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## UCARIS – Making the most of your current resources

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### Abstract

This paper outlines the work carried out by the project team over the last three years to develop an in-house current information management system, focused on the specific need to gather information from across various departmental databases to fulfil the research excellence framework requirements for a specialist arts institution.

The overall objective of the project was to support the university's successful submission to the REF2014 in November 2013. The system was used to collate relevant information from various institutional databases and transfer this to the Higher Education Funding Council for England (HEFCE) Submission System, thereby increasing institutional efficiency by reducing repetition of data entry and saving time in checking and organising information.

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### 1. Introduction

The University for the Creative Arts (UCA) is a leading art and design university in the south of England with campuses in Canterbury, Epsom, Farnham, Maidstone and Rochester. The origin of the university lies in a number of independent public art and design colleges in the counties of Kent and Surrey, almost all of which had origins in the nineteenth century<sup>1</sup>.

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As an active research institution UCA participates in the national assessment of research quality, the latest of which, the Research Excellence Framework (REF) is currently underway and outcomes of which be made known at the end of 2014. The Higher Education Funding Council for England (HEFCE) provides research funding according to the quality and score achieved during the assessment period, normally the previous 5 to 6 years<sup>2</sup>.

In 2008, at the end of the previous assessment exercise, the university received a couple of recommendations to inform and support its future submissions. These indicated that the university needed to have: its own institutional repository, and a system, which could effectively support future submissions. Although successful in its assessment return, the university recognised that its existing process of collecting the information needed for the submission was both lengthy and repetitive.

In 2007 the university participated in the Kultur Consortium (a partnership lead by the University of Southampton, in collaboration with University for the Creative Arts, University of the Arts London and Winchester School of Arts (part of the University of Southampton) and received funding from Jisc under its Repository Start-Up and Enhancement strand. The project aimed at creating a transferable and sustainable institutional repository model for research outputs in the creative and applied arts, a discipline area where repository practice was very underdeveloped. As a result of this work, using the enhanced EPrints platform, in 2010 UCA launched its institutional repository under the name of UCA Research Online (UCARO)<sup>3</sup>.

## 2. UCARIS

In 2010 funds were secured to develop the university's Research Information System (UCARIS). Its objective was to gather relevant information from across the university in preparation for the submission to the Research Excellence Framework (REF 2014). The project proposed the development of a comprehensive, university wide research information system using the EPrints repository platform as a base.

As well as being seen as critical for the REF submission, the overarching approach of the implementation of UCARIS was that there should be 'one input, many outputs', in order to minimise the burden on academics and administrators in producing publications and reports for other internal and external purposes.

Due to the costs and particular requirements of the university, UCARIS is one of the few solutions developed 'in house' rather than purchasing a commercial system. The international interest that UCARIS demonstrated over the past three years shows the uniqueness of a specialist visual arts institution solving a specific problem using data mining and reusing research information from different sources.

In preparation for the REF, the Centre for Digital Scholarship at UCA worked with all the relevant internal departments across the university and the Electronics Department at the University of Southampton to develop the EPrints REF plugin to meet the university's and REF requirements. As a result the university now has an appropriate publications strategy and a research information system that is flexible enough to return any publication data that the REF may require within the relevant units of assessment.

### 2.1. *The Schedule*

The project started in September 2010 and it was divided in three phases – planning, development and deployment. The project was officially signed off in September 2013 and the REF2013 submission was made on 28th November 2013.

Phase 1 (2010/11) focused on investigating requirements both for the REF and appropriate solutions; technical enhancements to the institutional repository's underlying infrastructure, including updating its software, LDAP integration, and installation of additional tools; and identifying and meeting skills requirements.

Phase 2 (2011/12) focused on the technical implementation and development of the approved solution; gathering relevant information and documentation from specified fields within university databases in accordance with the REF requirements; and making the data available in one single secured place and testing the approved solution.

Phase 3 (2012/13) focused on interface and security tests; bug fixes; training key stakeholders; and supporting the final submission process.

