

JISC DEVELOPMENT PROGRAMMES

Project Document Cover Sheet

REMAP - PROJECT PLAN

Project

Project Acronym	REMAP	Project ID	
Project Title	REMAP - Using a digital repository to support the embedding of records management and digital preservation within the institution		
Start Date	1 st April 2007	End Date	31 st March 2009
Lead Institution	University of Hull		
Project Director	Ian Dolphin		
Project Manager & contact details	Richard Green r.green@hull.ac.uk		
Partner Institutions	Spoken Word Services (Glasgow Caledonian University)		
Project Web URL	www.hull.ac.uk/remap		
Programme Name (and number)	Repositories and Preservation Programme: Digital Preservation and Records Management		
Programme Manager	Helen Hockx-Yu		

Document

Document Title	Project Plan		
Author(s) & project role	Richard Green (Project Manager)		
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Document History

Version	Date	Comments
0.1	23/03/2007	First draft
0.9	17/04/2007	Post-start meeting draft
1.0	24/04/2007	Version 1.0 for the JISC



1. Background

1.1 The JISC has, over the past few years, funded a wide range of projects in the records management and digital preservation^{i,ii,iii} (RMDP) arena, and established much good practice and knowledge. Many of the projects have worked on the basis of there being an acceptance that interaction with a repository for RMDP is a good thing. The work carried out has certainly demonstrated that this is the case. However, there remains a potentially damaging disconnect between the repository and the people expected to use it on a regular basis.

1.2 Work in Australia has sought to address this in one way, by developing tools that allow files to be transformed into XML, currently viewed as the most stable format for preservation purposes, for example the XENA^{iv} and ICE^v projects. DSpace has developed its Lightweight Network Interface (LNI)^{vi} based on WebDAV to enable external interaction with a DSpace repository. The JISC-funded PRESERV^{vii} project has, though, recently identified Web services as potential candidates for enabling the development of distributed preservation services^{viii}, recognising that not all preservation functionality can be delivered locally within a digital repository. The National Archive's (TNA) PRONOM service is a tool that has its origins in web-based and desktop delivery, but is currently being developed further to deliver the PRONOM file format services as Web services by mid-2007. This work is building on previous work within the PANIC project at the University of Queensland^{ix} on a Web services architecture for preservation services, and the current work of the EU PLANETS project^x (in which TNA is a partner). Web services development to support records management, a specific form of preservation, has so far tended to be through the provision of commercial systems, though there is potential applicability of preservation Web services to be focused around specific records management needs

1.3 Web services, whilst offering great potential, do not in themselves offer integration between a digital repository and the desktop applications used to create digital materials. This gap can, though, be addressed through notifications, alerting material owners and/or creators to specific records management and/or digital preservation tasks that need to be carried out. The repository can thus enter into an engagement with the end-user in order to encourage RMDP processes over a period of time. RSS is an XML format that can be used for such notifications: it is also a simple Web service and can be used to communicate between the repository and end-users, guiding them through the RMDP processes required wherever human input is required.

1.4 The JISC-funded RepoMMan project^{xi} based at the University of Hull has developed a tool to orchestrate Web services using WSBPEL over a Fedora repository^{xii}. The REMAP project will enhance this tool to work with the PRONOM file format Web services, and others where available, including policy acceptance (e.g., through use of the PLEDGE work at MIT and the San Diego Supercomputer Center (SDSC)^{xiii}) and metadata submission and creation. This work will be based on user requirements for institutional RMDP and the development of related models describing RMDP workflow. The project will develop a notification layer as part of the overall orchestration, using RSS to inform users of repository tasks that require their attention and encouraging their engagement with the system. Such notifications will be provided through incorporation of a persistence layer to underpin the orchestration as a whole and address RMDP requirements over time. Technical developments and the relationship between records management and digital preservation will be validated with a range of institutional end users and iteratively enhanced to take on board user feedback.

