



**Project Document Cover Sheet**

Project Information			
<b>Project Acronym</b>	CUCKOO Project		
<b>Project Title</b>	Cardiff University Collaboration with KC-ROLO Organisational Objects		
<b>Start Date</b>	1 <sup>st</sup> April 2007	<b>End Date</b>	31 <sup>st</sup> April 2009
<b>Lead Institution</b>	Cardiff University		
<b>Project Director</b>	Ms Joan Wright		
<b>Project Manager &amp; contact details</b>	Graham Mason. Head of ICT, Kidderminster College. Market Street. Kidderminster. DY10 1LX. Tel 01562 512053 m: 07974351212		
<b>Partner Institutions</b>	Cardiff University, Kidderminster College		
<b>Project Web URL</b>	www.kidderminster.ac.uk/cuckoo		
<b>Programme Name (and number)</b>	e-Infrastructure VO Tools		
<b>Programme Manager</b>	James Farnhill		

Document Name			
<b>Document Title</b>	Project Plan		
<b>Reporting Period</b>			
<b>Author(s) &amp; project role</b>	Joan Wright (project Director) & Graham Mason (Project Manager)		
<b>Date</b>	30 June 2007	<b>Filename</b>	
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<b>Access</b>	<input checked="" type="checkbox"/> Project and JISC internal		<input type="checkbox"/> General dissemination

Document History		
Version	Date	Comments
1.0	30 June	Deliverable sent to JISC

## **Cuckoo Project**

### **Cardiff University Collaboration with KC-ROLO Organisational Objects**

#### **Tools for the Establishment of VOs**

## **Overview of Project**

### **1. Background**

Core middleware services such as identity management, directory, and authentication provide a foundation for secure, manageable applications throughout an institution/federation. However, with most institutional community collaborations, user confidentiality is a concern which presents a real problem to Virtual Organisations (VO's). Members could belong to more than one real organisation; such as Foundation Degree students within the HE-FE environment, who would move in and out of the federated structure. Wishing to share resources across these HE-FE institutional boundaries often raises problematic security difficulties as VO membership may be more (or indeed less formal) in a HE-FE environment. Cardiff University and Kidderminster College have been very active over the past three years in Shibboleth development and research.

Cardiff University (CU) is a major user of Identity Management (IDM) systems having just completed the second phase of a two phase IDM project. Phase one produced a system designed to be flexible and extensible, is connected to major business systems, and proved of great value to CU. Phase two introduced new features, and reworking some existing components given experience gained from the phase one. This already extensive understanding of IDM within CU allows us to be able to comprehensively identify and understand core issues surrounding IDM; and how IDM issues brought about by forming Virtual Organisations can be effectively solved.

Cardiff University's extensive experience with Federated Access Management (FAM),( "The Identity Project", a JISC funded project in collaboration with the London School of Economics) are currently investigating IDM across the UK academic world, looking at intra, and inter, institutional requirements of IDM. As Virtual Organisations are an aspect of inter-institutional management of identity and access; this project gels quite neatly with the existing work being done and will be able to offer an additional viewpoint.

### **2. Aims and Objectives**

The aim of the project is to research implement/demonstrate Shibboleth Virtual Organisations (VO's) and on-line collaboration tools. The project will build on and incorporate work already done, such as attribute release policy mapping that has been highlighted in the ShARPE and MyVOCS projects.

The project will research into how Shibboleth 2.0 will affect these tools and solutions. Within Virtual Organisations creating, managing, and supporting groups can be challenging. An open source toolkit such as Grouper is designed to function as the core element of a common infrastructure for managing group information across integrated applications and repositories. The project will research and report on these authorisation and service provisioning decisions, issues such as allowing portals to personalise content and provide role information to applications.

The project will have a number of key objectives:

- Review VO tools and concepts in place by other projects and catalogue the relevant data and findings of these projects, such as ShARPE's whose aim was to manage the creation and maintenance of user's attributes by Attribute Release Policy (ARP) mechanism bolted on to Shibboleth.
- To investigate good privacy protection for users, which in the Shibboleth Identity Provider (IdP) and Service Provider (SP) architecture, is based on individual access to a resource based on their role rather than their identity. How will this affect the HE-FE environment regarding the mapping of attributes from different schemas which can be problematic and complex?
- Review the selection of Virtual Organisation Tools and if there is a single tool or site that can satisfy all requirements and maintain the quality of collaboration. Will users suffer and collaborations be hampered if the wrong tools are selected.
- Highlight the difficult problems of tool selection, identity management and access control in both Shibboleth 1.3 and Shibboleth 2.0
- Investigate the management of permission and access control in a HE-FE environment with Signet tool, which provides a framework for transforming process and policies into rules that govern access to systems.
- Create demonstrators for JISC related events and documentation for both HE & FE

The project will produce some development by looking at simplifying the VO process giving a scalable platform for what we would call non traditional organisations who might be interested in purchasing/sharing content. Widening the access to other organisations such as SWITCH would also benefit.

