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data.europeana.eu – the Europeana Linked Open Data Pilot

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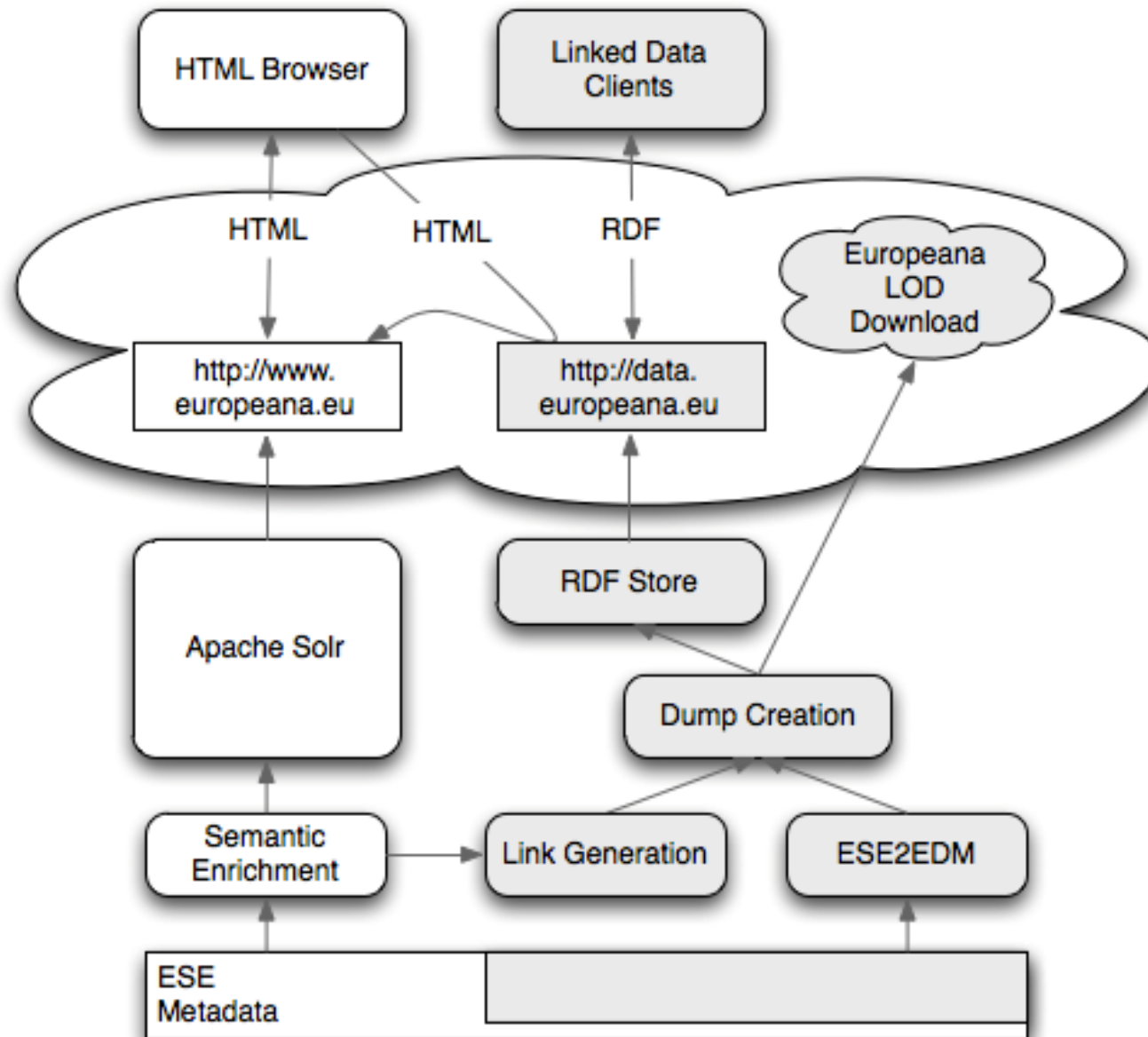EuropeanaTech, Vienna, 05/10/2011

