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Grant Agreement number: 270902
Project Title: Europeana Version 2

D6.1: Release Report

<table>
<thead>
<tr>
<th>Revision</th>
<th>[1.0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of submission</td>
<td>22 October 2012</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Jan Molendijk - The Europeana Foundation</td>
</tr>
<tr>
<td>Dissemination Level</td>
<td>[Public]</td>
</tr>
</tbody>
</table>

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REVISION HISTORY AND STATEMENT OF ORIGINALITY

Revision History

<table>
<thead>
<tr>
<th>Revision No.</th>
<th>Date</th>
<th>Author</th>
<th>Organisation</th>
<th>Description</th>
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<tr>
<td>1.0</td>
<td>22 October 2012</td>
<td>Jan Molendijk</td>
<td>The Europeana Foundation</td>
<td>Release Report</td>
</tr>
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</table>

Statement of originality:

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.
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Introduction

As a rule, in Europeana we now prefer to have frequent small releases in line with the Agile/SCRUM methodology. Over the past months, however, we have worked on one much bigger release, encompassing the Core libraries, the Europeana.eu portal, the Europeana API and the ingestion tools. The reason for this is that all of these components had to be made compliant with EDM, the Europeana Data Model.

In parallel we did make some minor improvements to the existing portal and backend tools, resulting in 9 minor releases. Chapter 1 describes these changes.

Chapter 2 describes the major release making both front-end and back-end EDM-compliant.
Chapter 1. Minor Releases on the ESE-based production system

Since the beginning of the Europeana V2 project we have deployed 9 minor releases. Most were devoted to small functional improvements and bug fixes, in parallel with the work on rebuilding the Core, establishing a new schema and rebuilding the portal and the ingestion tools.

The biggest observable change has been the change of the ranking algorithm, a result of cooperation between the Europeana team and the ASSETS project. The ranking algorithm implemented is now BNF25, with ranking factors determined based on logfile analysis comparing ‘successful’ and ‘unsuccessful’ searches – where successful searches are the ones that lead to a user clicking on an object to visit the data provider’s page.

Also considerable effort has been put in improving our Search Engine Optimisation, by improving our site maps and including more pages to be indexed by Google. This has led to a significant increase in the number of pages crawled by Google in May, and again in August, which in turn led to a significant increase in Search Engine traffic, and a boost in traffic overall.

A third area of change has been making the site ready for the release of the metadata under a CC-0 license. This involved creating an opt-out feature to give data providers the option to not include their thumbnails in the API responses, and an overhaul of the static pages related to rights and policies.

An overview of the minor releases can be found in the table below:

<table>
<thead>
<tr>
<th>Version</th>
<th>Type</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1.5.0</td>
<td>Functionality</td>
<td>2011-10-11</td>
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<tr>
<td>V1.5.1</td>
<td>Bug Fixes</td>
<td>2011-10-13</td>
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<tr>
<td>V1.5.2</td>
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<td>V1.5.3</td>
<td>Bug Fixes</td>
<td>2011-10-25</td>
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<tr>
<td>V1.5.4</td>
<td>Functionality and Bug Fixes</td>
<td>2011-11-25</td>
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<tr>
<td>V1.5.5</td>
<td>Bug Fixes</td>
<td>2011-11-30</td>
</tr>
<tr>
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<td>Bug Fixes</td>
<td>2011-12-05</td>
</tr>
<tr>
<td>V1.6.0</td>
<td>Functionality</td>
<td>2012-02-15</td>
</tr>
<tr>
<td>V1.6.1</td>
<td>Bug Fixes</td>
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<td>V1.6.3</td>
<td>Functionality and Bug Fixes</td>
<td>2012-06-25</td>
</tr>
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</table>
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From the blog

Meet Europeana: Oonagh O'Sullivan

Oonagh O'Sullivan is Europeana's new Senior Marketing Specialist. Here she tells us some stories from the collection that tell us a little bit more about her.

Letters from rural Ireland in France, 1816

The majority of the French Revolution, its causes and consequences, fits neatly into Snippets, while current events remain very much alive today. It has become part of the individual.

Europeana Homepage: Your thoughts?

Nordico in Dublin tried to expand the homepage on the proven offline new Europeana prototype--it's time to test this wireless think before creating a web site.

Fig. 1 Current Europeana.eu homepage

Fig. 2 Current Europeana.eu search results page
Fig. 3 Current Europeana.eu object page
Chapter 2. Major Release EDM-based Europeana

Next to the changes described above, the Europeana development team has been working on the complete overhaul of both the front-end and back-end systems. This has resulted in a release on 19th of October to a preview environment. There we will test and evaluate the changes, and invite the Europeana Network to do the same, and provide us with feedback.

The aim is to release this version to the full production environment after a 6 to 8 week testing period.

