

## Introduction

### Background

Kultivate aims to share and support the application of best practice in the development of institutional repositories that are appropriate to the specific needs and behaviours of creative and visual arts researchers. One of the objectives is to provide a sector led support framework where repository enhancements, services and tools to the open source EPrints repository platform and institutional processes can be promoted, developed and rigorously tested.

### Approach

The technical workshop held on the 11<sup>th</sup> January 2011 gathered ideas from the Kultur II Group and prioritised these according to the number of times an enhancement was mentioned and also based on the priority given by each group. There were three main technical enhancements suggested and prioritised by the group: simplifying the workflow to make deposit easier; providing a tool to enable researchers to upload from their desktop applications; and being able to link objects hierarchically in terms of relationships. The desktop uploading tool is already currently being developed as part of the DepositMO project<sup>1</sup>. This tool and the Kultivate case studies are also likely to address how the workflow process may be simplified. The Kultivate project can however address the other enhancement given priority, which was to be able to link related objects together in a hierarchy such as a project or exhibition. In addition the use of IRStats would be beneficial to encourage arts research deposit, and so this has been added to the technical specification.

### Methodology

This technical specification document will be circulated to the Kultur II Group for feedback. Members of the Kultur II Group will be able to give feedback on this document and the technical enhancements through the kultur@jiscmail.ac.uk closed email list and through the Kultur II Group meetings. The technical enhancements will be made to the EPrints demonstrator hosted by the Visual Arts Data Service (VADS) at the University for the Creative Arts<sup>2</sup>. The EPrints demonstrator service is available to all members of the Kultur II Group and can be used to test functionality before institutions apply enhancements to their own repositories. A Technical Developer is being recruited to make the enhancements to the EPrints demonstrator and they will be managed by Carlos Silva, Technical Manager for the Kultivate project.

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<sup>1</sup> <http://blogs.ecs.soton.ac.uk/depositmo/>

<sup>2</sup> <http://wwt.research.ucreative.ac.uk/>

## Technical Specification

This specification will develop two tools: an enhancement to allow hierarchical relationships to be built between objects loaded into EPrints, for example linking an artwork with an exhibition; and a 'kulturised' version of the IRStats plugin.

### **Tool One: hierarchical relationships to be built between objects loaded into EPrints**

#### **The problem**

An artwork can have many related objects including published papers, exhibitions, learning and teaching materials, and websites<sup>3</sup>. Currently there are a number of fields within EPrints that enable data to be recorded however this is as field within the existing object record, and not as part of a hierarchical relationship. For example Andrew Gray writes about the project field that was added as part of the Kultur enhancements to metadata<sup>4</sup>. This field enabled the creation of a project name with objects being able to be linked to the project, however this is reliant on the accuracy of the data entry and a knowledge of what the relationships are prior to data entry occurring.

#### **Requested functionality**

- Technical enhancements to be made to EPrints repository software.
- Enhancements to be visually appealing and attractive in order to meet the needs of the visual and creative arts community.
- Related objects to be linked at time of deposit; and also to be linked retrospectively to other objects.
- Relationships to be defined hierarchically e.g. an object can be described as an exhibition, and may be the parent object with child objects consisting of artworks, a publication, and other objects.

#### **Known issues**

- Consideration to be given to existing EPrints functionality that may not be currently utilised by the demonstrator, and to forthcoming developments and upgrades such as the EPrints Bazaar<sup>5</sup> in order to avoid duplication of effort.
- Consideration to be given to the granting of user permissions to create the hierarchical relationships and if this is granted to the depositor how this is then presented as part of the workflow. For example will the depositor begin the workflow by creating the hierarchy

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<sup>3</sup> As illustrated in Rosaline Smith's PowerPoint slide from the 11<sup>th</sup> January technical workshop:  
[http://www.vads.ac.uk/kultur2group/downloads/20110111\\_UniversityofLincoln.pdf](http://www.vads.ac.uk/kultur2group/downloads/20110111_UniversityofLincoln.pdf)

<sup>4</sup> <http://www.ariadne.ac.uk/issue60/gray/>

<sup>5</sup> [http://wiki.eprints.org/w/The\\_EPrints\\_Bazaar](http://wiki.eprints.org/w/The_EPrints_Bazaar)

before uploading the object, or will the object be uploaded then a 'relationship' record created between one or more existing objects. How will this 'relationship' record be presented in terms of the deposit workflow at steps such as 'save for later', 'deposit', 'edit', and 'public'.

- It may be necessary to investigate how the application of hierarchical relationships could be managed retrospectively as presumably it will depend on a case-by-case basis how existing objects have been catalogued. For example an existing object could be a book or an exhibition which has one metadata record but several images uploaded to the one record.
- It is important that adequate data controls are in place at time of data entry. For example the existing project field does not have a naming convention; data entered is freetext and case sensitive; there is no look-up function for existing projects. This can lead to the same project having several different names.
- This technical enhancement will not deal with issues discussed elsewhere regarding version control, this is partly as this is unique to each institution, and also because it is out of the scope of this enhancement.

### **Tool Two: a 'kulturised' version of the IRStats plugin**

#### **The problem**

Being able to provide usage statistics to encourage use and engagement with repositories is an important key in advocacy to increase arts research deposit. Members of the Kultur II Group at the meeting on the 28<sup>th</sup> February were impressed with the existing features of the IRStats plugin as demonstrated by Graham Stone from the University of Huddersfield. It would be good to develop the IRStats plugin further to create even more visual representations of the statistics e.g. instead of static flags for each country, different sized flags depending on the stats, with the largest flag showing the highest stats.

#### **Requested functionality**

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- Enhancements to be visually appealing and attractive in order to meet the needs of the visual and creative arts community.

#### **Known issues**

- Consideration to be given to existing EPrints functionality that may not be currently utilised by the demonstrator, and to forthcoming developments and upgrades such as the EPrints Bazaar<sup>6</sup> in order to avoid duplication of effort.

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<sup>6</sup> [http://wiki.eprints.org/w/The\\_EPrints\\_Bazaar](http://wiki.eprints.org/w/The_EPrints_Bazaar)

- Consideration to be given to the existing installations of IRStats by members of the Kultur II Group e.g. University of Huddersfield.
- A recent issue identified at the Queen Margaret University, Edinburgh is a problem installing MePrints with IRStats. The University of Southampton are aware of the 'Can't find IRStats module' error.

### Timescale

- ✓ Technical workshop took place on 11<sup>th</sup> January 2011, minutes of findings circulated to Kultur II Group at kultur@jiscmail.ac.uk
- ✓ Recruitment of Technical Developer in progress.
- ✓ Technical specification to be circulated to the Kultur II Group at kultur@jiscmail.ac.uk for feedback and comments.
- Upgrade of EPrints demonstrator platform to occur early April 2011.
- Last Kultivate community-led meeting to be held on 24<sup>th</sup> May to include progress report on technical enhancements to Advisory Group.
- Technical enhancements to be demonstrated (beta version) at end of project conference on Friday 15<sup>th</sup> July 2011.