Intro

- Starting point: quite a few obstacles to making available Europeana data as linked open data
  - No rich metadata
  - No links to other datasets
  - No agreements with data providers

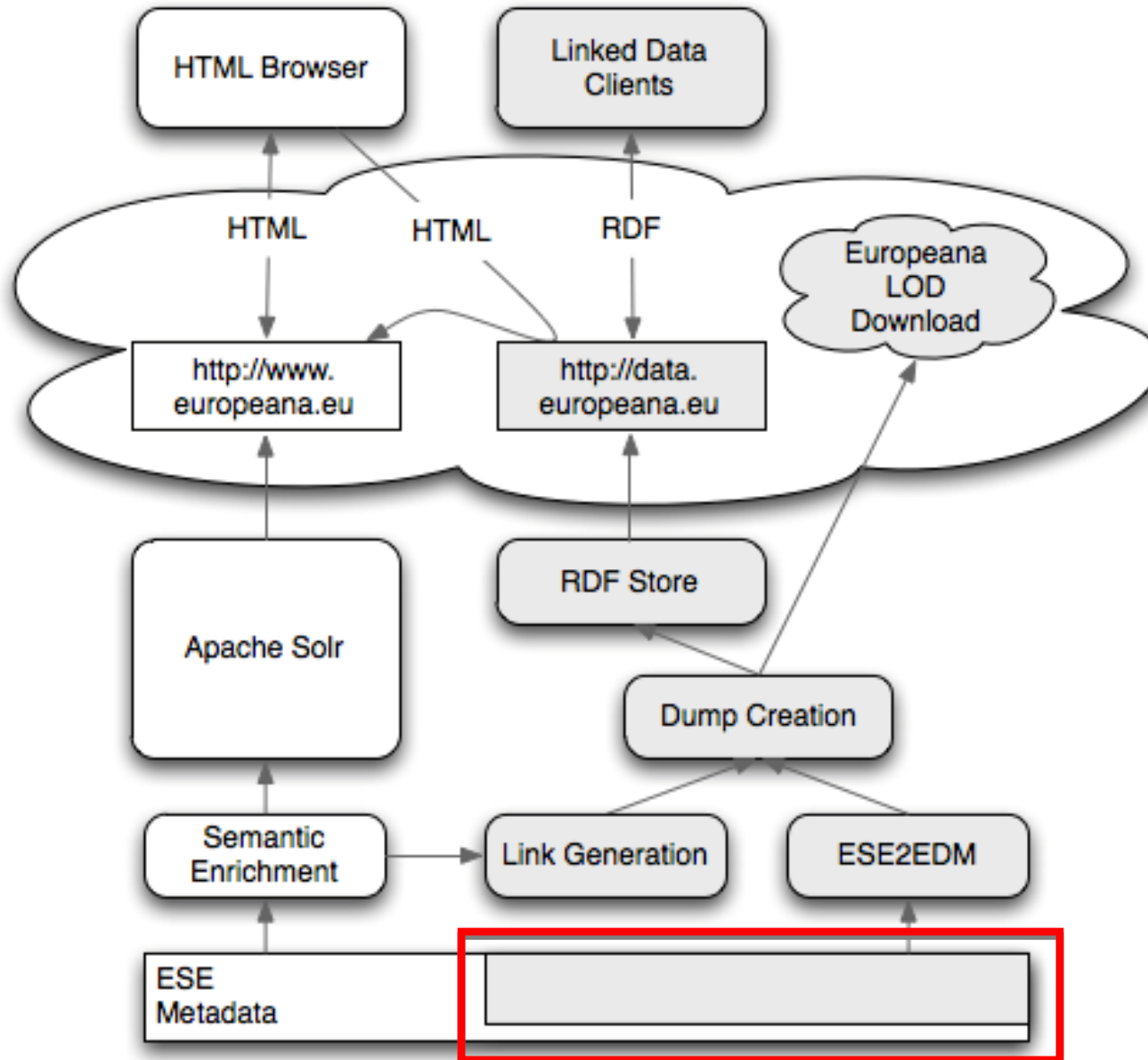- But recently we have made some progress on all this

