

JISC DEVELOPMENT PROGRAMMES

Project Document Cover Sheet

Progress Report I (Feb '05 – Jul '05)

Project

Project Acronym	GROWL	Project ID	None Assigned
Project Title	VRE Programming Toolkit and Applications (GROWL: Grid Resources on Workstation Library)		
Start Date	2005-02-01	End Date	2006-07-31
Lead Institution	University of Cambridge, e-Science Centre		
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Partner Institutions	CCLRC Daresbury Laboratory, e-Science Centre University of Lancaster, e-Science Centre		
Project Web URL	http://www.growl.org.uk		
Programme Name	Virtual Research Environments (VRE) 5/04		
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Document

Document Title	GROWL: Progress Report I (Feb '05 – Jul '05)		
Reporting Period	Feb 2005 – Jul 2005		
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Document History

Version	Date	Comments

Overview of the Project

1 Grant Statement

The GROWL project is being conducted according to the terms agreed with JISC in the letter of grant and the JISC Terms and Conditions attached to it.

The official start date has been agreed as 2005-02-01, although some staff were not in place at that point.

2 Aims and Objectives

The original Aims and Objectives are unchanged. We have made progress in all of the listed objectives:

1. Initial user requirements have been generated. These will be refined as users learn more about GROWL and its capabilities.
2. The client-side of the GROWL toolkit has been refined and repackaged to provide lightweight support for the minimal functionality needed to demonstrate GROWL functionality in each of the user application areas. An Architecture document has been written.
3. A simple demonstrator has been written for one of our Bioinformatics users: Gene expression analysis using the markov Chain Monte Carlo (MCMC) algorithm.
4. Basic GROWL functionality is now available within Sabre-R (Software for the Analysis of Binary Recurrent Events)
5. We are in the final stages of intergrating GROWL with the Materials Science visualisation tool "DL Visualise" so that GROWL may be used to perform its computations.

3 Overall Approach

The only minor change to the overall approach is that based on our user requirements, we are now aiming to provide additional wrapper support for Stata and Matlab.

4 Project Outputs

Reports and documentation

- Web page on JISC VRE programme site (http://www.jisc.ac.uk/index.cfm?name=vre_growl)
- Project Web site (<http://www.growl.org.uk>) with links from JISC and project partner's Web sites
- Project Plan
- 1st 6-monthly Progress Report
- User Requirements document with input from each of the three target user communities
- Architecture document

Technical outputs

- Software repository: currently being setup to contain core GROWL functionality:
 - Build infrastructure
 - The core GROWL C library components for Authentication, Job management and File movement.
 - GROWL Wrapper for the statistical language R

Knowledge and other outputs

- Presentations (and accompanying papers) at UK and international conferences (see Dissemination below).

5 Project Outcomes

Nothing to report

6 Stakeholder Analysis

A User Requirements document has been produced following meetings with a variety of potential users, individually and at workshops.

7 Risk Analysis

We have found the use of the Access Grid (AG) extremely important for effective meetings and communications. The Daresbury node has recently been problematic and if this continues, we will have to make other arrangements. Our backup plan is to use AG for video and telephone conference for audio. This worked effectively at a recent meeting.

8 Standards

Our Project Plan states that we will be using XHTML 1.0 for web pages, the JISC pages suggest we should be using HTML 4. Since they also mention WAI accessibility guidelines, then XHTML+CSS as suggested in our Plan would be more appropriate.

9 Technical Development

We will be using Subversion rather than CVS for our software configuration management. Since initial developments have been largely independent we have used email and our web portal to share software releases and documentation, and for archival.

10 Intellectual Property Rights

Work towards a software licence for the release of GROWL software is underway by our respective commercial departments.

Project Resources

11 Project Partners

The Collaboration Agreement has been signed by all parties.

12 Project Management

Lorna Morris joined the GROWL project at the University of Cambridge on 2005-03-07.

Dan Grose joined the GROWL project at Lancaster University on 2005-05-16, as intimated in the Project Plan.

13 Programme Support

The issue of software licences has been raised with Programme Support. This is an area which is cross-project and where we shouldn't ave many solutions when one will do.

14 Budget

This will follow in late August once July's accounts have been settled for the three institutions.

Detailed Project Planning

15 Workpackages

Having completed our initial project phase, our emphasis for the middle six months of the project is on adding functionality and making what we have already produced more robust and general purpose. During this phase we will continue to interface to users, reviewing what we have done so far and ensuring work carried out in this phase is according to the priorities of our users.

