

# A Conceptual Model for Inscriptions

## Harmonizing Digital Epigraphy Data Sources

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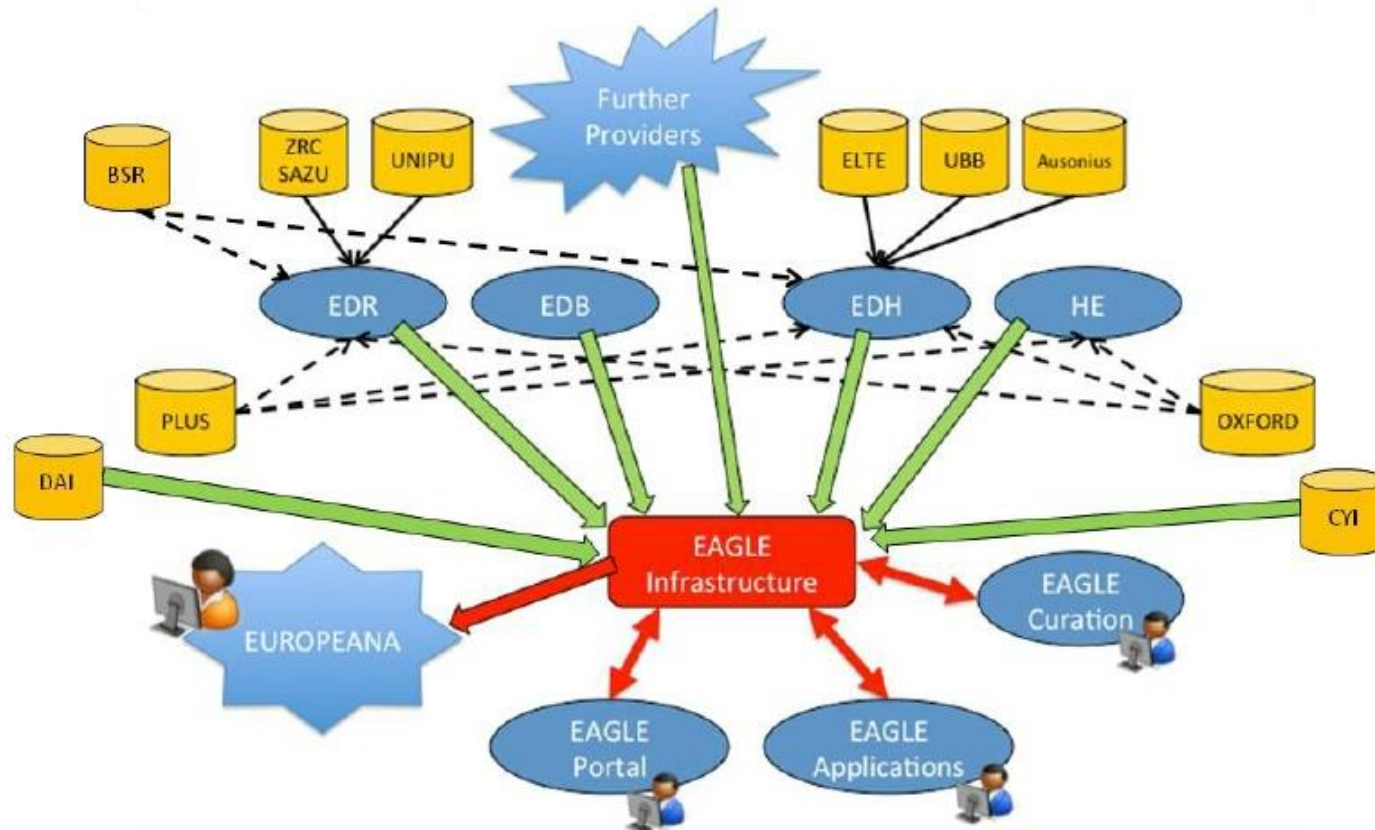
# Outline

- Introduction to the EAGLE project
- The EAGLE data model
  - EAGLE entities
- EAGLE implementation
  - DNET framework
  - Metadata Record Inspector
- Conclusions

