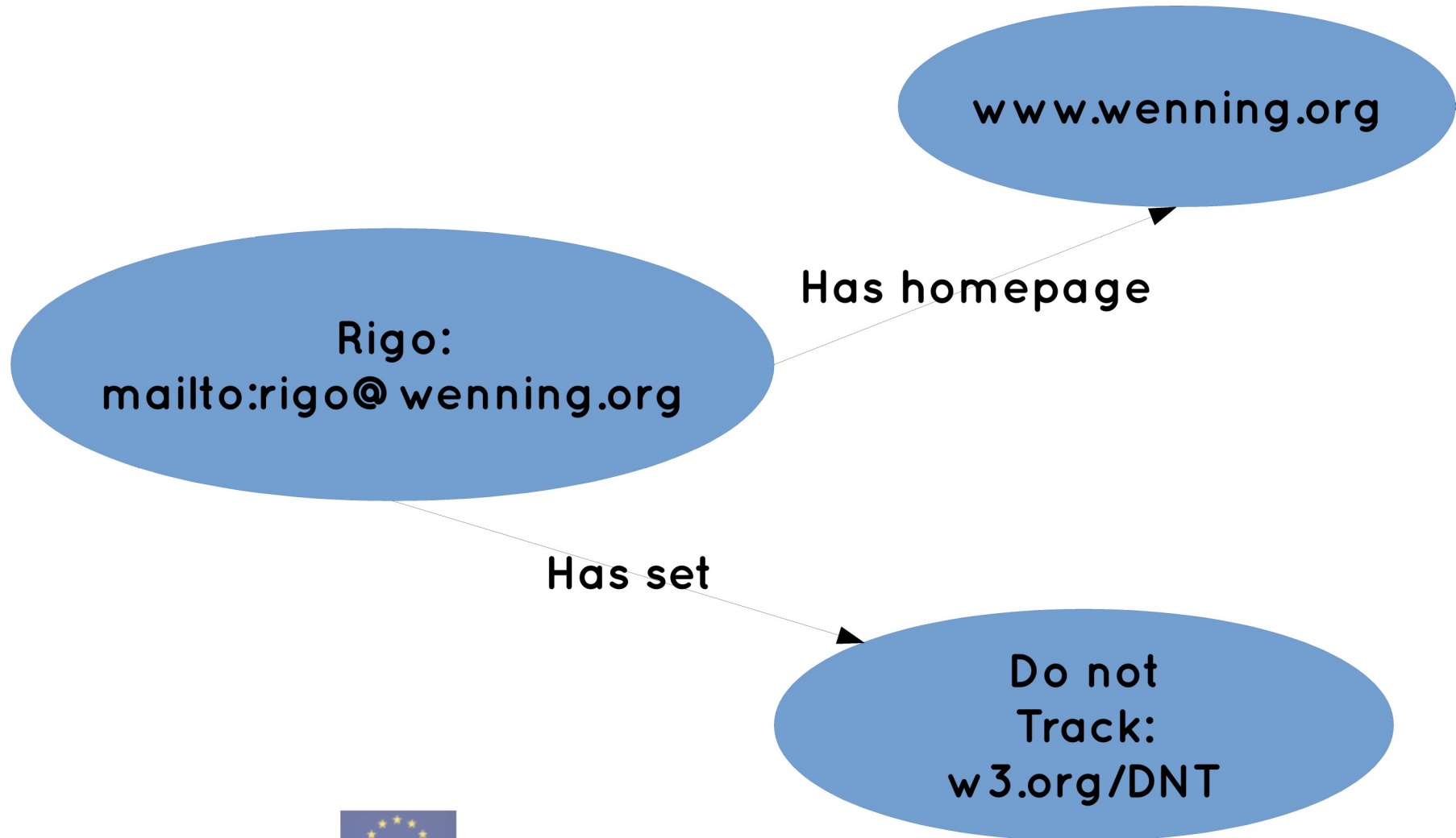
How?



