



WORKPACKAGES	Month	1	2	3	4	5	6	7
1: Modelling								
2: Knowledge engineering								
3: Standards								
4: Create testbed								
5: Grid service development								
6: Design and consolidation								
7: User agent development								
8: 3 rd party tools investigation								
9: System testing								
10: Expert evaluation								

Project start date: 01-09-2004

Project completion date: 31-03-2005

Duration: 07 months

Workpackage and activity	Earliest start date	Latest completion date	Outputs (clearly indicate deliverables & reports in bold)	Milestone	Responsibility
YEAR 1					
WORKPACKAGE 1: Model Generation <i>Objective: produce a detailed model specification, machine readable schema and understand the implications for e-learning standards</i>	1/9/04	31/12/04	See below		MG
1. Modeling The high-level requirements for the service will be captured and specified. The main task will then be	1/9/04	29/10/04	Detailed model specification High-level requirements specification		CF

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<p>to generate a detailed specification of the models and ontology for the 2 types of resource, (i) e-learning case studies and (ii) student feedback. This will in-part be based on a review of the tool specification from the e-learning models desk study and will mainly comprise of a systematic analysis using walk-throughs to ensure that the models are correct and complete, and extracting the core models into a formal structured model (which could be used to define a W3C OWL specification in WP2). It will also consider the specification of lower-level modules within the model for more detailed case-study descriptions, such as the use of the IMS Learning Design specification for the specification of learning activities within each case study. The output from this activity will feed into WP 2.</p>					
<p>2. Knowledge engineering. This task will take the detailed system specification and build the e-learning expert system. This will comprise of the following steps:</p> <ul style="list-style-type: none"> - build a formal ontology using the OWL tool - specify the database schema - generation of the expert system - provide web accessibility - provide a meta-data repository - testing and validation of the expert system 	1/10/04	30/11/04	Machine-readable schema Meta-data repository		AS
<p>3. Standards. This task will analyse the model specification and schema in terms of the relationship with the main e-learning standards (e.g. IMS LOM, LD, etc) and will produce a mapping report.</p>	1/10/04	31/12/04	Mapping report		JS

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WORKPACKAGE 2: Grid service development	1/9/04	31/03/05	See below		MG
<i>Objective: to setup the testbed, develop and test the grid service elements, and produce the design report and interface specifications.</i>					
4. Create testbed. This will consist of 2 activities: - Build the computing testbed - Generate test materials and build a test relational database of case studies and student feedback	1/9/04	30/11/04	Testbed created Test resources created		JS
5. Grid service development A UML design of the grid service will first be completed. This will followed by the following three steps. The first will be to extend the OGSA-DAI framework to provide access to the expert system and database. OGSA-DAI will provide the ability to access distributed grid data sources. The next steps will be to create a schema repository and an OGSA grid service to provide a public web-service for accessing the expert system and distributed databases. This grid service will communicate with the OGSA-DAI components using SOAP and in turn will itself provide a SOAP based API for external applications. All software will be unit tested.	1/10/04	31/03/05	UML design Grid services Meta-data repository		JS
6. Design and consolidation This activity will consolidate and document the technical work into a design report and in particular will specify a set of well-defined open interfaces for the grid service, so that it can be easily incorporated into the JISC technical architecture and re-used by others.	1/10/04	31/03/05	Design report and interface specifications		MG

Workpackage and activity	Earliest start date	Latest completion date	Outputs (clearly indicate deliverables & reports in bold)	Milestone	Responsibility
<p>WORKPACKAGE 3: Client application development and service testing</p> <p><u>Objective:</u> development of user agent client applications, investigation of 3rd-party tool/client integration, full system testing and expert evaluation</p>	1/09/04	31/03/05	See below		MG
<p>7. User agent development. This activity will build user agents for e-learning case studies and student feedback applications. This will provide a structured search and retrieval of the e-learning resources and will make use of the grid based SOAP API to the expert system and database.</p>	01/10/04	31/03/05	User agent client applications		TA
<p>8. Investigation of 3rd-party tools This activity will investigate 3rd-party tools (such as learning design authoring tools) and how they can be integrated into the system to allow users to specify components of the shareable learning resources.</p>	01/09/04	31/01/05	3 rd party tools report		JS
<p>WORKPACKAGE 4: Completion</p> <p><u>Objective:</u></p>	01/03/05	31/03/05	See below		MG
<p>9. System testing Much of the testing of the system will be done during the iterative development cycle through unit testing. However, once the client applications are completed a full integration test of the complete system will be carried out and the software will be formally released onto Sourceforge.</p>	01/03/05	31/03/05	Test plan Test reports Release of software components		TA
<p>10. Expert evaluation This will consist of expert walk-throughs of the final system and preparation of a final evaluation report.</p>	01/03/05	31/03/05	Experts report		TM

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Members of Project Team:

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