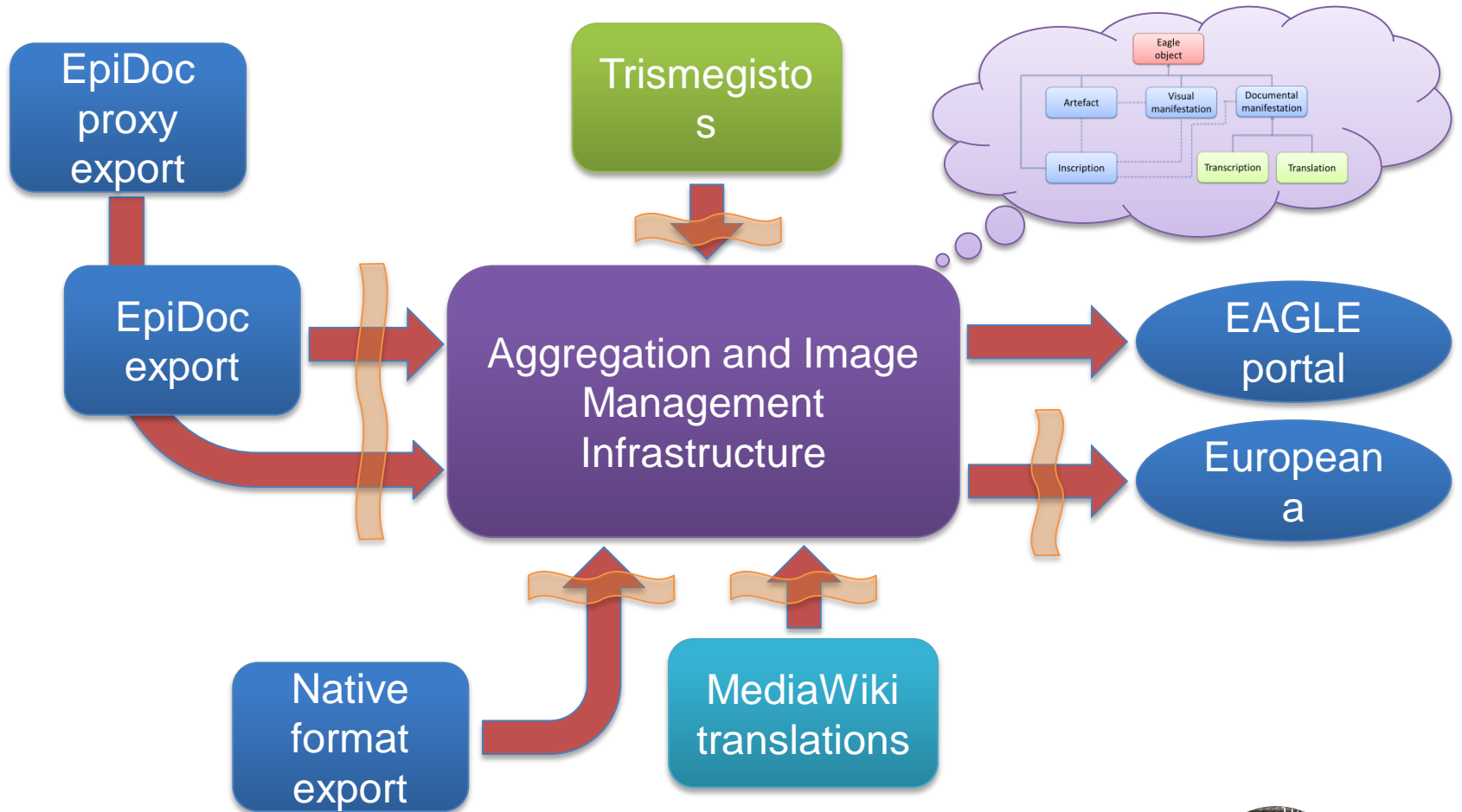
# The EAGLE Project

- Throwing some figures
  - 14 archives have joined by now
  - About 1.5 millions items (by its 3<sup>rd</sup> year of life)
  - Scattered across 25 EU countries
  - 80% of the total amount of epigraphic related material in Europe