Intro

We decided to experiment with a part of Europeana data

- Selected providers
- 3.5M objects
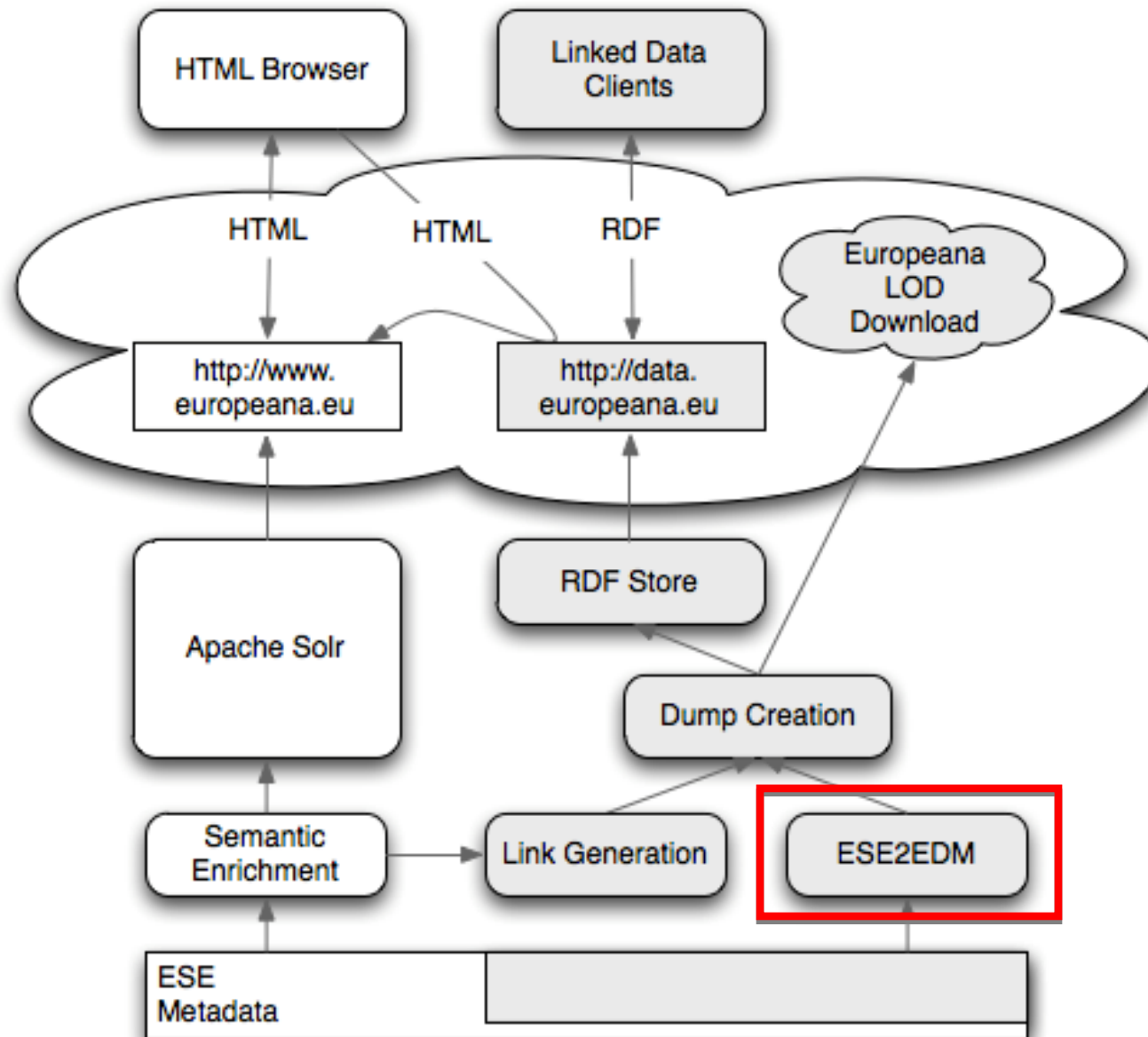- 9 direct providers, 300 indirect data providers
- 16 countries