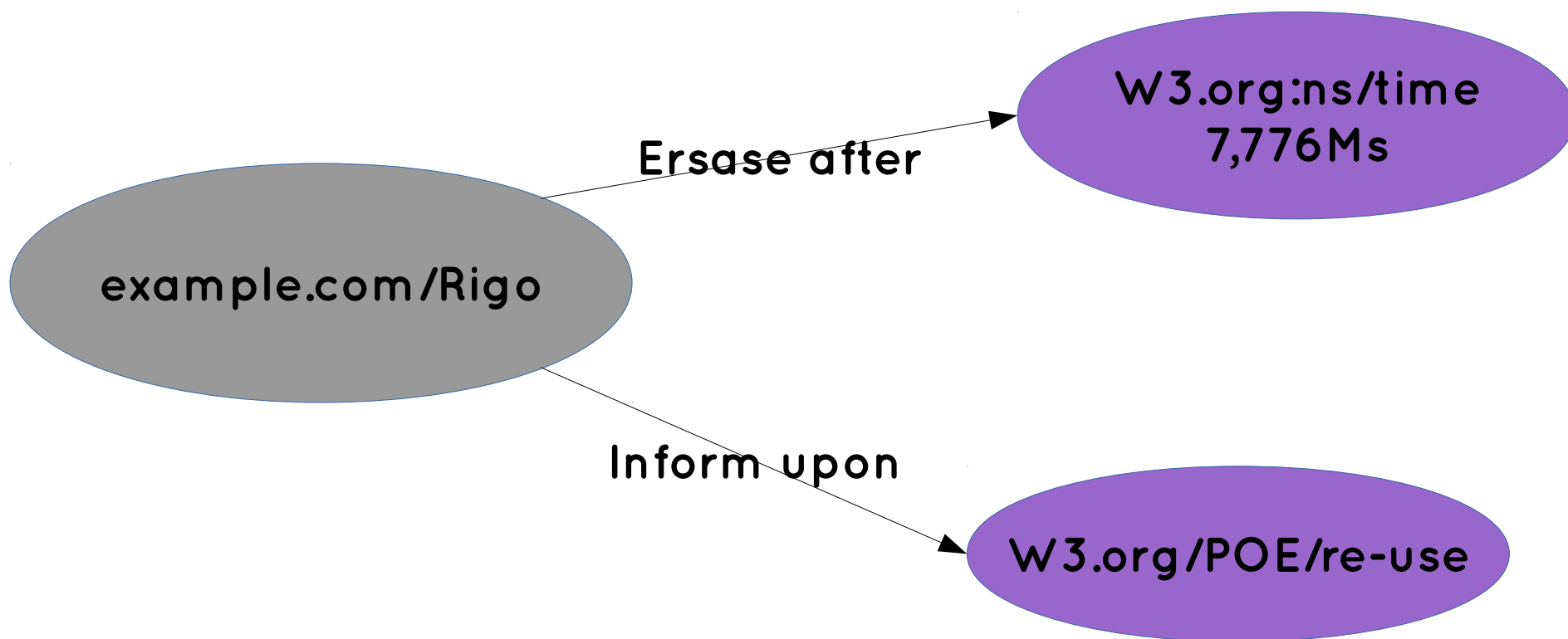
Data collection points



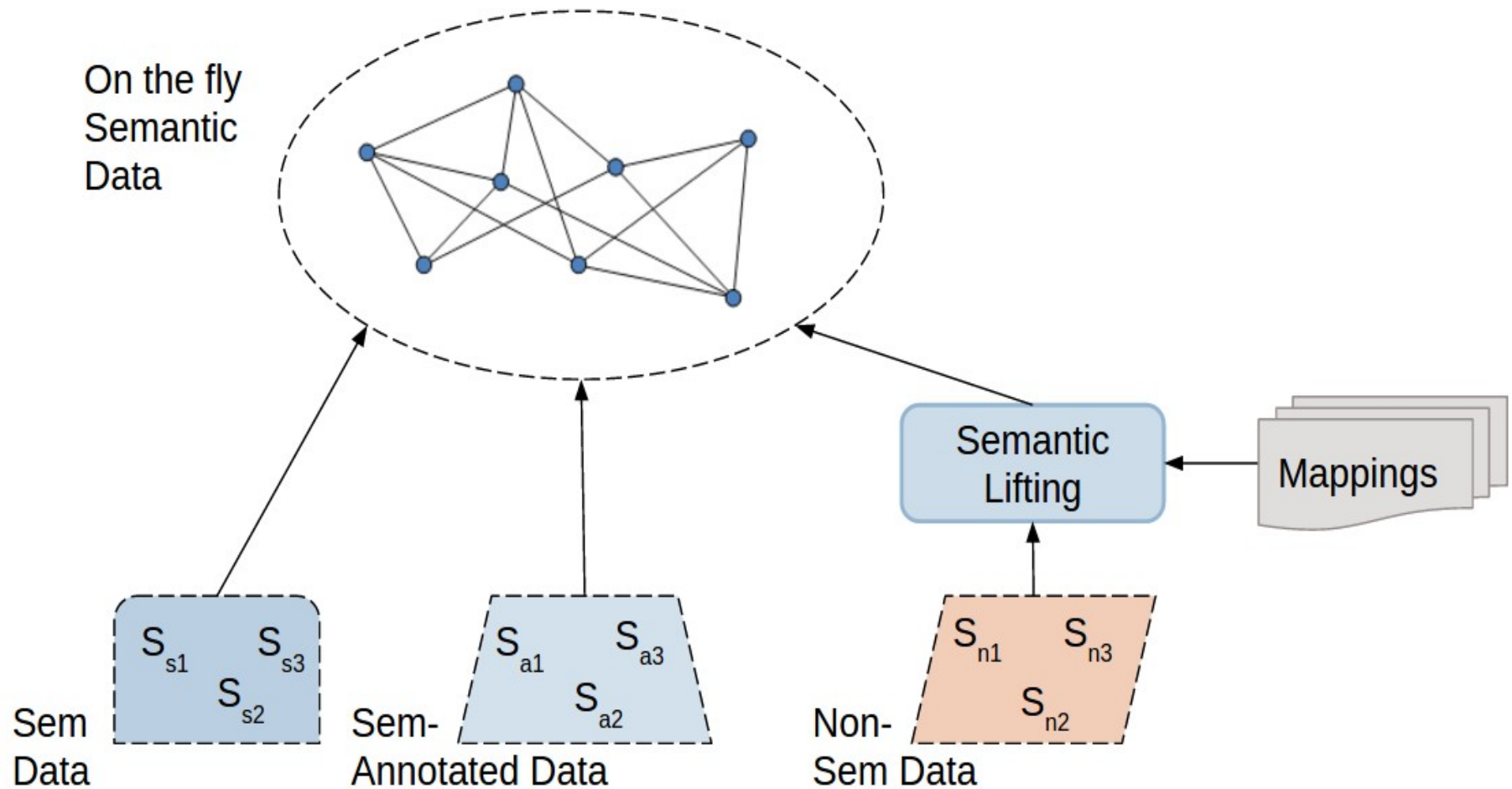
Linked data