### 3. Overall Approach

Common interests have always played a great part in forming institutional communities. This could relate to their locality within a region such as a University and their Further Education Colleges with regards to Foundation Degree students. Wider boundaries can break institutional structures by creating virtual communities with common interests and resources to share.

With the JISC launching its UK Federated Access Management for HE and FE in July 2008, VO's could play a significant part in allowing access to what could be called a non-traditional institutional access route. With this in mind, the CUCKOO project proposes to research, develop and report on what the future holds for VO's in this type of environment. The project will have two distinct phases:

Phase one of the project will consolidate and review existing national and international tools for the establishment and developments of Virtual Organisations (VO's), such as myVocs, Grouper and Signet. This will be achieved by researching, demonstrating, and producing papers/reports on how these tools and developments work in the real world of HE – FE. This will involve working with the community who would really benefit from the UK Federated Access Management structure – students and institutional staff.

The second phase will deal with the arrival of Shibboleth 2.0 and the potential new capabilities of Shibboleth 2.0 within Virtual Organisations; not forgetting that the UK Federated Access Management will stay with Shibboleth 1.3 for some time.

With the Shibboleth mantra of “open source, open standards, and open architectures”, we will explore how these new VO tools and developments aid or hinder these cross-collaborative HE-FE environments. Will they provide the most compatible, secure, and flexible access regarding shared collaborative resources, sharing via portal entrances (SSO) and Federated Access?

Previous research from phase one of the projects will be vital in accessing and reporting back to the HE-FE lead bodies, having compared VO tools within Shibboleth 1.3 and Shibboleth 2.0 plus the various requirements and scenarios to provide solutions for institutions.

#### **4. Project Outputs**

##### **Project Deliverable**

Most of deliverables will be designed for potential re-use by other members of the community (and will be clearly marked out as such):

The Main project deliverables will be as follows:

- Review of current VO Tools and their effect in the HE-FE communities; this will be highlighted in a report
- Installation of Shibboleth 2 IdP and SP and the associated lessons learnt and documentation
- The testing and reporting on how the current VO tools work with Shibboleth 2
- Report on Signet and Grouper combination and the components with Shibboleth 2
- The creation of project demonstrators and the dissemination to HE-FE & JISC/RSC's
- Feedback to SWITCH, MAMS and other projects with Shibboleth 2.0
- Project paper and report on findings
- Project Website, which will be maintained for three years after project completion
- Feedback to the UK FAM

Project reporting will be set out in the “Project Workpackage Timeline”, with the Project Plan, Interim Reports and the Final Report in March 2009. Project deliverables include components and the associated demonstrator, which will be made available on the project website in conjunction with access to documentation and how-to cookbooks. The reports and papers will provide information of use to similar institutions across the HE-FE communities and the UK FAM.

The project website will describe in detail the research carried out throughout all work packages and the results obtained from that research. This should provide a clear basis for future work by JISC and others in the sphere of Identity Management and VO tools.

#### **5. Project Outcomes**

The primary benefit to the JISC community will be the improved understanding of VO tools and their interaction with Shibboleth 2.

Technology briefings will help those who wish to find clear and impartial information about the benefits and drawbacks of technical solutions for VO tools.

Other benefits such as user privacy and security will unlock an even broader range of benefits for the JISC community and contribute both to the aim of this call and to other related JISC development programmes and projects.

Additional benefits from the project outcomes (associated with the project deliverables) will be the projects involvement with the wider VO community in Europe.

Project demonstrators will be useful for support purposes and as an aid to implementation, thereby increasing the growth of the UK FAM community of UK HE-FE institutions who will be aware of the strategic and technical issues of identity management and VO tools.

#### **6. Stakeholder Analysis**

Stakeholder	Interest / stake	Importance
Cardiff University	Project provides a chance to explore issues and approach IM from a different angle	High
Kidderminster College	Enhance student learning and production of VO Tools within a collaboration environment	High
UK HE-FE	Project will provide an opportunity to test VO within an institutional setting. Encourage FE participation in IM	Medium/High
MAMS Project	Virtual Organization Toolkit Virtual Organisations Management Erik Vullings, James Dalziel	Medium
Internet 2 Community MyVOCS	Feedback regarding Signet and Grouper  My Virtual Organization Collaboration Suite	Medium
SWITCH	VHO service	Medium
VP Technical Programme  The Distributed European Infrastructure for Supercomputing Applications (DEISA)	European NRENs (Claudio Allocchio)  DEISA VO management concepts and tools management in VOs differs from management in real organizations.	
JISC Programmes	Provide opportunity to assess VO technology and improve the understanding within HE-FE	High