Overall approach

Dataset gathering

Conversion of existing ESE data to EDM

ESE?

Europeana Semantic Elements

- The current metadata vocabulary used at Europeana
    - For data ingestion and storage

- Properties from Dublin Core
- Extra Europeana-specific properties
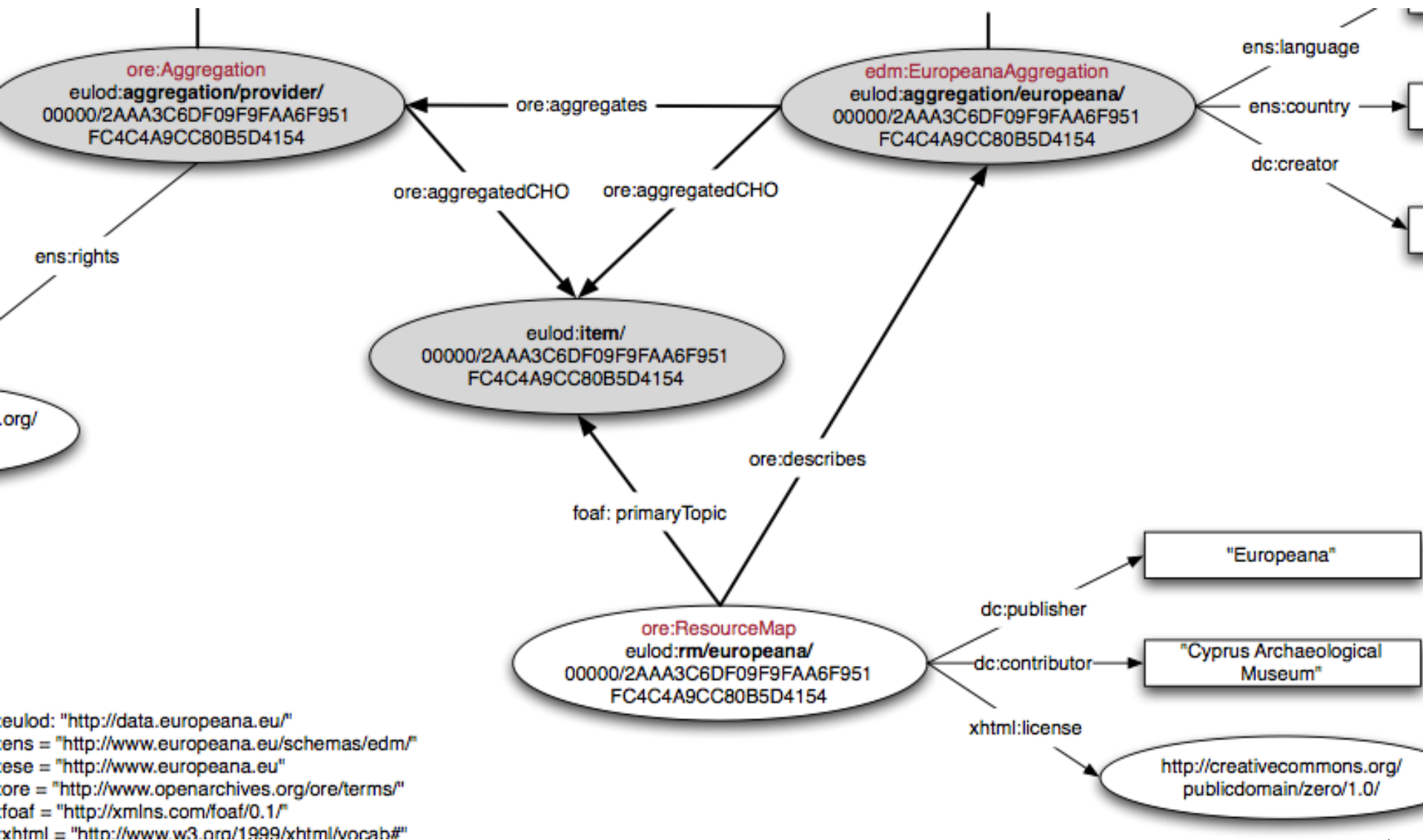- No links