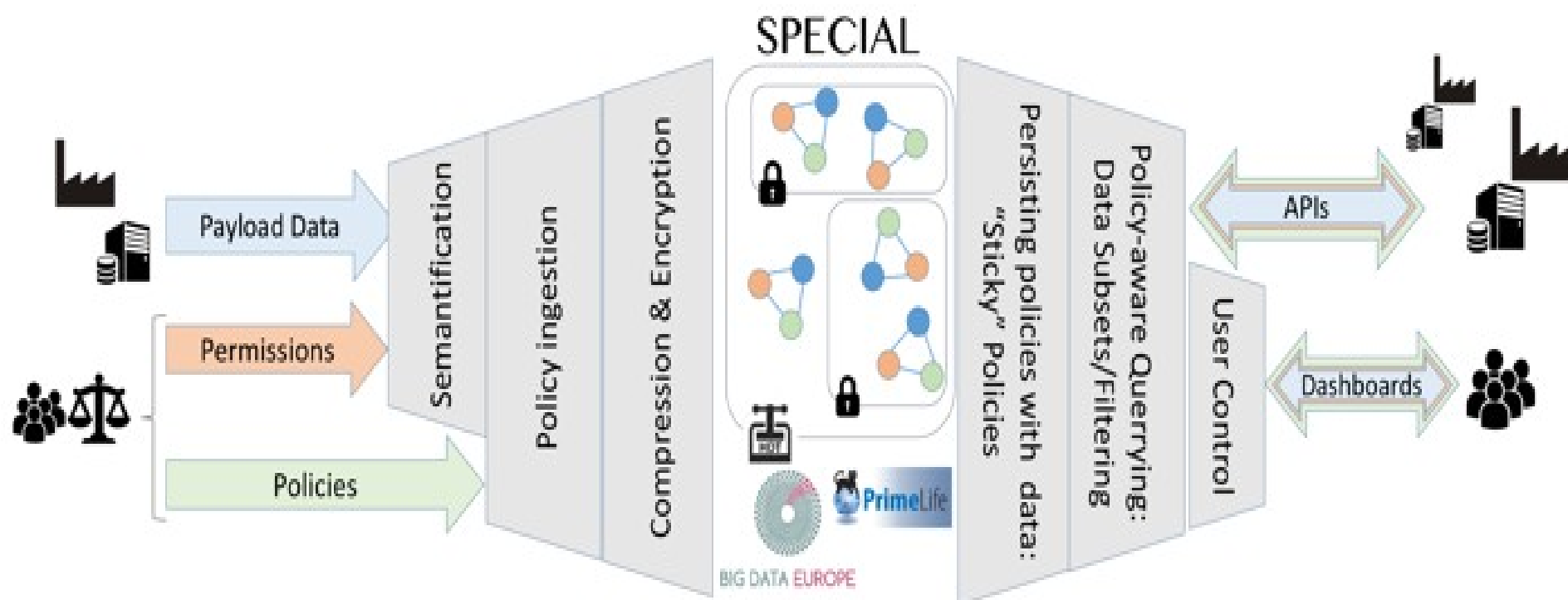
ERCIM



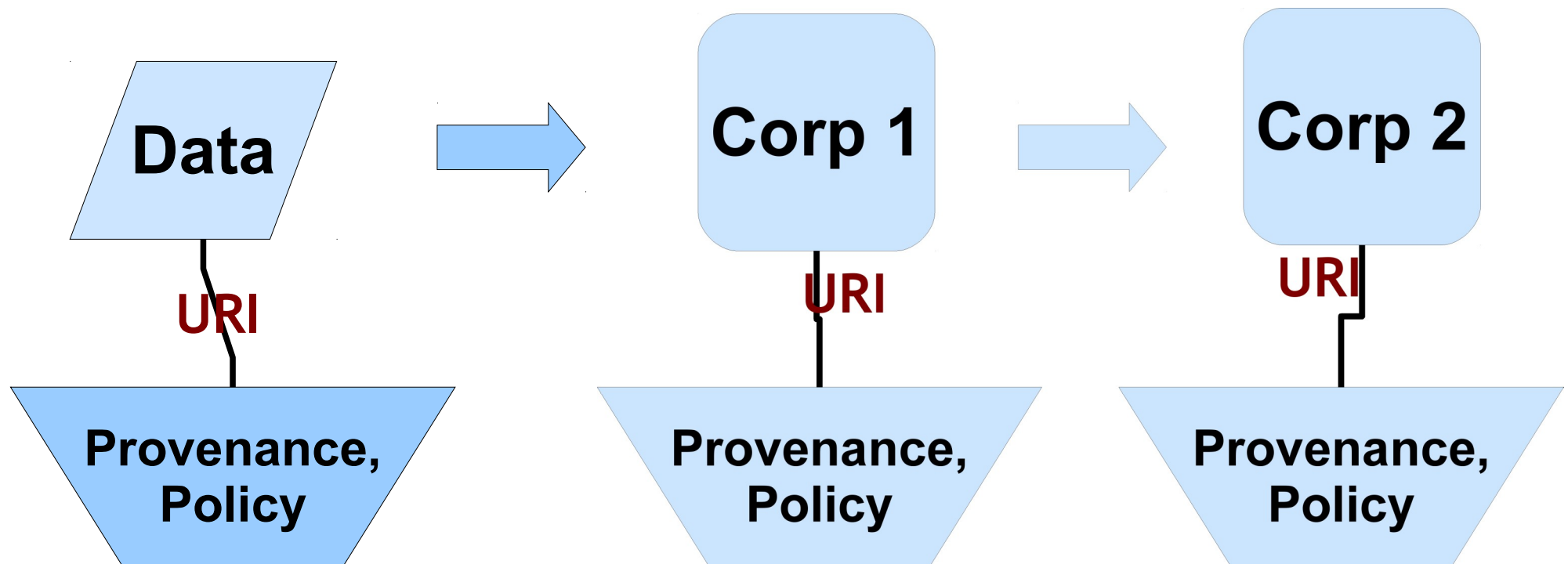
Semantic Lifting



The SPECIAL model



Corporation Transborder Flow