2. Aims and Objectives

2.1 The REMAP project has the following aims:

- To develop institutional RMDP workflow(s) models in order to understand how a digital repository can support these activities
- To embed digital repository interaction within working practices for RMDP purposes
- To further develop the use of a WSBPEL orchestration tool to work with external Web services, including the PRONOM Web services, to provide appropriate metadata and file information for RMDP
- To develop and test a notification layer that can interact with the orchestration tool and allow RSS syndication to individuals alerting them to RMDP tasks
- To develop and test an intermediate persistence layer to underpin the notification layer and interact with the WSBPEL orchestration tool to allow orchestrated workflows to take place over time
- To test and validate the use of the enhanced WSBPEL tool with institutional staff involved in RMDP activities

2.2 These aims will feed into and help achieve the project's objectives:

- To raise the profile of records management and digital preservation and how it can become a part of regular working practices through interaction with a digital repository
- To better understand how WSBPEL can be used in a real world scenario to support records management and digital preservation
- To test and demonstrate how the Fedora digital repository system can be used to support records management and digital preservation within institutional practices

3. Overall Approach

3.1 The project will use a methodology that has been tried and tested in past successful projects carried out at the University of Hull. This places the user at the centre of technical development, to ensure that the development that does take place is relevant for the purpose at hand.

3.2 REMAP's first phase will start with an investigation of user requirements for embedding RMDP into regular day-to-day working practices. 'Users' in this context will be the institutional Records Manager and Archivist plus a range of departmental staff with a responsibility for addressing these issues at the University of Hull, and library staff within Spoken Word Services involved in implementing records management and long-term preservation at Glasgow Caledonian University. The requirements gathered will inform the development of workflow(s) that are undertaken or which need to be undertaken to bring about successful use of a repository to support RMDP. User information gathered will be contrasted and combined with user data and related information gathered elsewhere, through desk research, on workflows for RMDP, particularly within an institution, e.g., through sources such as the Digital Preservation Coalition^{xiv} and the Digital Curation Centre^{xv}. The inclusion of two project partners will provide validation of the project's findings and the technical developments, and exemplars of a range of different scenarios for RMDP covering multiple content types.

3.3 The user data will inform the second phase of the project, which will be centred round technical enhancement of the RepoMMan orchestration tool to put the workflows

into practice. Although not wishing to pre-empt the user requirements work, the technical work will include interaction specifically with the forthcoming PRONOM Web services to establish how they can be fed into institutional processes. Work will also be carried out to identify available Web services and gaps where Web services do not currently exist. Applying the outputs of the project to other repository environments is also key and an investigation of WebDAV in a WSBPEL context will be undertaken to identify potential for applying orchestration over the DSpace Lightweight Network Interface.

3.4 Technical work will be carried out on an iterative basis to allow testing and validation by users to ensure the orchestration tool and Web services are meeting needs in a third phase. The project will seek to develop a mature understanding of the services needed to facilitate interaction with a repository via Web services for RMDP and how these should be orchestrated to meet the desired workflow(s).

4. Project Outputs

4.1 The REMAP project will produce the following project outputs:

- User requirements report for carrying out RMDP processes at an institutional level
- Workflow model(s) for embedding RMDP based on these requirements and associated desk research
- A report on the availability of Web services to support RMDP and a gap analysis where services do not exist
- An enhanced version of the RepoMMan Web services orchestration tool to enable these workflows, working in particular with the PRONOM Web services to provide format information
- A web interface to the tool for end-user interaction
- A loosely coupled notification layer using RSS to provide alerts to users on RMDP tasks
- A report and demonstration of the presentation of personal RSS alerts based on personal metadata profiles within an institutional portal
- A persistence layer to underpin these notifications over time act as the connection with the WSBPEL orchestration tool
- An investigative report on the use of WebDAV within the orchestration tool to support interaction with applications
- A report on the user testing and validation carried out to ensure the technical development is meeting users needs
- Open source code that can be adopted by the wider community
- Periodic reports on the Fedora Wiki

5. Project Outcomes

5.1 The outputs described above will allow the REMAP project to bring about two key outcomes. The project will increase acceptance that RMDP are activities that can be undertaken as part of regular working practices, and that a repository can be used as the basis for this. This outcome will emerge from the technical development that underpins this project, and which provides the second outcome. The project will provide a richer understanding of the use of WSBPEL to help orchestrate a series of Web services that can intermediate between users and a repository. In doing so, it will encourage adoption of Web services by showing how they can be used in a controlled and coherent way, irrespective of where they are located.