Conversion of existing ESE data to EDM

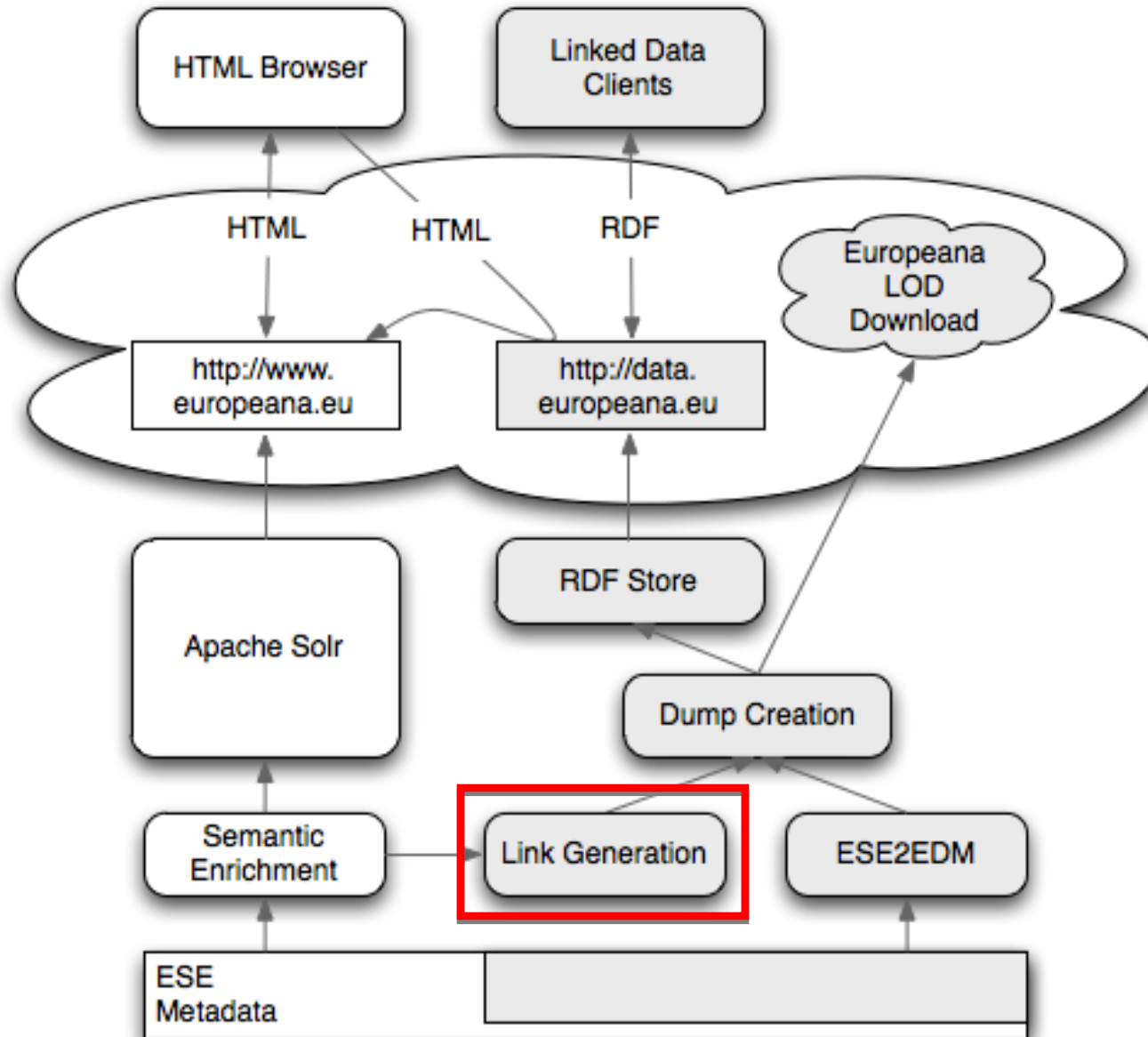| ESE Field	Value
dc:identifier	02-Lemba-Lakkous-Lady.tif
dc:title	Stone figurine
dc:subject	Cyprus--Antiquities
dc:description xml:lang="en"	Stone vessel from Choirokoitia with emobssed decoration...
dc:publisher	Cyprus Archaeological Museum
dc:type	Image
dc:format	image/tiff
dcterms:temporal	mid 3rd millenium B.C.
dc:rights	Cyprus Archaeological Museum
dc:title	Λίθινο ειδώλιο
dc:description	Λίθινο ειδώλιο από τη θέση Λέμπα ...
europeana:provider	Cyprus Library
europeana:type	IMAGE
europeana:rights	http://creativecommons.org/licenses/by/3.0/nl/
europeana:dataProvider	Cyprus Archaeological Museum
europeana:isShownBy	http://www.mcw.gov.cy/mcw/da/da.nsf/All/8308A7AB9CA6CB5EC22574CC003FF5E1/$file/02-Lemba-Lakkous-Lady.jpg?Ope
europeana:uri	http://www.europeana.eu/resolve/record/00000/E2AAA3C6DF09F9FAA6F951FC4C4A9CC80B5D4154
europeana:country	cyprus
europeana:language	gr

