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**Europeana v1.0**

# Europeana v1.3 Danube Major Release

## 30 April 2011

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### *eContentplus*

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This Deliverable is Software and the current version can be found in action at
www.europeana.eu for the Europeana portal. The backend tools cannot be seen there, but
can be seen at www.europeanalabs.eu for the code repository and specifications.

1. Danube Release process

Although the Europeana Version 1 Description of Work talks of having two 'Major Releases',
the Rhine Release in May of 2010 and the Danube Release in April/May 2011, that is in
practice not how we have organised our work.
Leading up to and following the Rhine Release, we have changed our development
methodology to a more Agile approach. The advantages of this are many:
- the work is broken up into manageable chunks
- the process of releasing new features can be faster, and is less disruptive to the
  entire organisation with respect to Acceptance Testing, Data Migration and such
- more frequent and incremental changes to the portal means that end users are less
  confused: they experience a sense of continuity and see continuous improvements to
  the platform
- we are more adaptable in the sense that we can accommodate changes brought
  about by changing user demands and expectations much quicker than with a yearly
  'Big Bang' release

To keep the project manageable and accountable, and to structure the work as not being a
series of small changes, but a more integrated program working towards a wider goal, we
have used the term 'Danube Release Program'.

We work with a monthly release schedule ('development heartbeat'), with the possibility of
adding weekly bug-fixing releases when needed. Every month we decide which features
have been sufficiently developed and unit tested to go through Acceptance Testing. When
the feature passes the Acceptance Test, it is included in the monthly portal release.

1.1 requirements implemented

Following a requirements, estimation and business prioritisation process, the following
Requirements have so far been implemented as part of that Danube Release Program:
- Embed record
  o users can create an HTML snippet showing a favourite object in Europeana on
    their own website or blog
- Cite record
  o Generate a journal-style citation for a Europeana object
- Improved search API
  o results are enhanced with geocoordinates and available in JSON
- Facets for licenses
  o allowing users to refine search results to e.g., public domain objects
- Icons on objects for licenses
  o clearly showing license status for each object directly below the thumbnail

- United ingestion toolset
  - workflow tool combining the various steps of the ingestion process
- Social media streams on portal
  - our twitter and Facebook streams are now included on the portal
- Content re-use statistics
  - for share, embed, API use etc.
- External services integration (SIWA)
- Results translation (using external translation services)
- Improved accessibility for the visually impaired
  - this will alsobe taken into account in the Portal Design Modifications
- Data Enrichment
  - Adding geo-coordinates and –names, standardized tie periods and concepts to metadata records, improving the multi-lingual search capabilities
- Semantic markup in object pages
  - Allowing applications (rather than humans) to read and understand the object pages and the metadata in them
- Publish Linked Open Data
  - 3.2 Million objects in Europeana are now published as LoD, as part of a pilot.
- Improved virtual exhibitions
- SEO optimisations
  - allowing Search Engines to optimise their indexing of Europeana records.

Some work that was not explicitly planned earlier was also performed:
To cope with the success of our SEO efforts and the growth of the lucene/solr index (we are now at 17.9 Million objects and growing) we have also had to introduce a few architectural changes, most notably the caching of search results (brief_doc pages) and object pages (full_doc pages). Previously these were always retrieved from the lucene/solr database, but caching means a lot less pressure on the performance of those databases, and therefore a faster and more predictable and scalable response.

A lot of preparation work for implementing the Europeana Data Model (EDM) was already completed under the somewhat generic heading of 'core refactoring'. What this means is that the Java core classes, that were originally designed to support the ESE data model, have been made 'Data Model agnostic' – the software doesn't usually care what data format the Europeana data is in – it reads a description of that data model from a Definitions file. Anything to do with handling 'a Europeana object/aggregation' doesn't need to care about what the precise elements of that object are, and what the rules these elements have to follow. Only where those descriptions and rules are meaningful, are they injected from the definitions file.

2. Looking Forward

Work is continuing on the first implementation of the Europeana Data Model. The core refactoring preparatory work already goes a very long way to be able to support the EDM – so much so that we are confident that by the end of June we will be able to show a first implementation of the Europeana portal based on EDM data. Most of the data will at that time be covered from the current ESE data, but some features require additional information to be supplied by the Data Providers.
The remaining work for this first implementation of EDM includes
- EDM Core implementation
- EDM Presentation Layer changes
- Changes to the UIM and ingestion tooling to accommodate EDM, including ingestion of contextual content
- Hierarchical object display
- Wikipedia enhanced search results
- Portal design modifications
    o To allow for hierarchical object display and to optimise the effect of SEO-generated traffic, also includes social media trackbacks on object pages

Other features planned for later this year are:
- map search and display
    o is undergoing final user testing and minor tweaking at this time
- improved ranking of search results
    o continuous improvements are made, and this is a systematic step to evaluate these, and propose more improvements
- Improved tagging and  including the tags in search index
- Customer service centre
    o Allowing for better communication between the Europeana Ingestion Team and the data providers, and sharing of best practices between data providers
- Content reporting