Legal blessing Art.21 (5) GDPR

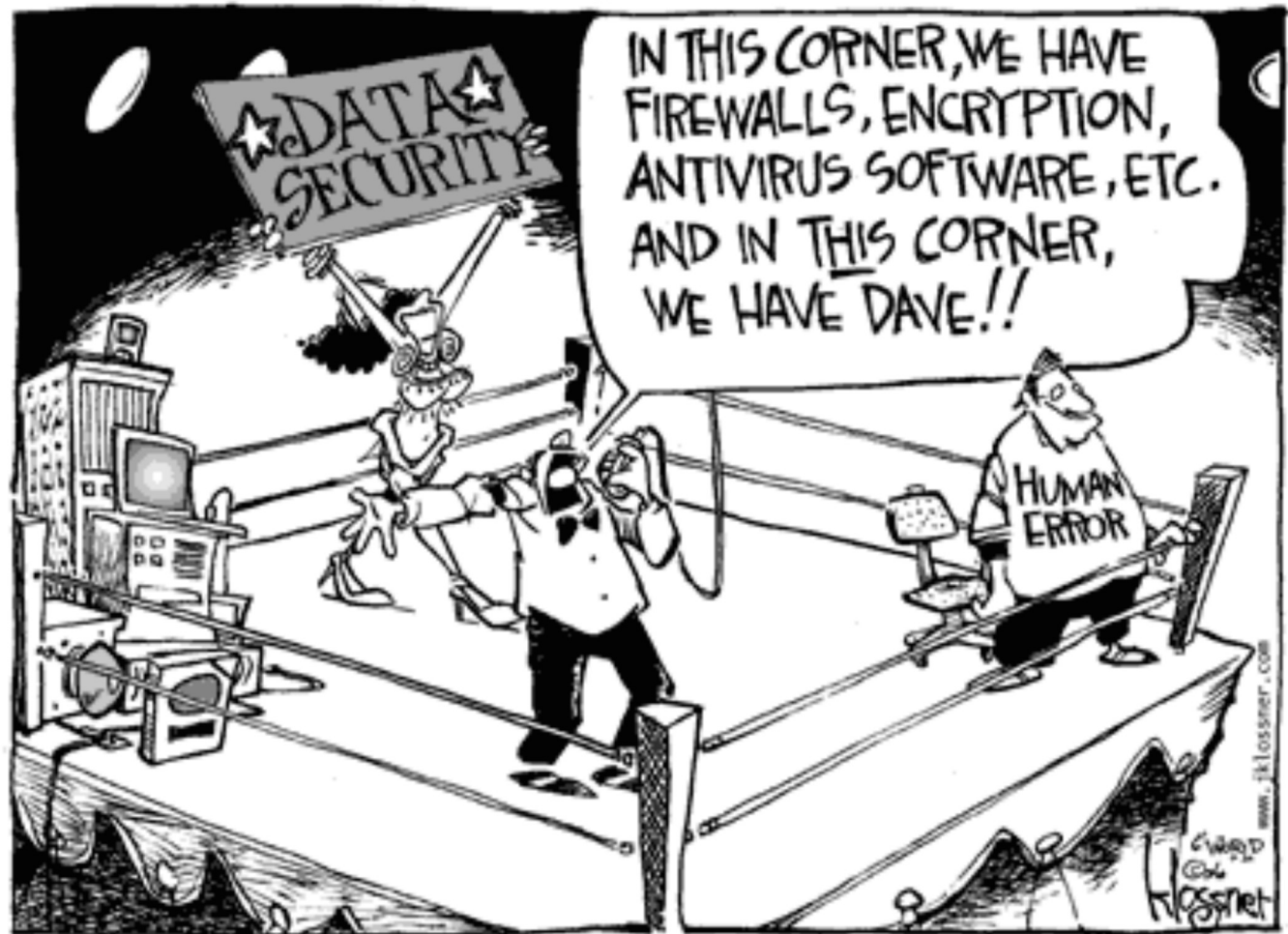
- In the context of the use of information society services, and notwithstanding Directive 2002/58/EC, the data subject may exercise his or her right to object by automated means using technical specifications.