## 7. Risk Analysis

Risk	Probability (1-5)	Severity (1-5)	Score (P x S)	Action to Prevent/Manage Risk
<b>Staffing</b>				
Project Team	2	2	4	The project team has now been together for over three years and has strength in depth with full institutional support.
Loss of team members	2	4	8	Loss of team members / unavailability of team members will be planned and managed by ensuring that there is overlap of skills and competences.  Other staff within the organisation could be relocated to support the project from the IT Development Team which is proactive in Shibboleth technology.

<b>Technical Limitations</b>				
Failure to integrate VO tools with other components such as Moodle, Wiki or Blog. Whilst Grouper and Signet are stable and the quick installation is reasonably straight forward. Integration with other MySQL databases can be problematic as with any open source product documentation can be limited.	2	4	8	Liaison with other project such as University of Newcastle G-FIV-O Project where we are collaborating via a wiki. There is also the Grouper and Signet Dev lists.
Leading-edge of development and may not meet prior expectations	2	2	4	If for unforeseeable reasons we couldn't get Grouper or Signet to work the scale of other areas of the project such as attribute release policy mapping could be investigated further.
The project depending on Grouper/Signet development	2	2	4	Proceeded with latest stable release version
<b>External suppliers</b>				
Late or no release of Shibboleth 2.0	3	5	15	The launch of SAML 2.0 has been put back before so there could be a possibility of delay, therefore putting back the start date of the SAML Work package. One of the main aims of the project is to compare and contrast VO tools in 1.3 and 2.0. The project has close contacts with the Internet 2 community and privy to pre-releases.
Lack of co-operation from other institutions in finding out how they use	2	2	4	With any commitment to a technology, institutions that have shown interest in participating might change through the life of the project.
Unrealistic project expectations	2	2	4	During the initial project team assembly, an audit exercise was conducted to map the skills and competencies of the project members.  Skills and competencies also reflect in the Stakeholder Analysis.
Unable to get input from SWITCH and other international organisations	2	2	4	Wider community input and views are important to the project but deemed as vital, but influential in JISC and the project thinking.

## 8. Standards

Name of standard or specification	Version	Notes
SAML	1.1	Developed by the Security Services Technical Committee of OASIS, is an XML-based framework for communicating user authentication, entitlement, and attribute information
SAML	V2.0	OASIS Standard
OpenSAML	2.0	
Shibboleth Protocol	1.3 and 2.0	In-conjunction with JISC recommendations

## 9. Technical Development

Although the project is not carrying out any technical development in the sense of a “Technical Project”, we feel that it would be hard not to participate in technological development because of the nature of Shibboleth and Virtual Organisations.

The Major element of the project explores VO Tools with the current version of Shibboleth and the future version 2.0. The project methodology will start with reviewing the current VO findings of other projects and how they have integrated VO Tools within an institutional environment. The technical output from reviewing/installing these VO tools especially in a HE & FE environment could differ from other project findings. With new VO ideas and approaches that have been highlighted in projects who have carried out more up-to-date development and being outside the JISC community, could provide a different experience compared to other JISC developments in previous calls.

The project will be working with FE institutions that might not have prerequisites in place such as Active Directory/LDAP store, attributes and firewall issues. These technical developments will help other institutions by highlight technical requirements.

Testing is another technical development that will see each tool having its accompanying test findings and bugs found will be feedback to JISC and other communities.

The second phase of the project however will see how these Tools are affected by Shibboleth 2. In the process of the discovering the affects and the feasibility of using Shibboleth 2 VO Tools with in an institutional collaboration, demonstrators will be created along with the technical knowledge gained from installing Shibboleth 2 IdP and SP and the testing against a VLE/Repository resource.

All documentation produced, designs, reports will be produced in MS Word and other MS Office products together with PDF versions.

## 10. Intellectual Property Rights

The Project will ensure that the outputs do not infringe on IPR of any third parties and will obtain written permission if required.

Intellectual Property Rights in the deliverables will be as stated in the project Consortium Agreement.

The project deliverables will be freely available on the project website and therefore available to the JISC Community.

Demonstrators will available via dissemination events. Whilst testing will use a VLE and a Repository, access to content created outside this project i.e. VLE and Repository learning object, are owned by the originating institution in accordance with the project Consortium Agreement.

Research papers and or journal articles, which draw on the project findings that Cardiff University/Kidderminster College, undertake will be provided to the JISC community.