6. Stakeholder Analysis

Stakeholder	Interest / stake	Importance
Institutional managers	Ability to enhance institutional information management and ensure digital materials and records are managed and preserved as required.	Medium
Archivists/Those with responsibility for institutional digital preservation	Ability to position digital preservation in day-to-day activity and ensure a long-term record of the institution's activity	High
Records managers	Ability to position records management in day-to-day activity and ensure accurate recording of relevant documents for management and legal compliance	High
Repository managers and repository community	Ability to demonstrate the use of a digital repository for RMDP and embed interaction with the repository in regular working practices	High
End-users:	Ability to engage with a digital repository to assist in managing digital materials over time through periodic notifications	Medium/High
- Academics	Ability to interact with a repository for the purposes of managing their digital materials, incorporating RMDP processes over time where applicable.	Medium
- Administrative staff	Ability to interact with a repository for the purposes of managing the digital materials they have responsibility for, incorporating RMDP processes over time where applicable.	Medium
Fedora community	Ability to demonstrate the usefulness of Fedora within an institutional setting for RMDP as a regular working practice	Medium

7. Risk Analysis

Risk	Probability (1-5)	Severity (1-5)	Score (P x S)	Action to Prevent/Manage Risk
Staffing				
Staff retention	1	3	3	All proposed staff for the project are in place. Staff will be managed to ensure they are comfortable with the work and to highlight any difficulties early
Staff absence (e.g., due to sickness etc.)	1	3	3	The work of the project will be reported and cascaded within both the University of Hull and Glasgow Caledonian to ensure other staff can pick up the project in case of core staff absence
Organisational				
Work too focused on requirements at Hull	2	4	8	The Hull requirements will be cross-checked with requirements at Glasgow Caledonian to identify generic elements and prevent over-specialisation at Hull. The project will also reflect requirements back to the community to get peer review
Misunderstanding or disagreement between project partners	2	4	8	Partners have established links and a close working relationship to date. Problem reporting within either partner will be encouraged at an early stage to help identify solutions. A consortium agreement will be signed agreeing each partner's role and responsibilities within the project
Technical				
WSBPEL doesn't meet requirements	2	5	10	Experience within the RepoMMan project has validated the initial choice of WSBPEL and demonstrated its capabilities. The project will engage in the WSBPEL community to resolve any issues that might arise
RSS notification and persistence layer fails to meet requirements	2	4	8	The iterative approach to development and user testing will allow comments to be fed back in good time and adjustments made to the RSS and persistence layers
Process				
User requirements are not clear enough to inform workflow development	2	3.5	7	We will work with users with identified institutional needs who have an interest in a working solution. The first six months of the project are dedicated to this activity to ensure a detailed picture is drawn up to inform technical development

8. Standards

Name of standard or specification	Version	Notes
WSBPEL	2.0	WSBPEL is a standard originating from IBM designed to orchestrate Web services so as to support business transactions. WSBPEL is now an OASIS standard.
Web services	N/A	A collection of standards that help to support interoperable machine-to-machine communication over a network, commonly implemented using the Web Services Description Language (WSDL) and based on XML
RSS	Various	RSS is an XML-based syndication format that enables focussed information to be sent to an individual or group
ATOM	1.0	Another syndication format allowing focussed information delivery
SOAP	1.2	SOAP is the protocol that the WSBPEL Web services communicate through

8.1 The Fedora digital repository system has adopted open standards wherever possible in its development. It is built in Java, it makes widespread use of XML standards, and it has the capability of storing many different metadata streams based on different standards (e.g., Dublin Core and METS). It is conformant with the OAI-PMH 2.0 protocol and can be used to generate RSS feeds. It also has standard Web service APIs to support all management and access functions, which have been used as the basis for the orchestration tool developed within the RepoMMan project.

9. Technical Development

9.1 Technical development within REMAP will follow an iterative agile development process, with the aim of receiving feedback from users to help inform subsequent development and ensure the tools developed meet stated needs. The project will base its investigations of orchestrating Web services on the Fedora digital repository system (as described above), using the Web service APIs this provides. Basing the orchestration on WSBPEL provides repository platform independence, though, and will allow the tools developed to be used over other repositories where Web service APIs are available. In particular, DSpace's Lightweight Network Interface, based on WebDAV, provides potential applicability over DSpace, and the project will investigate the use of WebDAV within WSBPEL to explore this.

