

# Milestone 1 Report

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# 1 SUMMARY OF WORK ACCOMPLISHED

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The goal of this project is to build a GIS Desktop Client that integrates with Open GIS Consortium (OGC) Open Web Services (OWS).

The Application Framework we will be using is called Eclipse Rich Client Platform. Eclipse Rich Client Platform is an offshoot of a popular Java Integrated Development Environment and offers a unique approach to Java User Interface development.

All required documents have been completed for this initial milestone.

These Documents are:

## Phase 1.1

- WFS DataStore Design and Testing Plan

## Phase 1.2

- Printing Technologies Report

## Phase 1.6

- Rendering Technologies Report

## Phase 1.8

- GIS Web Registry Services Report

## Phase 1.10

- Requirements Document
- Milestone Report

For milestone 1 we have completed:

## Phase 1.10

- Project Web Site, svn repository, wiki and email list

We were very pleased with the assistance provided by our partners and the open source community in setting up the uDig project.

This work is publicly available via the uDig project website, community wiki and Subversion repository.

## 2 ENCOUNTERED PROBLEMS AND SOLUTIONS

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### **2.1 GeoAPI and GO-1 Initiative**

The GeoAPI library provides the Java GIS community with a common set of interfaces based on OGC standards. Recently the GO-1 initiative has been brought before the OGC as a common object representation of OGC concepts across object oriented languages.

Several of the changes made to GeoTools to track the GeoAPI and the GO-1 initiative have resulted in a reduced feature set during the porting process. The GeoTools 2.1 branch has been scheduled to host the new capabilities required for the uDig project. The creation of this branch has been delayed due to GeoAPI and the GO-1 initiative.

At a functional level the impact on the GeoTools library is limited to reprojection. The uDig Project does not require reprojection services until Milestone 3.

The creation of the Geotools 2.1 branch has been rescheduled to during the Milestone 2 timeline. We have contacted several members of the GeoTools community with expertise in reprojection to ensure a timely response to GeoAPI changes. In addition, the company Polaxis has offered the uDig project a commercial implementation of the GO-1 rendering pipeline to use during development.

### **2.2 Grid Coverage Exchange**

The GeoTools support raster information has become outdated. The GO-1 initiative has provided the Java GIS community with the concept of a Grid Coverage Exchange (GCE) for access to raster information.

We have taken part in the specification of the GeoAPI interfaces for Grid Coverage Exchange, and provided an implementation for GeoTools ArcGrid file format.

### **2.3 Availability of Web Registry Service Documentation**

The available documentation of the OGC Web Registry Service is inadequate.

We have received the support of several OGC members with access to current documentation. We have received a commitment to answer our implementation questions as they arise via email.

### 3 WORK PLAN

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Our work plan for milestone two:

<b>Completion</b>	<b>Event</b>	<b>Specific Tasks</b>
July 23 <sup>th</sup> , 2004	Release 0.1	<ol style="list-style-type: none"><li>1) Core framework with Local Catalog Implementation</li><li>2) Sample Application Extension for validation</li><li>3) Module stubs and Model implementation for testing and concurrent development</li><li>4) GML parsing for WFS communication</li><li>5) Data discovery extensions to GridCoverageExchange and DataStore</li></ol>
Sept 7 <sup>th</sup> , 2004	Release 0.2	<ol style="list-style-type: none"><li>1) Full WMS support against latest version</li><li>2) WFS read access</li><li>3) Map visualization</li></ol>
Oct 4 <sup>th</sup> , 2004	Release 0.3	<ol style="list-style-type: none"><li>1) Transactional WFS access</li><li>2) Additional WMS specification support</li><li>3) Map printing</li><li>4) Feature selection and editing</li></ol>
Oct 11 <sup>th</sup> , 2004	Milestone 2	Milestone 2 complete.