## Project Resources

### 11. Project Partners

There will be two partners in this project Cardiff University and Kidderminster College (KC-ROLO)  
The majority of the Project Management and delivery of deliverables will fall on KC-ROLO who has a strong, experienced and stable ICT Development team in place.

Cardiff University will provide the Project Director and a HE technical perspective to deliverables. They will conduct an oversight and financial management of the project.

The proposed project will use HE-FE institutions that will be identified as the project research progresses as the basis for research into the current practice and future needs of UK HE-FE academic institutions in Identity Management and VO Tools.

Institutions that are willing to take part are:

- Bolton Community College
- Lincoln College

Identity management issues are of interest to these consortium members as they already use Shibboleth as a SSO with regards to their institutional VLE.

Consortium agreement will be signed and a copy sent to the programme manager.

### 12. Project Management

Oversight and scrutiny of the project will be exercised by a Project Executive Group in accordance with the project Consortium Agreement .It will meet at least three times a year to review progress against the plan and timetable, and authorise changes to the plan where necessary.

#### Project Executive Group

Ms Joan Wright	0.2	Project Director
Mr Graham Mason	0.2	Project Manager
Mr Ed Beddows	0.5	Senior Project Developer
Mr Anthony Williams	0.5	Junior Project Developer
Katy Baynton	0.2	Project Administrator

It is intended that membership of the Project Executive Group will be extended to invited representatives of academic staff and end users and, if possible, a representative from SWITCH.

Records of these meetings will be circulated on the website to all interested parties.

In addition to these formal structures, it is anticipated that staff involved in the project will maintain close contact with, and seek advice from appropriate JISC staff, and liaise with other relevant JISC projects to ensure that the project is continuing to adopt or develop technical models and standards that will be applicable to the whole of the HE-FE community.

## Key Personnel

Project Director: Ms Joan Wright:

Joan Wright is Principal Consultant for Strategy, Projects and Liaison; manager of Cardiff University's Identity Management System, was Project Manager for the JISC funded ASMIMA project and is Project Manager for the current JISC Funded "The Identity Project".

Project Manager: Graham Mason BSc. (Hons) CertEd

Graham Mason having a career in Computer Engineering and teaching in the Independent Sector, moved to Kidderminster College in 2002 as Head of ICT. Graham not only runs a busy ICT Department at the college, but also leads open source research and development projects.

At present is Project Manager of the JISC KC-ROLO Project (Kidderminster College –repository of Learning Objects), a JISC Core Middleware funded project 2004-2006.

Kidderminster College, who will do most of the project work, have a Project Development team in place consisting of a Project Manager, Senior Project Programmer, Junior Project programmer and project administrator.

This successful project team has been in place since the start of the core middleware project call 01/04. Although KC-ROLO have finished that phase of the project, they have been busy researching and carrying out Shibboleth installations and demonstration on behalf of JISC and interested clients, finance from the Shibboleth and VLE installation work and a contribution from the college has enable us to stay active and ready to progress in the area of VO's and SAML 2.0.

## Outline Project Timetable

Phase 1: consolidate and review existing national and international developments

Phase one of the projects will start in April 2007 and be completed by November 2007 with a review of the tools and projects that have implemented VO's. Selection of participating organisations will be briefed and installation of the various tools. User will use these access routes to gain access to resources such as Moodle VLE, repositories, Wiki's and Forums. Data will be collated and paper/reports drafted. Invite other organisations such as SWITCH, UK Federated Access Management to access these resources.

Phase 2: Research the potentials of Shibboleth and SAML 2.0 and Shibboleth's capabilities within VO's

Phase 2 of the project (November 07 – February 09) will focus on dealing with the SAML 2.0 and the potential new capabilities of Shibboleth 2 within Virtual Organisation. The project will spend sometime researching and implementing Shibboleth 2 within the consortium institutions and upgrading/documenting the Shibboleth infrastructure. Once this as been completed we will review the same tools with the same organisations and review how this time they access the same resources. This will compare and contrast VO tools and giving valuable data, reports and papers to HE-FE communities. This will be passed onto the JISC and the UK Federated Access Management.

## 13. Programme Support

The project envisage seeking advice and support via the Programme Manager (James Farnhiil) with issues such as venues for dissemination, publishing project findings to the appropriate community and participating at JISC Programme Meetings. Whist the aims of the project have been identified the Programme Manager will have a more helicopter view with regards the Shibboleth and the links with other Programme Projects.

## 14. Budget

The project budget is attached (see Appendix A). There have been no changes from the budget which was agreed in the project proposal.

**Detailed Project Planning**

**15. Workpackages**

See Appendix B.