As part of the project, it was acknowledged that the institutional repository UCA Research Online (UCARO) was going to play a key role in the REF submission by providing content in terms of research outputs and staff profile information, neither of which was available in other institutional systems.

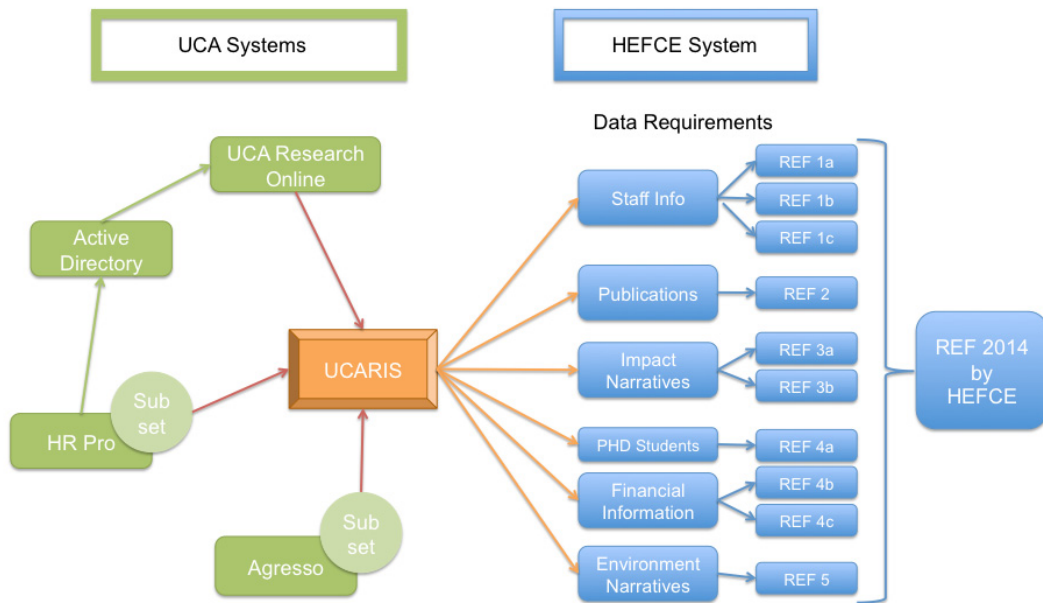


Fig. 1. UCARIS Interfaces

The flexibility of EPrints to harvest data from other systems and ‘push’ processed information both back to these and on to other systems meant that the development of UCARIS would ensure the university had an appropriate research information system capable of supporting its REF submission with potential to support and grow in future to meet new challenges and opportunities.

UCARIS is mainly formed by the adapted REF plugin (Fig.1), which harvests the different information needed to produce a coherent report and then submit it to the different sections on the (HEFCE) Submission System. These reports can be tailored to fit any data required where the REF Plugin has access<sup>4</sup>.

Furthermore, UCARIS is able to harvest specific content from datasets instead of connecting directly to a database. This minimised the risks associated with handling confidential and researcher information on the same infrastructure as UCA Research Online, and enabled the setting up of separate permissions to add, modify and delete data without interfering with production data.

## 2.2. *Communications Strategy*

The project team worked with the UCARIS Steering Group, which consists of key stakeholders including representatives from the Library, Human Resources, Marketing, IT Services and the Research Office. The Steering Group proposed the creation of a Project Board comprising members of IT Services and the Library in order to ensure the successful delivery of the technical components of the project. The project reported to other interested parties via the university committee structure, particularly the Value for Money Group and the IT Strategy Group.

The team successfully submitted a paper and presented at the Open Repositories 2013 in Prince Edward Island in Canada exposing and promoting the specific development work carried by UCA and EPrints to accomplish this project.

## 2.3. *Outcomes*

The project was successful in its overall objective to support the university's successful submission to the REF2014 in November 2013. The system was used to collate relevant information from various institutional databases and transfer this to the Higher Education Funding Council for England (HEFCE) Submission System, thereby increasing institutional efficiency by reducing repetition of data entry and saving time in checking and organising information.