10. Intellectual Property Rights

10.1 The University of Hull and Glasgow Caledonian University will retain rights in all outputs in accordance with the terms of the consortium agreement to be agreed at the start of the project. In accordance with the Terms & Conditions of JISC grants, all project outputs will be made available, free at the point of use, to the UK HE and FE community in perpetuity, and may be widely disseminated in partnership with the JISC. The code produced by the project will be released under an appropriate open source license, to be determined as part of Workpackage 10.

Project Resources

11. Project Partners

11.1 University of Hull

Project management, requirements gathering, workflow development and user testing, technical development and investigations, and the dissemination and evaluation activities.

Contact: Ian Dolphin, Project Director (i.dolphin@hull.ac.uk)

11.1.1 Richard Green, IT Consultant (subcontractor)

Project management and coordination on behalf of the University of Hull.

Contact: Richard Green, Project Manager (r.green@hull.ac.uk)

Note: This is the main project contact

11.2 Spoken Word Services, Glasgow Caledonian University

Requirements gathering, workflow development and user testing, technical investigation, validation activities, dissemination and evaluation activities.

Contact: Iain Wallace, Project Manager for GCU work (iain.wallace@gcal.ac.uk)

11.3 Consortium Agreement

The Consortium Agreement was signed on 13th April 2007.

12. Project Management

12.1 The project will be led and managed by the University of Hull, with Richard Green acting as the main contact with JISC and coordinator of the project's work. Ian Dolphin as Project Director will oversee the project. Simon Lamb will report to Richard throughout the technical development. Other University of Hull staff will act as advisors and contributors to the project as required and described above. Glasgow Caledonian University staff within Spoken Word Services will contribute to the project in the first and third phases, establishing their requirements for RMDP and testing and validating the RepoMMan orchestration tool over their Fedora repository to support these requirements. There will be regular contact between Iain Wallace and Richard Green to ensure the project schedule is met and meetings organised at the beginning of each phase to ensure project partners and staff are up-to-date with progress and current work to be undertaken.

12.2 University of Hull based staff

Ian Dolphin, Project Director	i.dolphin@hull.ac.uk	
Richard Green, Project Manager (0.5FTE)	r.green@hull.ac.uk	(subcontractor)
Chris Awre, Repository Domain Specialist	c.awre@hull.ac.uk	
Robert Sherratt, Technical Advisor	r.sherratt@hull.ac.uk	

Simon Lamb, Software Developer	s.lamb@hull.ac.uk
Judy Burg, University Archivist	j.burg@hull.ac.uk
Vicky Mays, University Records Manager	v.mays@hull.ac.uk

12.3 Glasgow Caledonian University staff

David Donald, Project Director for GCU	D.Donald@gcal.ac.uk
Iain Wallace, Project Manager for GCU	iain.wallace@gcal.ac.uk
Graeme West, Technical lead for GCU	graeme.west@gcal.ac.uk

13. Programme Support

The project team would be grateful if the JISC would:

- provide adequate advanced notice of programme meetings and non-standard reporting requirements
- provide a facility for interaction with other projects in this and related programmes
- identify potential areas of collaboration or communication with projects in other programmes
- formally support the establishment of links with other initiatives

14. Budget

See Appendix A

Detailed Project Planning

15. Workpackages

See Appendix B.

16. Evaluation Plan

Timing	Factor to Evaluate	Questions to Address	Method(s)	Measure of Success
October 2007 (end of requirements gathering phase)	User requirements gathered and models emerging from these	Are the outcomes fit for the project; are they useful to the community?	Internal project feedback between partners	A clear set of user requirements and models that the technical development can be based on
March 2009 (end of initial technical development phase)	Technical development	Is the technical development fit for purpose; has the project achieved its aims?	Internal valuation between partners and external check with Programme Manager	Working tool that can be used in testing and validation
March 2009 (end of user testing and validation phase)	User testing/validation and iterative development to meet needs	Has the project met its objectives; has the agile development been successful?	Internal project feedback between partners; community feedback	Successful end/wrap-up of the project; adoption of the project outputs institutionally

17. Quality Plan

Output	D1 Report on user requirements for RMDP				
Timing	Quality criteria	QA method(s)	Evidence of compliance	Quality responsibilities	Quality tools (if applicable)
October 2007	FFP	Peer review* and comment from Programme Manager	Acceptance by reviewers	RG	

Output	D2 Series of workflow models to reflect different RMDP requirements				
Timing	Quality criteria	QA method(s)	Evidence of compliance	Quality responsibilities	Quality tools (if applicable)
November 2007	FFP	Peer review* and comment from Programme Manager	Acceptance by reviewers	RG	