**16. Evaluation Plan**

<b>Timing</b>	<b>Factor to Evaluate</b>	<b>Questions to Address</b>	<b>Method(s)</b>	<b>Measure of Success</b>
July 07	Grouper Tool	Has this tool helped the test institutions  Has the Project Team fully understood the nature of this tool	Interview users of the tool  Project Notes and documentations	Satisfaction of participants and the involvement of VO Tools within the project scope
Aug 07	Signet Tool	Has this tool helped the test institutions  Has the Project Team fully understood the nature of this tool	Interview users of the tool  Project Notes and documentations	Satisfaction of participants and the involvement of VO Tools within the project scope
Apr/May 08	Grouper Tool	Has this tool helped the test institutions  Has the Project Team fully understood the nature of this tool	Interview users of the tool  Project Notes and documentations	Satisfaction of participants and the involvement of Shibboleth 2 VO Tools within the project scope
May 08	Signet Tool	Has this tool helped the test institutions  Has the Project Team fully understood the nature of this tool	Interview users of the tool  Project Notes and documentations	Satisfaction of participants and the involvement of Shibboleth VO Tools within the project scope
On-going	VO Tools within the context of other projects past and present	Review and understand what other projects in the wider community have carried out so far	Project documentation and their websites plus project personnel	Good feedback from these project and comments from the wider community
Feb 09	Shibboleth 2	The effectiveness of Shibboleth 2	Reviews and surveys that the project can put to the wider community  Project Notes and documentations	The up-take and the ease of installation  Cookbook documentation  Programme events

### 17. Quality Plan

<b>Output</b>	Project Website, which will be maintained for three years after project completion Project paper and report on findings				
<b>Timing</b>	<b>Quality criteria</b>	<b>QA method(s)</b>	<b>Evidence of compliance</b>	<b>Quality responsibilities</b>	<b>Quality tools (if applicable)</b>
Jun 07	Website hosted by Project	Project Doc's and description of CUCKOO Project Published	Linked to JISC Site	Project Manager	
Jun 07	Project Plan	Confirmation of Project Plan from Programme Manager	Project Plan to JISC Programme Manager and published on Project Website	Project Manager	
Sept 07  Mar 08  Sept 08  Mar 09	Project interim Reports  &  Project Final Report	Reports  Documentation  Cookbooks	Project Website  Feedback from Project Director  &  Programme Manager	Project Manager	

<b>Output</b>	Review of current VO Tools and their effect in the HE-FE communities				
<b>Timing</b>	<b>Quality criteria</b>	<b>QA method(s)</b>	<b>Evidence of compliance</b>	<b>Quality responsibilities</b>	<b>Quality tools (if applicable)</b>
July 07	VO Tools	Software Testing	Successful deployment of these tools and feedback from institutions	Project Manager	
July 07	Grouper	Software Testing		Project Developer	
July 07	Signet	Software Testing		Project Team	
Aug 07	Report on Signet and Grouper combination	Report  Technical review	Technical Report	Project Team Project Manager	

<b>Output</b>	Installation of Shibboleth 2 IdP and SP Project demonstrators and the dissemination to HE-FE & JISC/RSC's				
<b>Timing</b>	<b>Quality criteria</b>	<b>QA method(s)</b>	<b>Evidence of compliance</b>	<b>Quality responsibilities</b>	<b>Quality tools (if applicable)</b>
Feb 08	Shibboleth 2 IdP & SP	Software Testing	Project Doc's and description of installation on Project Website	Project Team	
Jan 09	VO Tools Workshops/Events	Feedback from these events	Feedback pass-on to wider community  Feedback to the UK FAM	Project Manager	

## 18. Dissemination Plan

Apart from publication of the formal deliverables, the CUCKOO project team will actively seek opportunities to disseminate information and experience from the project, in presentations and publications aimed at appropriate target audiences. All of the key personnel to be involved are experienced speakers and writers, and are active in cross-organisational dialogue with their professional peers.

Previous national projects in which the project team members have played a lead role have impressive track records of dissemination: The KC-ROLO Project and the Cardiff ASIMA Project will build on their demonstrations of Shibboleth and pass-on their extensive experience at JISC, ALT-C and other relevant conferences.