## 2.4. *Lessons Learned*

The primary lesson learned was to narrow our requirements and focus to achieve the specific goal of the project – to provide the right tools for a successful submission of the REF2014. Originally we noticed that the software developed could be used for several other purposes, however we immediately realised that by broadening the scope we were losing focus. The project team agreed on a strategy to focus only on ensuring gathering and collating data essential to support the university's REF submission.

Collaborative working with colleagues and external service providers was critical but involved a lot of communication, planning and commitment from all the stakeholders involved. By providing a clear plan and agreement of timings, responsibilities and schedules the project was allowed to flow its course as expected.

## 2.5. *Future*

The university has already started planning for REF2020 and the most obvious solution is to learn and build upon the success of UCARIS and develop it into a more comprehensive Current Research Information System (CRIS), which appears to be the sector wide preferred route. If the university follows in a similar fashion, development and enhancement will include feeding data to other internal and external university systems to support and enhance marketing, learning, teaching and knowledge transfer activities as shown in figure 2. There is further potential for integration with other systems as required, using, CERIF, SWORD2 and OAI-PMH protocols.

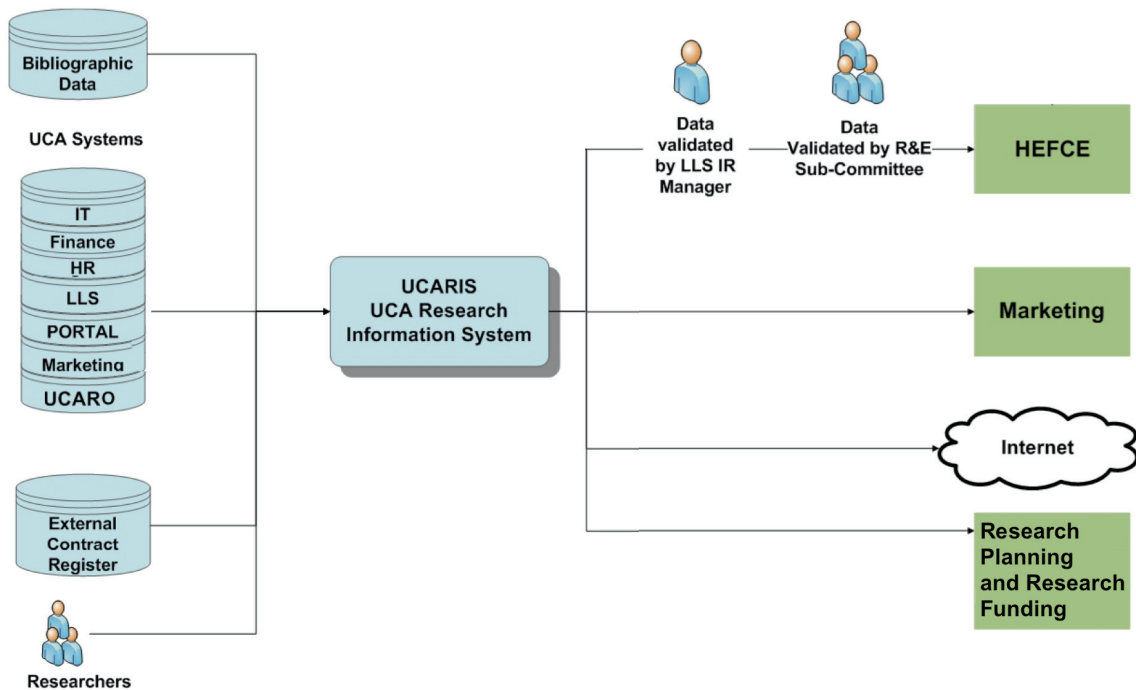


Fig. 2. UCARIS Future

### 3. Conclusions

UCARIS has ensured that the university had a system not only capable of generating its research outputs but also enhanced and enabled the deposit of these and related data into the (HEFCE) Submission System.

Further, UCARIS is able to gather specific information from different areas and departments and therefore provide a single point for analysing institutional data. This can be used to make decisions regarding marketing, review research targets, and inform and support internal planning and research funding.

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