Output	D3 Technology watch report				
Timing	Quality criteria	QA method(s)	Evidence of compliance	Quality responsibilities	Quality tools (if applicable)
November 2007 (and iteratively in November 2008 and March 2009)	Meets project and community needs	Community peer review	Community feedback	RG with CA	

Output	D4/D5 Demonstration and report of enhanced RepoMMan tool				
Timing	Quality criteria	QA method(s)	Evidence of compliance	Quality responsibilities	Quality tools (if applicable)
March 2009	FFP	Peer review* and comment from Programme Manager	Acceptance by reviewers	RG	

Output	D6 Report on feasibility of using WebDAV with BPEL				
Timing	Quality criteria	QA method(s)	Evidence of compliance	Quality responsibilities	Quality tools (if applicable)
April 2008	FFP	Peer review* and comment from Programme Manager	Acceptance by reviewers	RG with CA	

Output	D7 Report on user testing and validation				
Timing	Quality criteria	QA method(s)	Evidence of compliance	Quality responsibilities	Quality tools (if applicable)
March 2009	FFP	Peer review* and comment from Programme Manager	Acceptance by reviewers	RG	

* - Peer review to be sought from related projects within the Digital Preservation strand of the Repositories Programme, in consultation with the JISC Programme Manager

18. Dissemination Plan

Timing	Dissemination Activity	Audience	Purpose	Key Message
April 2007	A project website will be established and updated regularly.	General community	Awareness Inform Engage Promote	Information about REMAP & RMDP
As appropriate	Appropriate papers at conferences/meetings in the following areas: repositories (eg Open Repositories 2008), Fedora, (eg Fedora UK & Ireland User Group meetings), information management, SOA, web services, RMDP	Archivists; Records managers; Repository managers and repositories community	Engage Promote	Information about REMAP & RMDP
JISC calendar	Programme meetings	JISC; Repository managers and community	Engage Promote	Sharing experience
As appropriate	An article in an appropriate journal, eg Ariadne	General community	Inform	Information about REMAP & RMDP
As appropriate	Engagement and mutual dissemination with complementary JISC projects and services (incl. JISC InfoNet)	Repository managers and repositories community	Awareness Inform Engage Promote	Sharing experience and promoting information about REMAP & RMDP
As appropriate	Engagement with Fedora and broader Open Source communities via conferences, meetings and discussion lists	Repository managers and repositories community	Awareness Inform Engage Promote	Information about REMAP & RMDP

19. Exit and Sustainability Plans

19.1 The project and project outputs will be sustained via a number of routes. All reports will be made available through the project and JISC websites. The experience and workflows will be embedded within the project partner institutions to enable more effective RMDP for the future: the project will provide an impetus and platform to build on the buy-in already established. All code developed will be made available via an appropriate open source licence (see Workpackage 10). The project is anticipated also to raise a number of questions as much as provide answers, and recommendations for further work will be provided to assist the JISC and the community in planning ongoing activity.

Project Outputs	Action for Take-up & Embedding	Action for Exit
Reports	Effective dissemination within JISC and the wider repositories community	Ensure final versions on Project and JISC websites
Experiences and workflows	Involvement of stakeholders throughout project; document progress on website and Fedora wiki; incorporation within project reports	Ensure up-to-date
Code	Effective dissemination within JISC and the wider repositories and HE/FE community	Ensure final versions available through appropriate open source route(s) with documentation

Project Outputs	Why Sustainable	Scenarios for Taking Forward	Issues to Address
Reports	Ongoing usefulness	Project and JISC websites	
Experiences and workflows	Embedded in institutions	Project and JISC websites, other dissemination	
Code	Ongoing usefulness	Open source distribution	Appropriate licensing arrangements