<b>Timing</b>	<b>Dissemination Activity</b>	<b>Audience</b>	<b>Purpose</b>	<b>Key Message</b>
On-going	Project Website	HE & FE Communities	Report on Project progress, publish reports and outputs	Highlighting VO Tools  Shibboleth2
On-going	Liaise with other VO Projects	MyVOC DyVose Etc	Share Knowledge	Build on their findings
Feb –Jun 08	Publish cookbooks and documentation regarding Shibboleth 2 IdP & SP	Technical Communities JISC Projects	Share Knowledge Share Findings	Highlight Project Workpackages
Dec-Feb 08/09	JISC Dissemination Events	HE & FE Communities	Share Findings	Highlight Project Findings
Sept 07 March 08	Interim Report	JISC & Communities, Website	Report on Project progress, publish reports and outputs	Highlight Project Findings
Dec-Feb 08/09	Submit papers to conferences & journals	HE & FE Communities	Disseminate Findings	Analysis & recommendation for future project
March 09	Final Report	JISC & Communities, Website		Highlight Project Findings

**19. Exit and Sustainability Plans**

<b>Project Outputs</b>	<b>Action for Take-up &amp; Embedding</b>	<b>Action for Exit</b>
VO Tool Demonstrators Take-up & embedding	HE & FE	It's the project intention to get the "community" to know about the outputs and actively use them. We want to say something along the lines of publicising the guides, demonstrators and reports at relevant events, at JISC conferences, discussing on the relevant mailing lists (uk federation, jisc-shibboleth, etc), trying to get a speaking slot at ucisa directors meeting, publicising through our UKERNA/JANET UK contacts, etc.
VO Tools Guides	Actions for exit	The project will ensure the outputs of the project are accessible and useful for a while after the project. We will achieve this by ensuring the project's website will be available for 2 years after the project ends.
Final Report	HE & FE	Project Website & JISC

<b>Project Outputs</b>	<b>Why Sustainable</b>	<b>Scenarios for Taking Forward</b>	<b>Issues to Address</b>
Shibboleth 2 Idp & SP	Future project development	JISC Disseminations RSC WM Dissemination	Take-up of the UK FAM
VO Tools & Integration Reports	Link with other Projects Experience of Shibboleth 2 & VO Tools	HE & FE Communities	Demand for SAML 2

**Appendices**

**Appendix A. Project Budget**

ITEM	Year 2007/08 Apr- Mar(12)	Year 2008/09 Apr- Mar (12)	Total Over the Life of the Project (24)
<b>Project staff costs. JISC Contribution Required</b>			
<b>Total Staff Costs</b>	<b>£48,410.76</b>	<b>£48,410.76</b>	<b>£96,822</b>
<b>Non-Staff Costs</b>			
Travel & Subsistence (meetings, research, best practice, etc)	£1,100	£1,100	£2,200
Dissemination costs (design, print, distribution)	£400	£500	£900
<b>Total Non-Staff Costs</b>	<b>£1,500</b>	<b>£1,600</b>	<b>£3,100</b>
<b>Grand Total</b>	<b>£49,911</b>	<b>£50,011</b>	<b>£99,922</b>
<b>Contribution by Project Consortia</b>			
Project Administrator (0.2 Fraction)	£4,800	£4,800	£9,600
Secretarial support	£1,274	£1,274	£2,549
HR and Financial Administration	£750	£750	£1,500
Website Implementation / updates	£650	£250	£900
<b>Staff Costs Total</b>	<b>£7,474</b>	<b>£7,074</b>	<b>£14,549</b>
<b>Non-Staff Costs</b>			
Overheads for Project /Accommodation Offices/ P.C. Equipment/heating/Lighting	£7,200	£7,200	£14,400
Accommodation Meeting/training Rooms	£2,700	£2,500	£5,200
Evaluation Activities i.e. input by testers	£4,800	£4,800	£9,600
Hardware Servers and Network support	£2,400	£2,600	£5,000
Postal/Telephone costs	£450	£550	£1,000
<b>Total Non-Staff Costs</b>	<b>£17,550</b>	<b>£17,650</b>	<b>£35,200</b>
<b>Grand Total</b>	<b>£25,024</b>	<b>£24,724</b>	<b>£49,748</b>



**Appendix B. Workpackages Timetable of activities (start-month) & deliverables (due month)**

<b>WORKPACKAGES</b>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
<b>Month</b>	A 07	M	J	J	A	S	O	N	D	J 08	F	M	A	M	J	J	A	S	O	N	D	J 09	F	M	
1: Initial Project Start-up																									
2: Survey of current VO organisational practice within the UK and other areas																									
3: Virtual Organisational Tools and their selection																									
4: Virtual Organisational Tools Grouper VO Tool																									
5: Virtual Organisational Tools Signet VO Tool																									
6: VO Tools Signet and Grouper																									
7: VO Tools Evaluation and reports and papers																									
8: Shib 2.0 install and test																									
9: SAML 2.0 and VO Tools Signet and Grouper																									
10: Dissemination and demonstrators																									
11: Final Project Report																									