# The EAGLE Project



# The EAGLE infrastructure

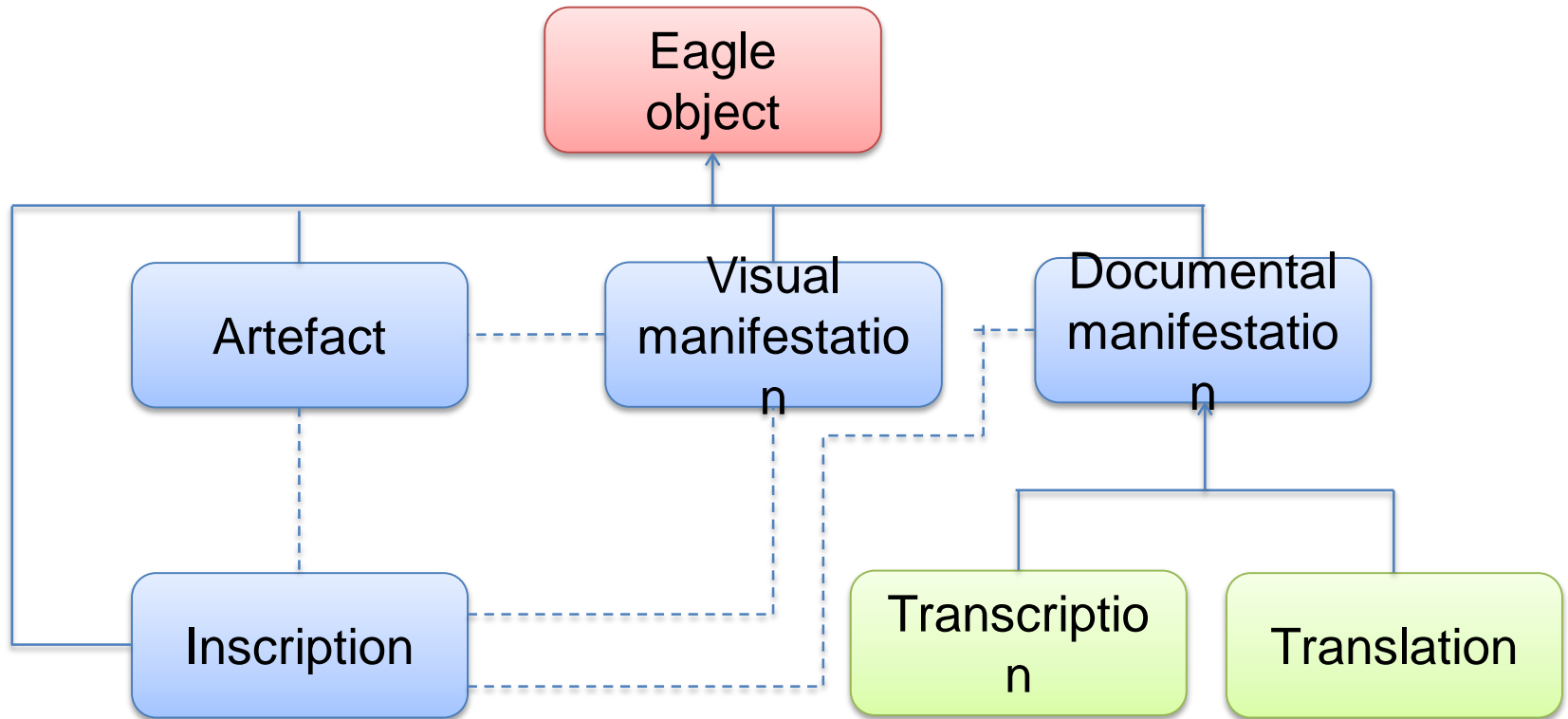


Is a transformation step based on a mapping

# EAGLE Aggregative Conceptual Model (EACM)

- Developed in order to
  - Accommodate adequately the heterogeneous information flowing into the EAGLE aggregation infrastructure
  - Serve complex and flexible queries from users
- The EAGLE Aggregative Data Model (EACM) is
  - Derived from a preliminary study performed by the University of Alcala (UAH) which based the analysis on CIDOC Conceptual Reference Model (CRM)
    - a formal ontological model for describing the structure of Cultural Heritage objects, relations between them, and their lifecycle.
  - Capable of describing entirely the objects in Eagle use case.