EDM?

Europeana Data Model

- The metadata vocabulary that will be used at Europeana

- Extending on DC
- Re-using other vocabularies: OAI-ORE, SKOS…
- Finer grain: not one record entity anymore

Conversion of existing ESE data to EDM

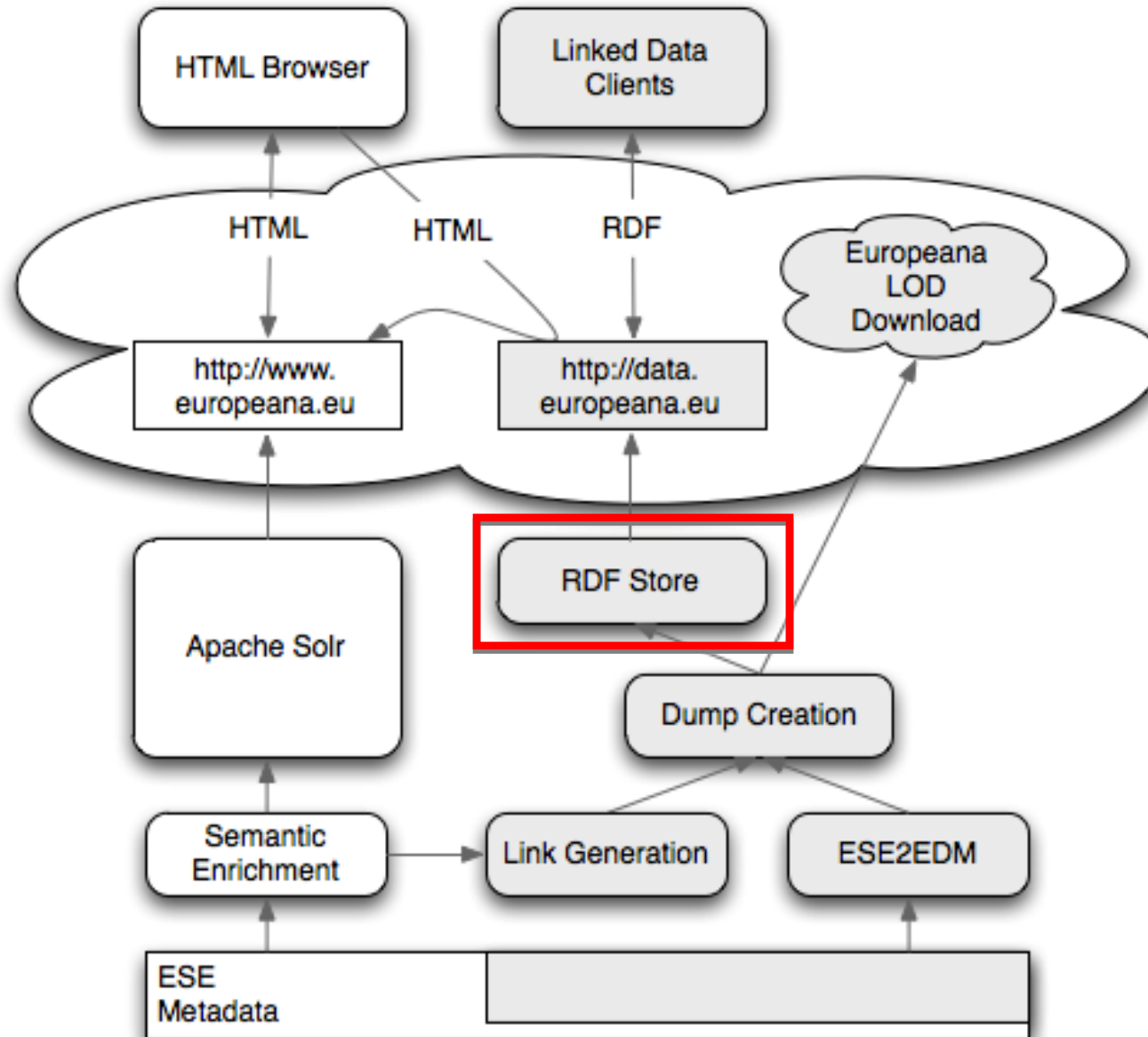http://europeanalabs.eu/wiki/EDMPrototypingTask15