Project start date: 01-04-2007

Project completion date: 31-03-2009

Duration: 24 months

Workpackage and activity	Earliest start date	Latest completion date	Outputs	Milestone	Responsibility
<b>YEAR 1</b>					
WORKPACKAGE 1: Initial Project Start-up <b>Objective:</b> <i>Start of the project administration, issues such as, Project Plan, website creation and the selection of the Project Executive group.</i>	<b>April 07</b>				
1. Appoint Members of executive group	<b>April 07</b>	<b>01 May 07</b>			JW
2. Write Project Plan	<b>April 07</b>	<b>30 June 07</b>	<b>Project Plan</b>		GM
3. Create project website	<b>April 07</b>	<b>30 June 07</b>	<b>Project website</b>		GM
WORKPACKAGE 2: Survey of current Virtual Organisational practice within the UK and other areas <b>Objective:</b> <i>Build a picture of current VO Tool practice across the UK academic sector and our neighbours in Europe. Contact representative in SWITCH. EB to look at areas/concepts</i>	<b>01 May 07</b>	<b>01 Jul 07</b>		<b>1</b>	
4. Survey of current institutional practice with VO tools and the pedagogy behind the user interaction. Mailing list	<b>01 May 07</b>	<b>01 Jul 07</b>	Update section of the project website relating to this work package		Project Team GM
5. Review of VO projects findings	<b>01 May 07</b>	<b>01 Jul 07</b>	Data gathered from research regarding VO Tools, create a questionnaire (or similar) designed to survey current institutional thought and practice around VO tools.		Project Team GM
6. Identify a subset of institutions that are representative and would be willing to access resources via VO tools (Bolton/Lincoln)	<b>01 May 07</b>	<b>31 Jul 07</b>	Report on current state of VO tools in UK academic institutions and Europe (SWITCH)		GM
7. investigate these further through direct interaction with members of each institution	<b>01 May 07</b>	<b>01 Jul 07</b>	The data gathered will give us a large breadth of information about current VO practice across the HE & FE sector.		Project Team

Workpackage and activity	Earliest start date	Latest completion date	Outputs	Milestone	Responsibility
<p>WORKPACKAGE 3: Virtual Organisational Tools and their selection</p> <p><b>Objective:</b> Tools in VO's can play a role in the functionality of an institutions access to resources. This will take place over several Workpackages as each tool will need to be assessed.</p>	Jun 07	Aug 07		2	Project Team
<p>Review the suite of tools that are currently being or have been tested and approved by the Internet2 communities</p> <p>Link with SWITCH and other projects</p> <p>8.</p>	Jun 07	Aug 07	<p>Quick review on the tools A4 Page on each tool. What's out there? Brief summary on project website.</p> <p>Opened to wider community</p>		Project Team
<p>9. The project will be taking in to consideration the work that other projects within the UK and Worldwide have been using some, whether it is PERMIS or just a simple e-mail tool such as Sympa.</p>	Jun 07	<p>Aug 07</p> <p>Sept 07</p>	<p>Link review of tools to other JISC Projects</p> <p><b>Overview report/Technical report</b></p> <p>Document the tools and links to projects</p>		GM Project Team
<p>WORKPACKAGE 4: Virtual Organisational Tools "Grouper VO Tool"</p> <p><b>Objective:</b> Selected tools is Grouper</p>	Jul 07	Oct 07		3	
<p>10. Review the complexity of Grouper, user &amp; institution issues, their association, status, or relevant roles within the HE-FE community</p>	Jul 07	Oct 07			Project Team
<p>11. Review Grouper Group Management Toolkit</p>	Jul 07	Oct 07	<p>Reporting back to the HE-FE communities on issues such as what support is needed, eases of use and the expense.</p>		Project Team
<p>12. Enable both automated and manual mechanisms for assigning users to groups</p>	Jul 07	Oct 07	<p>Technical notes and findings</p> <p>Note on website</p>		Project Team GM

Workpackage and activity	Earliest start date	Latest completion date	Outputs	Milestone	Responsibility
<p>WORKPACKAGE 5: Virtual Organisational Tools “Signet VO Tool”</p> <p><b>Objective: Selected tools is Signet</b></p>	<b>Aug 07</b>	<b>Oct 07</b>		<b>4</b>	
13. Implement Signet privilege management system, centralise user’s privileges across a wide range of applications	<b>Aug 07</b>	<b>Oct 07</b>	Detailed Signet tool research		Project Team
14. Test module links with Shibboleth and Institution MIS/CIS system, using Signet to link in via Active Directory and the Signet interface	<b>Aug 07</b>	<b>Oct 07</b>	Technical notes and findings Note on website		Project Team
15. CU Portal entrance to applications would test the feasibility of such an activity to gain access to applications	<b>Aug 07</b>	<b>Oct 07</b>	Reporting back to the HE-FE communities on issues such as what support is needed ease of use and the expense.		Project Team
<p>WORKPACKAGE 6: Virtual Organisational Tools “Signet and Grouper”</p> <p><i>Objective: Data from WP 4 &amp; WP5, this WP would see the combination of both tools.</i></p>	<b>Nov 07</b>	<b>Dec 07</b>		<b>5</b>	
16. Research would advise communities within the academic environment if this is the best possible approach how it was intended by Internet2 developers	<b>Nov 07</b>	<b>Dec 07</b>	<b>Project paper and report on findings</b>		GM
17. Reviewing the concerns that the MyVOCS project addressed, issues relating to institutional confidentiality of users and VO components	<b>Nov 07</b>	<b>Dec 07</b>	Technical notes and findings Note on website		Project Team
18. Tools developed by ShARPE and their Attribute Release Policy (ARP) interface mechanism will be used to evaluate and contrast the real World situation.	<b>Nov 07</b>	<b>Dec 07</b>	Technical notes and findings Note on website		Project Team GM