Questions

@ rigow
rigo.wenning
@ ercim.eu

Keywords to
continue:
Prime-project.org
primelife.eu
Permissions &
Obligations
Do-Not-Track
DCAT



Reserve



How? Governance with Metadata

- Semantify legacy data
- Acquire data with their context
- Data handling for Privacy and Access control
- Context dependent data handling
- Rights management
- Obligation management
- Provenance

Semantify data at collection time

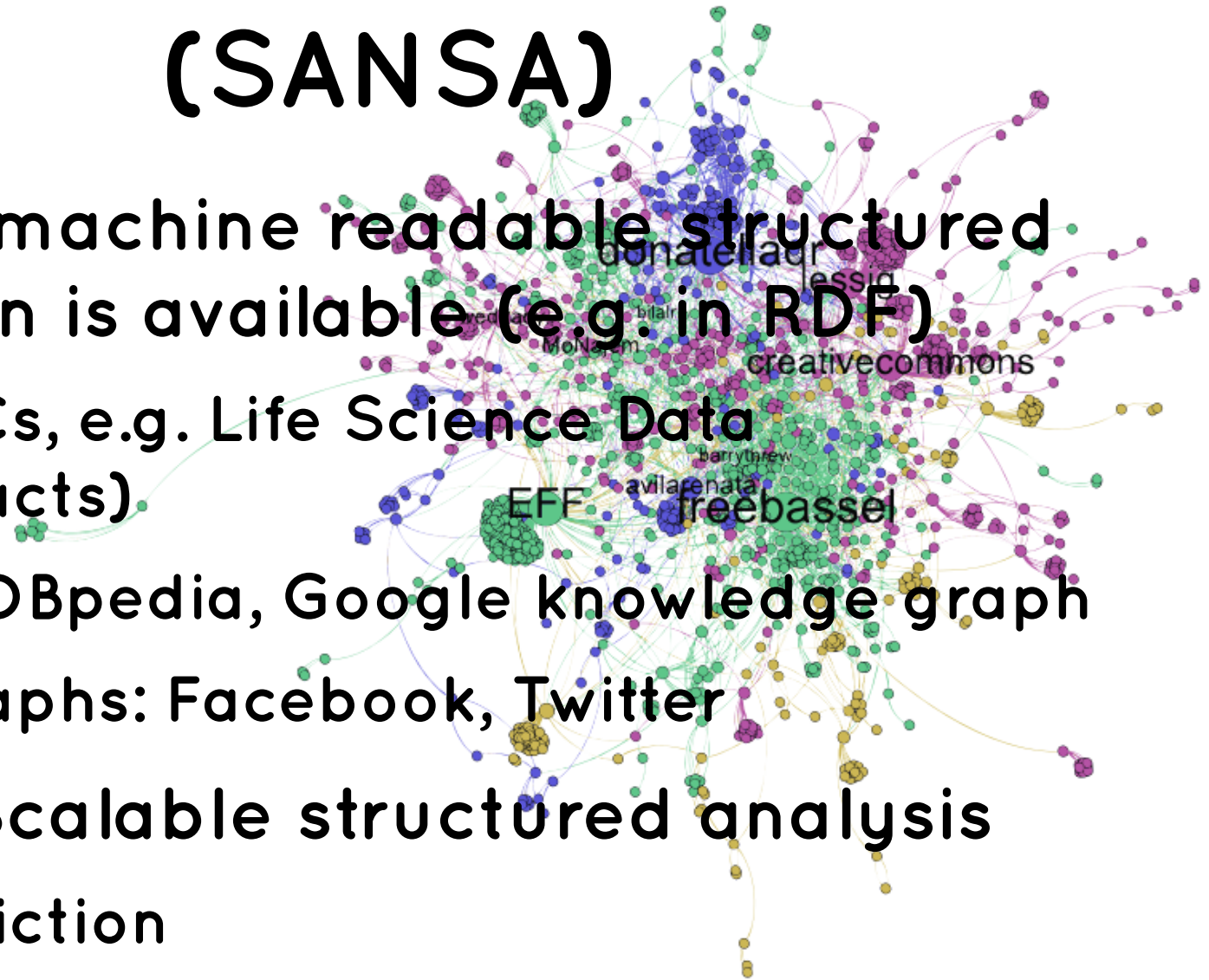
- At collection time, the collection policy is known.
- At collection time, necessary permissions are given
- Compliance policy under which data is acquired
- Retention times etc

Big data integration

- <https://www.big-data-europe.eu/>
- Lambda Architecture
- Docker swarm
- SANSA semantification
- Runs out of the box