The main elements of the release are the following:

On the portal side:
- responsive design – mobile first
- make the site more visually appealing
- make the site more ‘sticky’
- technological clean-up: remove the Freemarker templates

On the API:
- implement new API, EDM based
- implement API console
- create automated sign-up procedure
- make API1 generate ESE-based responses from an EDM-based core

On the Ingestion Tools:
- implementation of UIM
- integration of REPOX
- updating MINT to be able to map EDM
- integration of MINT

These will be described in more detail in the following sections.
2.1 Europeana Portal Changes

On of the biggest visible changes to the portal has been the adoption of responsive design: with one website we now serve all screen sizes: mobile, tablets, desktops. Based on media queries we serve specially optimized graphics to mobile (typically low-bandwidth) and tablet clients.

Fig. 4a - preview.europeana.eu – desktop view
This helps make the site more visually appealing, as does the use of more and larger graphics where possible. User research indicated that people love to click on images, rather than on text links, and now the content and sections we want to push are reachable through image links. We now highlight more content, exhibitions and featured providers. Also we show visually appealing content from Europeana that was posted on Pinterest.

Taking advantage of the more and more prevalent higher bandwidths, we now present 24 results per page by default, with the option to increase that to 96. We have also rearranged the faceted search to make the divisions and search refinements more logical.
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Because now more than half the Europeana visitors come in directly through one of the search engines, it has become important to **make the site more ‘sticky’**. We already started doing this in the ‘old portal’, but have taken this further. This is most urgent on the object page: if users come in here directly from Google or Bing, they need to understand the available ways to further explore the Europeana collections.
Fig 6a and 6b – preview.europeana.eu object page, desktop view and mobile view
In addition we have done a much-needed technological clean-up: we have removed the Freemarker templates, thereby simplifying the rendering of the HTML pages and keeping more of the business on the server, and the rendering details solely in css and javascript.

Last but not least the whole site was adapted to use EDM based metadata, preparing for the added richness of expression that EDM offers over ESE metadata. Areas where this will be visible is objects that have more than one media file (image) associated with them, and a better display for hierarchical objects.
2.2 Europeana API Changes

The Europeana API is gaining in importance as a means to give access to digitised cultural heritage. Therefore the API has been adapted to deal with and return EDM based metadata, to be more easily managed (signup forms, statistics etc.) and to be better secured by adding http login security and avoiding using the API key as a URL parameter.

The existing API will be maintained in a backwards compatibility mode for current API users for at least 18 months. For this a ‘back-translation’ from EDM to ESE has been developed.

To support developers an API console was developed showing API queries and the responses they generate. The screenshot below gives an impression.

![API console screenshot](image)
2.3 Ingestion Tool Changes

In order to be able to harvest, map, validate, ingest, and index EDM records, a whole new ingestion workflow has been created. Where possible we have used existing tools, either integrating or adapting them to work together as seamlessly as possible.

The tools we now use are:
UIM – United Ingestion Manager, based on a joint implementation between Europeana and The European Library with input from the ASSETS project.
REPOX – OAI-PMH harvested, created by IST in Portugal and developed through many European projects.
MINT – metadata mapping tool, created by NTUA (national Technological University of Athens) in Greece, developed through several European and national projects.
AnnoCultur – semantic enrichment tool

Also a dedicated interface was created to SugarCRM, the system where Europeana stores information about data providers and their collections (datasets).

Getting all of these tools to work together under the direction if the UIM has proved challenging and we are currently fleshing out the last remaining stability issues. The result is an integrated workflow that gives full control to the Europeana operations team.

The screenshots below illustrate some of that workflow.
### Europeana Release Report

#### Finished Ingestions

<table>
<thead>
<tr>
<th>Ingestion ID</th>
<th>Date</th>
<th>Status</th>
<th>Start Time</th>
<th>End Time</th>
<th>Completion Time</th>
<th>Error</th>
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</thead>
<tbody>
<tr>
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<td>10/10/2019</td>
<td>Success</td>
<td>10:00 AM</td>
<td>11:00 AM</td>
<td>1 hour</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>11/10/2019</td>
<td>Failure</td>
<td>11:00 AM</td>
<td>12:00 AM</td>
<td>1 hour</td>
<td>Yes</td>
</tr>
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#### Start Ingestion

- **Start**:
  - Collection: Europeana Local Arouna
  - Provider: Europeana Local Arouna
  - Collection: Europeana Local Arouna

- **Ingestion Settings**
  - **Name**: Europeana Local Arouna
  - **Provider**: Europeana Local Arouna
  - **Collection**: Europeana Local Arouna

- **Ingestion Activity Settings**
  - **Source**: Europeana Local Arouna
  - **Target**: Europeana Local Arouna

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Fig. 8 – UIM screenshots