Workpackage and activity	Earliest start date	Latest completion date	Outputs	Milestone	Responsibility
<b>Year 2</b>					
<b>WORKPACKAGE 7: Virtual Organisational Tools Evaluation and reports/papers</b>  <b>Objective:</b> <i>This WP sees all first phase project work come together in a research package that will move us forward into the next phase of the project.</i>	<b>Dec 07</b>	<b>Jan 08</b>		<b>6</b>	
19. First Year Evaluation Report	<b>Jan 08</b>	<b>March 08</b>	Technical notes and findings Notes on website <b>Project paper and report on findings</b>	<b>7</b>	GM
20. Feedback from our European colleagues at SWITCH	<b>Dec 07</b>	<b>March 08</b>	Link with SWITCH and other projects		GM
<b>WORKPACKAGE 8: Shibboleth 2.0 install and test</b> <b>Objective:</b> Project moves into phase2 of the CUCKOO Project, Shibboleth 2.0.	<b>Feb 08</b>	<b>April/May 08</b>		<b>8</b>	
21. Review of MAMS project and SAML2.0	<b>Feb 08</b>	<b>May 08</b>	Activity. outputs & findings		
22. Shibboleth 2.0 Installation Phase Plan	<b>Feb 08</b>	<b>April/May 08</b>	Technical notes and findings Notes on website		Project Team
23. Shibboleth 2.0 install Idp	<b>Feb 08</b>	<b>April/May 08</b>	Technical notes and findings Notes on website		Project Team
24. Shibboleth 2.0 install SP	<b>Feb 08</b>	<b>April/May 08</b>	Technical notes and findings Notes on website		Project Team
25. Shibboleth 2.0 test with Moodle resource and others federation plans, international project	<b>Feb 08</b>	<b>April/May 08</b>	Technical notes and findings Notes on website		Project Team
26. documentation	<b>Feb 08</b>	<b>April/May 08</b>	<b>Project paper and report on findings</b> Shibboleth 2 Cookbook and tips		Project Team GM

Workpackage and activity	Earliest start date	Latest completion date	Outputs	Milestone	Responsibility
<p>WORKPACKAGE 9: Shibboleth 2.0 and Virtual Organisational Tools “Signet and Grouper”</p> <p><u>Objective:</u> This Work package will implement the same VO tools (Signet &amp; Grouper) that were used with Shibboleth 1.3f and see the difference in Shibboleth2</p>	<b>Aug 08</b>	<b>Nov 08</b>		<b>9</b>	
27. Shibboleth 2.0 and Signet			Signet components with Shibboleth 2		Project Team GM
28. Shibboleth 2.0 and Grouper			Grouper components with Shibboleth 2		Project Team GM
<p>WORKPACKAGE 10: Dissemination and demonstrators</p> <p><u>Objective:</u> This WP sees the project give practical examples to the HE-FE communities</p>	<b>Dec 08</b>	<b>Feb 09</b>		<b>10</b>	
29. Demonstrators for JISC events	<b>Feb 09</b>	<b>Mar 09</b>	<b>Documentation and demonstrators will see the new functionality of Shibboleth 2.0</b>		GM
<p>WORKPACKAGE 11: Final Project Report</p> <p><u>Objective:</u> This WP see the end of the project however sustainability built-in by both institutions will see this work carryon</p>	<b>Jan 09</b>	<b>Mar 09</b>	<b>Final Report</b> Project paper and report on findings	<b>11</b>	
30. Website final update and archive					GM
31. Final Paper to the HE-FE communities giving much gained knowledge to JISC and the UK FAM.		<b>31 Mar 09</b>	Feedback to the UK FAM and other projects with Shibboleth 2.0		JW & GM

Members of Project Team:

Joan Wright=JW

Graham Mason=GM

Ed Beddows=EB

Anthony Williams=AW

Katy Baynton=KB