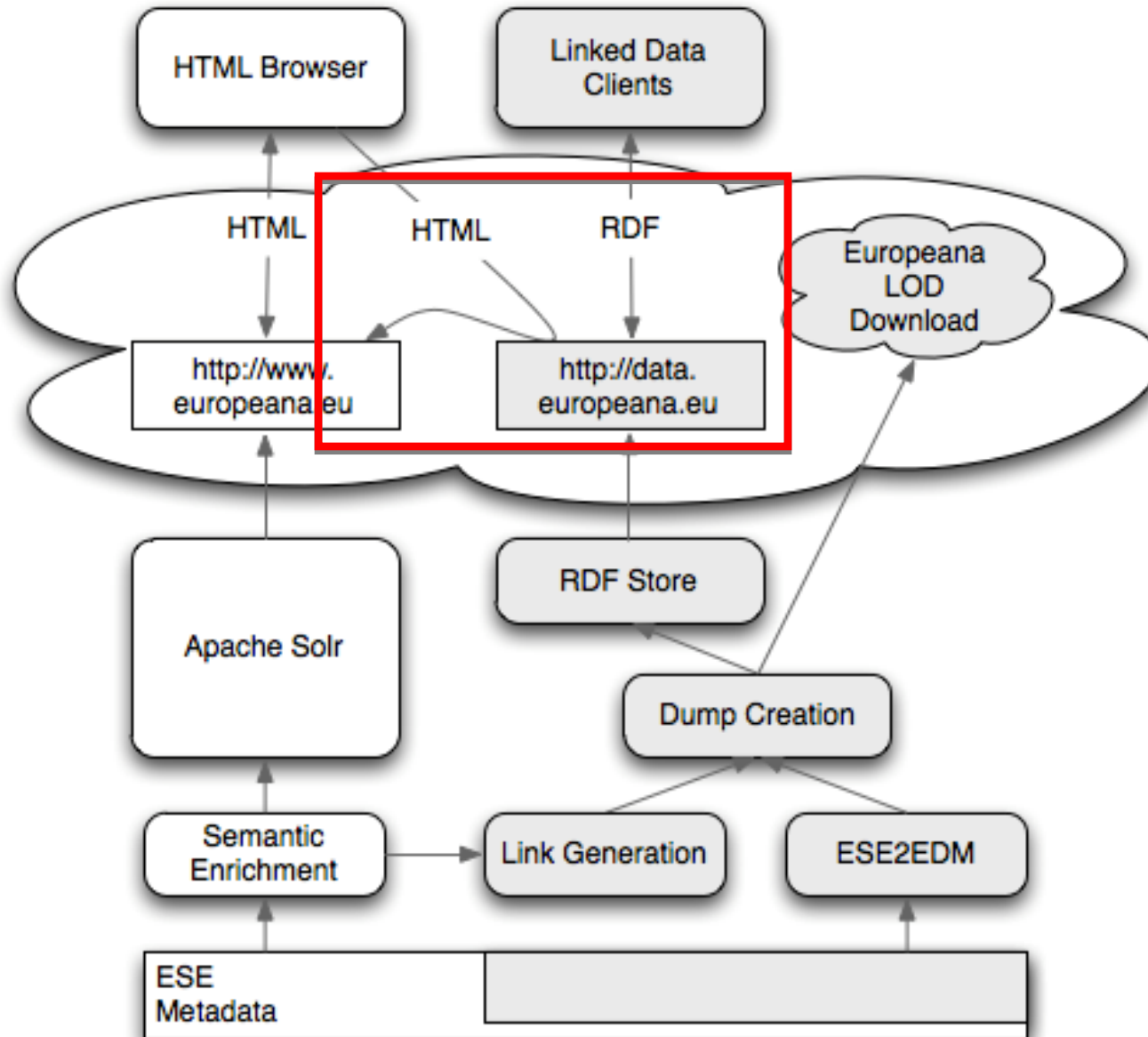# Semantic linking to other data

Linking to other sources

- Semantic enrichment at Office with Annocultor
  - GeoNames
  - Time Ontology

- Links to Linked Data services by Europeana providers
  - SOCH – Swedish Cultural Heritage Aggregator
  - National Library of Hungary

RDF storage

HTTP redirection

Some lessons (re-)learnt

- Data providers can mis-use ESE elements

  The ESE2EDM mapping sometimes lead to strange data

- EDM proxies are not linked-data friendly

  - Complexity of resulting RDF

  RDF Named graphs for representing context would be really useful!

Some lessons (re-)learnt

- There are solutions for representing provenance and licensing info
  - ORE Resource maps + CCrel + CC license
  - Needs further discussion

- Licensing is still a big issue
  - We could not publish *everything* as CC0
  - Only data added by Europeana

- Use of the data?

Next steps

A new version

- Entirely CC0

- More semantic links (GEMET)

- Publish properly the RDF spec for EDM

LOD pilot resources

- Main site

  http://data.europeana.eu

- Data dumps

  http://data.europeana.eu/download/1.0/

Conclusion

- We think such discussions can be useful to
  - Other LOD implementors
  - Especially those doing data aggregation

- Pilot: still subject to experimentation and change!

Feedback is much welcome!

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