# EACM Bird's-eye view



# EACM detailed view

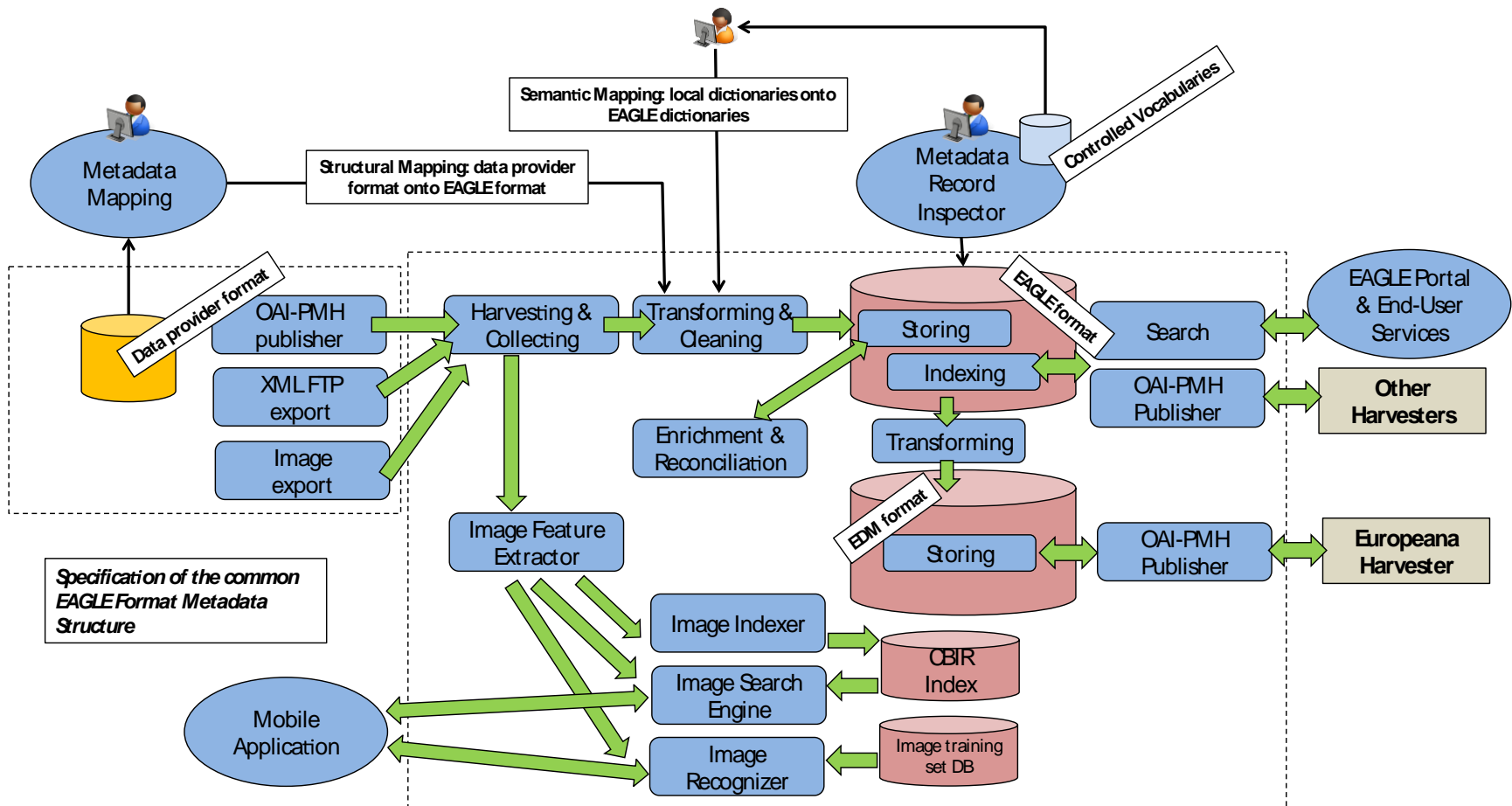
- **EAGLE Object**
  - Top entity in the conceptual model
  - Abstract entity
  - Used as base type for every sub-entity (of which is an extension)
  - Contains common properties such as
    - Unique objects identifiers
    - Provenance information
    - Metadata editing/authoring
    - IPR
    - Title & description



# EACM detailed view

- **Artefact**
  - Captures the **physical nature** e.g. monument type, material, dimensions, preservation, toponyms, dating, etc...) of an object of study in the Epigraphic domain (stone, monument, statue or other contextualizing objects)
- **Inscription**
  - Describes the nature of a text area possibly present on an artefact (e.g. inscription type, metric, field and letter size, paleographic characteristics, etc)
- **Visual representation**
  - Collects all the information related to the “visual nature” of a generic artefact (e.g. image location online, image properties, and authoring information)
  - It can be born-digital (e.g. digital camera, computer graphics) or digitized printed material (e.g. drawing, old pictures, literature)
- **Documental manifestation (two sub-entities)**
  - **Transcription:** the ancient text, its critical apparatus, any eventual side commentary and referenced bibliography.
  - **Translation:** the content of the transcription translated in a model language, authoring information and IPR