The milestones from the progress report are repeated here for ease of understanding of the amended Workplan in Appendix A.

15.1 Project Milestones

1. Release of Final Project Plan
2. Site visit and Progress Report in July 2005, also JISC VRE Programme Meeting at the beginning of July.
3. Dissemination at All-Hands Meeting in September 2005
4. Second Progress Report in January 2006
5. We also expect to have a milestone in April or May 2006; its form is not yet decided.
6. Release of Final Report and Completion Report in July 2006

16 Evaluation plan

Nothing to report, evaluation activities will not start in earnest until the latter stages of the project.

17 Quality Assurance Plan

Nothing to report

18 Dissemination Plan

Information on Growl has been presented (or has been accepted for presentation) at the following events :

- National e-Social Science Conference <http://www.ncess.ac.uk/conference-05/>: presentation and paper
- National Centre for Research Methods Summer School, workshop event
- Demo, Poster and talk prepared for JISC VRE meeting
- Paper accepted for presentation at UK eScience All-Hands Meeting.

19 Exit/Sustainability Plan

Nothing to report

Appendices

A Refined Work Plan

Workpackages	Earliest Start	Latest Finish	Outputs	Milestone	Responsibility
Project Management					
0.1 Produce Draft Project Plan	2005-02	2005-03	Draft Project Plan		JK
0.2 Produce Final Project Plan	2005-03	2005-04	Final Project Plan	1	JK
0.3 Produce 1st Progress Report	2005-06	2005-07	1st Progress Report	2	JK
0.4 Produce 2nd Progress Report	2005-12	2006-01	2nd Progress Report	4	JK
0.5 Produce Draft Final Report	2006-05	2006-06	Draft Final Report		JK
0.6 Produce Final Report	2006-06	2006-07	Final Report	6	JK
0.7 Produce Completion Report	2006-07	2006-07	Completion Report	6	JK + MH
WP1: Toolkit and Services					
1.1 Architectural Design	2005-03	2005-05	Architectural Design	2	JK
1.2 Updated build system	2005-04	2005-07	for core GROWL C Library	2	JK
1.3 Integration of up-to-date version of gSOAP	2005-04	2005-07	for core GROWL C Library	2	JK
1.4 Integration of up-to-date version of R	2005-05	2005-07	GROWL Wrapper for R	2	JK
1.5 R wrappers	2005-08	2005-09	GROWL Wrapper for R	4	LM
1.6 Enhanced grid-login and Authentication Service	2005-05	2005-08	for core GROWL C Library	4	JK
1.7 Asynchronous Job Manager	2005-08	2005-09	for core GROWL C Library	4	DG
1.8 Session Management Service	2005-07	2005-09	for core GROWL C Library	4	DG
1.9 SRB client	2005-07	2005-09		4	
1.10 Additional Language wrappers	2005-09	2005-12		4	LM
WP2: Bioinformatics					
2.1 Produce User Requirements for WP2	2005-02	2005-05	User Requirements	2	LM
2.2 Implement MCMC Use Case	2005-05	2005-07		2	LM
2.3 Implement a 2nd WP2 Use Case	2005-05	2005-07		4	LM
WP3: Chemistry and Physics					
3.1 Produce User Requirements for WP3	2005-02	2005-05	User Requirements	2	JK

Workpackages	Earliest Start	Latest Finish	Outputs	Milestone	Responsibility
3.2 Implement DL Visualise Use Case	2005-06	2005-09		2	JK
WP4: Social Science					
4.1 Produce User Requirements for WP4	2005-04	2005-05	User Requirements	2	DG
4.2 Implement Sabre-R Use Case	2005-06	2005-09	GROWL Demonstrator	4	DG
4.2 Implement Stata-R functionality	2005-08	2005-12	GROWL Demonstrator	4	DG
Dissemination					
5.1 Web Page on JISC site	2005-02	2005-02	JISC Web Page	1	RA
5.2 Project Web site	2005-02	2005-03	Project Web site	1	MH/RA
5.3 National e-Social Science Conference	2005-02	2005-02	Abstract		RC
	2005-04	2005-05	Paper		RC
	2005-05	2005-06	Presentation		DG
5.4 National Centre for Research Methods Summer School	2005-07	2005-07	Workshop presentation		DG
5.5 All-Hands Meeting	2005-03	2005-03	Extended abstract	3	JK
	2005-06	2005-06	Paper	3	JK
	2005-08	2005-09	Presentation	3	JK
5.5 GIS and Grid Computing Workshop	2005-08	2005-09	Presentation		JK