Appendix B. Workpackages

REMAP Project 1st April 2007 - 31st March 2009 (24 months)		2007									2008											2009			
		A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
WP1	Project management																								
WP2	Records management & preservation requirements																								
	D1 <i>Report on user requirements for RMDP, identifying the overlap between these and the different needs of different parts of an institution, and a series of identified use cases</i>																								
WP3	Records management and preservation workflow																								
	D2 <i>A series of workflow models to reflect the different RMDP requirements within an institution</i>																								
WP4	Records management and preservation web services inte																								
	D3 <i>Technology watch report on available web services that can be used to support institutional RMDP needs in the context of a digital repository</i>																								
WP5	Technical development																								
	D4 <i>Enhanced RepoMMan tool with loosely coupled notification layer and intermediate persistence layer, capable of orchestrating appropriate web services to meet varied RMDP needs.</i>																								
	D5 <i>Demonstration and report of delivering notifications through personal RSS within an institutional portal based on personal metadata profiles</i>																								
WP6	Investigation of WebDAV in the context of BPEL to enable																								
	D6 <i>Report on the feasibility of using WebDAV within the context of BPEL</i>																								
WP7	User testing and validation																								
	D7 <i>Report on the results of user testing and validation</i>																								
WP8	Dissemination																								
WP9	Evaluation																								
WP10	Code availability																								

Workpackage and activity	Earliest start date	Latest completion date	Outputs	Milestone	Responsibility
YEAR 1					
WORKPACKAGE 1: <i>Project management</i>	01/04/07	31/03/09			ID, RG, IW
1. Interim project report 1				30/09/07	RG
2. Interim project report 2				31/03/08	RG
3. Interim project report 3				30/09/08	RG
4. Final project report and completion report				31/03/09	RG
WORKPACKAGE 2: <i>Records management & preservation requirements</i>	01/05/07	31/10/07			
5. Carry out a series of focus groups and meetings with key institutional users to identify their requirements for RMDP, including the University of Hull's Archivist and Records Manager and departmental users				31/05/07 Participating departments identified and primed 31/07/07 Detailed interviews complete	JB VM (RG CA)
6. Spoken Word Services will assess their own requirements in the context of providing a multimedia information service.				31/07/07 SWS submit their requirements to Hull	DD IW

7. Cross-checking of identified partner requirements				31/08/07	RG CA DD IW
8. Input from users will be complemented by desk research to identify existing information on institutional RMDP workflows.				30/09/07	CA (with input from ALL as information identified)
9.			A report on user requirements for RMDP, identifying the overlap between these and the different needs of different parts of an institution, and a series of identified use cases.	31/10/07	RG with CA JB VM DD IW
WORKPACKAGE 3: <i>Records management and preservation workflow</i>	01/07/07	30/11/07			
10. WP3 will take the outputs from WP2 and develop a series of workflow models based around the use cases and requirements identified to act as the basis for developing tools to help put these workflows into practice.					RG with CA JB VM DD IW
11.			A series of workflow models to reflect the different RMDP requirements within an institution		RG with CA JB VM DD IW

<p>WORKPACKAGE 4: <i>Records management and web services integration</i></p>	<p>1/10/07</p>	<p>30/11/07 then review 30/11/08 and project end</p>			
<p>12. Desk research to identify available Web services in the realm of RMDP, to inform the technical development and map against the identified workflow models.</p>					<p>CA with RG RS SL IW GW</p>
<p>13.</p>			<p>A technology watch report on available Web services that can be used to support institutional RMDP needs in the context of a digital repository</p>		<p>CA with RG RS IW</p>
<p>WORKPACKAGE 5: <i>Technical development</i></p>	<p>1/10/07</p>	<p>31/03/09</p>			
<p>14. Take the user input from earlier workpackages and use this to inform the enhancement of the RepoMMan tool to support RMDP needs</p>				<p>Start meeting mid 09/07</p>	<p>RG CA RS SL</p>
<p>15. Develop the notification layer and underlying persistence layer to help support RMDP workflow over a period of time.</p>					<p>RG RS SL CA</p>
<p>16.</p>			<p>Enhanced RepoMMan BPEL orchestration tool, with loosely coupled notification layer and intermediate persistence layer, capable of orchestrating appropriate Web services to meet varied RMDP needs.</p>		<p>RG RS SL</p>

17.			Demonstration and report of delivering notifications through personal RSS within an institutional portal based on personal metadata profiles.		RG RS SL CA
WORKPACKAGE 6:					
<i>Investigation of WebDAV in the context of BPEL to enable links to applications</i>					
	01/03/08	30/04/08			
18. Short technical examination of WebDAV in the context of BPEL to investigate the capability of enabling orchestration activities from within desktop applications					RG RS SL
19.			A report on the feasibility of using WebDAV within the context of BPEL		RG with RS
WORKPACKAGE 7:					
<i>User testing and validation</i>					
	01/03/08	31/03/09			
20. Test the applicability of the orchestrations enabled through the RepoMMan tool in the context of the use cases and workflows identified earlier in the project. This user testing will take place on an iterative basis in order to inform subsequent development.				Start meeting mid 02/08	CA RG RS JB VM DD IW (SL GW)
21.			A report on the results of the user testing and validation		RG with CA DD IW