# Implementation with D-Net



# Metadata Record Inspector

The screenshot displays the Metadata Record Inspector interface. The top navigation bar includes links for D-Net, Home, DataSource Management, Infrastructure Management, Export Settings, MD Inspector, Users, Logs, and Mock User. The main content area is titled "Metadata record inspector" and features a sidebar with filters for Datasource name, Entity type, Material, Object type, Inscription type, and Writing type. The main area shows a list of records with a "Query: (\*=\*)" and a "back" button. A red dashed box highlights a record with a document icon, which is then shown in a detailed view. This detailed view includes the record's title, entity type, description, and a "show record" button. Below the record details, there are sections for "Connected entities" (showing a TXT file) and "Record XML" (displaying the record's metadata in XML format).

**Metadata Record Inspector**

Navigation: D-Net Home DataSource Management Infrastructure Management Export Settings MD Inspector Users Logs Mock User

Metadata record inspector

Datasource name

Epigraphic Database Heidelberg	155838
Epigraphic Database of Bari	23206
Archivio epigrafico di Roma	20508
Universitatea Babes Bolyai	4142
Last Statues of Antiquity	3434

Entity type

artifact	91304
documental	91304
visual	32098

Material

Object type

Inscription type

Writing type

Query: (\*=\*)

« first 1 2 3 4 5 ... last »

back

Title: Grabinschrift auf Stele  
Entity type: artifact  
Description:

show record

Connected entities

Record XML

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<eagleObject>
  <dnetResourceIdentifier>Mock:f2c77596a76a530f78b4aaa886ab1037:artifact</dnetResourceIdentifier>
  <recordSourceInfo providerName="Mock" providerAcronym="Mock" landingPage="http://edh-www.adw.uni-heidelberg.de/edh/inschrift/H0010201">H0010201</recordSourceInfo>
  <editingInfo>
    <dateEdited>2013-11-07</dateEdited>
    <metadataEditor>Graf</metadataEditor>
  </editingInfo>
  <metadataPr url="http://creativecommons.org/licenses/by-nc-sa/3.0/">This file is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported license.</metadataPr>
  <title lang="de">Grabinschrift auf Stele</title>
  <description lang="de"></description>
  <entityType>artifact</entityType>
</eagleObject>
```

Powered by D-NET - <http://www.d-net.research-infrastructures.eu/>

# Conclusions

- We presented a **conceptual model** for inscriptions which can **adequately accommodate** all different records flowing into EAGLE infrastructure.
- Each record is **transformed** and generates different instances of different types depending on the case
  - It is possible to **query items on per-entity-type basis** as separate collections. (e.g. search in all images only or all artifacts only)
- Different instances of EAGLE entities are **interconnected** and form a **network of objects**
  - This **enables browsing** from one entity to other related entities and discover details gradually.
- Of course, **traditional filtering** can still be applied to narrow down queries
  - Per content provider filtering
  - **Faceted search** on specific fields (e.g. material, decoration and many others)

DANKSCHEEN  
 SPASSIBO SNACHALHUYA NUHUN  
 CHALTU YAQHANYELAY YUSPAGARATAM  
 GRACIAS TASHAKKUR ATU WABEEJA MAITEKA HUI  
 SUKSAMA EKHMET  
 DHAHYABAAD ANBHA ATTO MERSI SPASIBO UNALCHEESH HATUR GI  
 ARIGATO MERASTAWHY SANCO MAAKE GRAZIE MEHRBANI PALSIES  
 SHUKURIA GAEJTHO LAH KOMAPSUMNIDA  
 GOZAIMASHITA AGUYJE FAKAAUE  
 TAVTAPUCH MEDAWAGSE  
 BAIKA JUSPAXAR  
 BIYAN SHUKRIA  
 TINGKI  
**THANK**  
**YOU**  
 EKOJU SIKOMO MAKETAJ  
 BOLZIN MERCI  
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