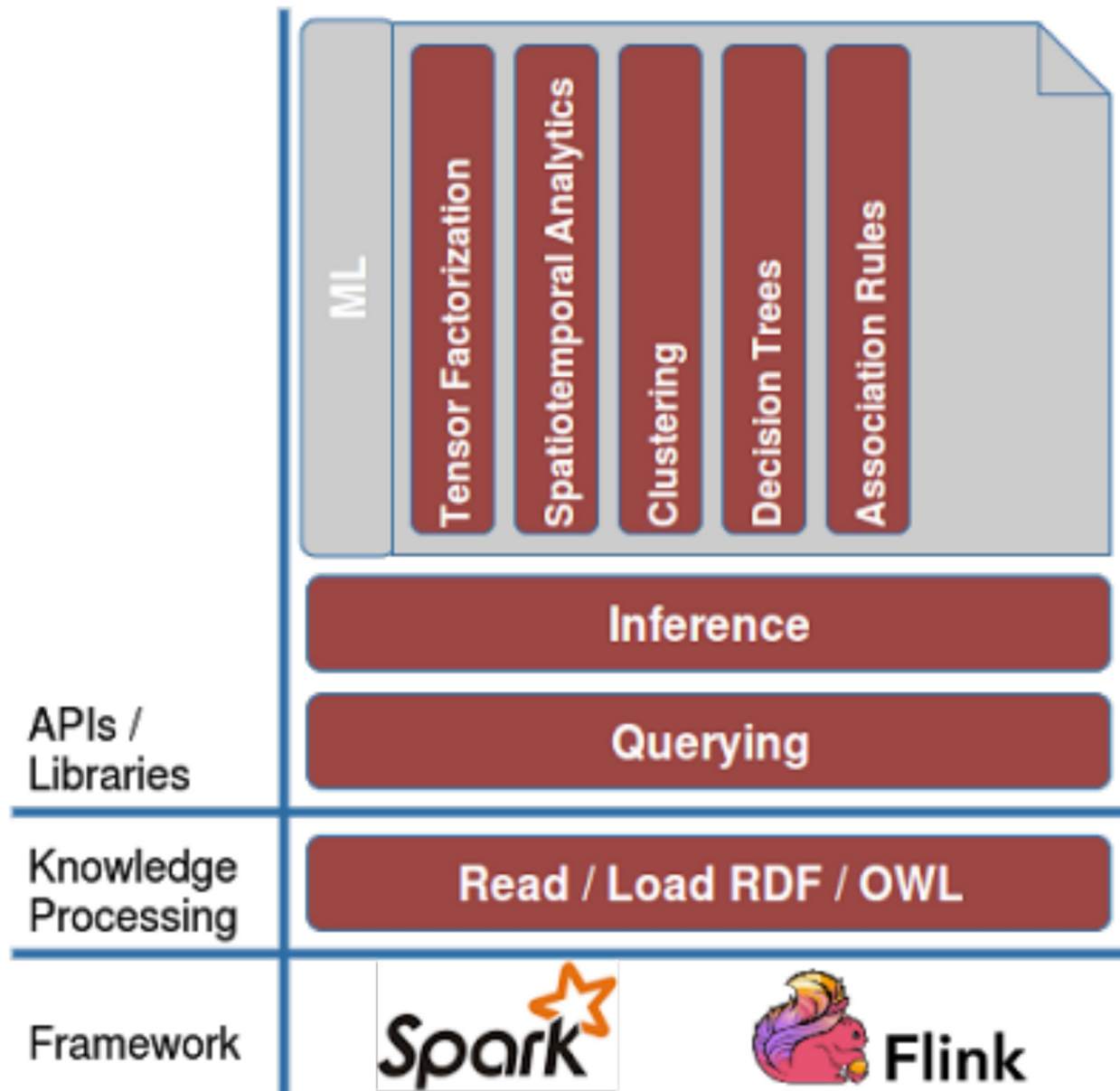
Semantic Analytics Stack (SANSA)

- Abundant machine readable structured information is available (e.g. in RDF)
 - Across SCs, e.g. Life Science Data (OpenPhacts)
 - General: DBpedia, Google knowledge graph
 - Social graphs: Facebook, Twitter
- Need for Scalable structured analysis
 - Link prediction
 - Knowledge base completion
 - Predictive analytics



SANSA Stack

19



Semantify Legacy data

- Adding a scheme to identify each record with a URI
- Register pointer with Metadata DB
- Assess compliance against Metadata DB
- Execute into legacy DB

Concept can be extended

- Payment conditions in eInvoicing (e.g. ZUGFeRD) and object association
- Legal obligations (e.g. Notifications)
- Guarantee
- Environmental restrictions
- Data pooling and Cooperation
- Virtual cooperation environments