WORKPACKAGE 8:	01/04/07	31/03/09			
<i>Dissemination</i>					
22. Dissemination paths will be focused around a project website, and aim its efforts at the JISC community, the RMDP communities, the digital repository community, and the Fedora community. Dissemination opportunities will be identified by all involved in the project to reach the widest possible audiences within the constraints of project timing and budget.			Dissemination opportunities and wide awareness of the project's work		All
23.			Project website	21/04/07	RG
WORKPACKAGE 9:	01/04/07	31/03/09			
<i>Evaluation</i>					
24. Evaluation will take place through a variety of routes: through the users taking part in the user requirements and testing; through communication between project partners; through contact with the JISC; and through dissemination to peers.			A successful project meeting the needs of all stakeholders		All

WORKPACKAGE 10:	01/10/07	31/03/09			
<i>Code availability</i>					
25. Identify appropriate Open Source Licence for code distribution				01/10/07	RG CA RS DD IW
26. Code available for others to use throughout the period of technical development. The code itself will consist of two types: that supporting the generic workflow (the workflow tool) and that providing the specific orchestrations to meet workflow requirements.					SL GW RS IW (RG)
27.			Code for other projects to benefit from, released using an appropriate open source licence in accordance with JISC guidelines		RG RS SL

University of Hull

ID Ian Dolphin, Project Director
 RG Richard Green, Project Manager (0.5FTE)
 CA Chris Awre, Repository Domain Specialist
 RS Robert Sherratt, Technical Advisor
 SL Simon Lamb, Software Developer
 JB Judy Burg, University Archivist
 VM Vicky Mays, University Records Manager

Glasgow Caledonian University

DD David Donald, Project Director for GCU
 IW Iain Wallace, Project Manager for GCU
 GW Graeme West, Technical lead for GCU

References

- ⁱ Digital Preservation and Records Management Programme, http://www.jisc.ac.uk/whatwedo/programmes/programme_preservation.aspx
- ⁱⁱ Supporting Institutional Records Management Programme, http://www.jisc.ac.uk/whatwedo/programmes/programme_supporting_irm.aspx
- ⁱⁱⁱ Digital Preservation and Asset Management Strand, http://www.jisc.ac.uk/whatwedo/programmes/programme_preservation/programme_404.aspx
- ^{iv} XENA project, <http://xena.sourceforge.net/index.html>. The XENA project at the National Archives of Australia provides a standalone tool that transforms a range of digital materials into XML. It uses the OpenOffice suite as the basis for this transformation, a good example of bringing different services together for a greater benefit.
- ^v ICE project, <http://ice.usq.edu.au/>. The Integrated Content Environment (ICE) project at the University of Southern Queensland takes this a step further and provides fixed templates for use in either Microsoft Word or OpenOffice Writer that can also act as the basis for transformation into XML and ingest into a repository.
- ^{vi} DSpace Lightweight Network Interface, <http://cwspace.mit.edu/docs/ProjectMgt/Reports/DSpaceUserGroupBergen2006/MIT-LNI-DSUG-Bergen2006.ppt.htm>
- ^{vii} PRESERV project, <http://preserv.eprints.org/>
- ^{viii} PRESERV project presentation, 'IRs: towards preservation services', <http://preserv.eprints.org/talks/hitchcock-jiscnew-251006.ppt>
- ^{ix} PANIC project, <http://www.itee.uq.edu.au/~eresearch/projects/panic/index.html>
- ^x PLANETS project, <http://www.planets-project.eu/>
- ^{xi} RepoMMan project, <http://www.hull.ac.uk/esig/repomman/>
- ^{xii} Fedora digital repository system, <http://www.fedora.info/>
- ^{xiii} PLEDGE project, <http://pledge.mit.edu/>
- ^{xiv} Digital Preservation Coalition, <http://www.dpconline.org/>
- ^{xv} Digital Curation Centre, <http://www.dcc.ac.uk/>