# 2009

# The KSLOF GIS Data Portal
## Administrative and user guide to the portal.

An interactive Graphic User Interface (GUI) was designed and developed to facilitate the access of GIS data from the Khaled bin Sultan Living Oceans Foundation data repositories. This document describes the system developed for internet access and how to manage the dynamic pages via the supporting database.

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6/22/2009

# The KSLOF GIS Data Portal

Administrative and user guide to the portal.

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2009

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# Introduction

The *Khaled bin Sultan Living Oceans Foundation* (hereafter will be referred to as *KSLOF*), has been collecting and analyzing spatial data. Since its inception in 2000 as a 501(c)(3) public benefit, Private Operating Foundation, KSLOF has collected a number of spatial data that are valuable in the formulation of strategies and policies to protect the environment. These collections are available to scientists and researchers around the world for free via user-friendly web-based interfaces as a testament to their over arching theme of *'Science Without Borders'*, which is a dedication to research, conservation and restoration of marine ecosystems. More data are expected to be archived with scheduled activities.

The number of visitors to the current portal has steadily increased and is expected to increase exponentially with the upcoming Global Reef Expedition, beginning in 2010. The request for information of what data are available and how to access these data is expected to increase, as well. In order to manage the request and monitor the users of the data, an Internet-based data portal has been designed and developed to assist clients retrieve geographic information system (GIS) data that are in the repository of the KSLOF (Figure 1).
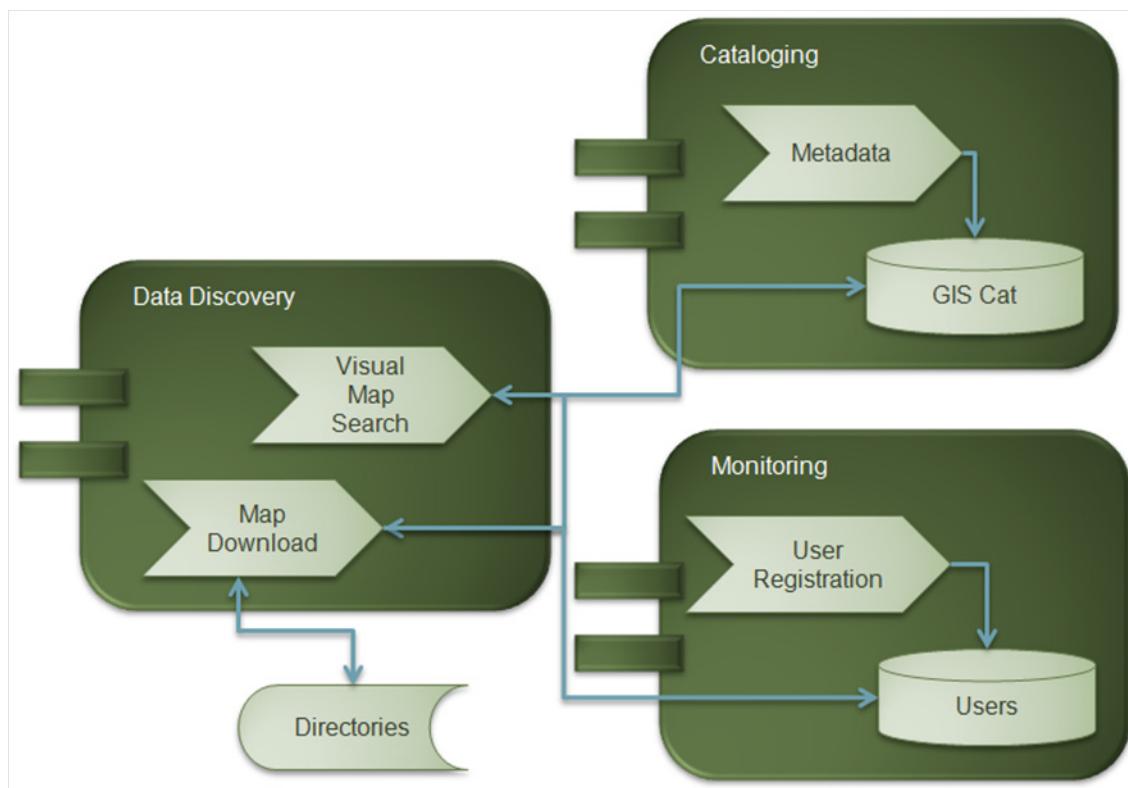


**Figure 1. System architechture of the KSLOF GIS data portal from development to deployment.**

This system has three major modules: *Data Discovery*, *Cataloging* and *Monitoring*. The "*Data Discovery*" module includes two dynamic interfaces, the interactive Google Earth map with markers and links to the data, a table listing of maps in the repository, and a table listing of interactive map viewers. The "*Cataloging*" module uses third-party utilities to encode and manage the SQLite[1] database backend. SQLite, the most widely deployed SQL database engine, was selected for this portal as it is a self-contained, serverless, zero configuration, open source and easy to manage system. The "*Monitoring*" module contains a series of user interfaces to facilitate the free registration of the users of the data and components to track files registered users have downloaded.

## The Graphic User Interface

This portal was designed to be deployed on a web server and tested with commonly used browsers (e.g. Microsoft Internet Explorer 7.x and 8.x, Mozilla Firefox, Apple Safari, Google Chrome, and Opera Unite). This means that if you can open a standard website, this portal will also work, albeit slow if the memory of the client's computer is slow and not enough hard disk space for temporary storage of data.

It is important to note that some of the portal modules require auto-executed ActiveX modules to be allowed to run. This portal was developed using JavaScript and a combination of other technology that are, often times, referred to as ActiveX modules to facilitate data discovery. The portal also incorporates a number of calls to pop-up windows as they become necessary. This means that all pop-up blockers to this domain should be disabled to use it effectively.

The main GUI provides an interactive user interface with the following components: (A) working area that changes depending on the active tab; (B) tab function to quickly move to different views of the same data; (C) navigation menu to move to other link of interest, such as the available interactive map viewers; and (D) messages and reminders to users (Figure 2).

### The Interactive Map Interface

The first tab on the portal entry page, called the Interactive Map, contains a world map based on Google Earth API technology, with georeferenced markers displaying where data are available via the KSLOF repository. These markers signify the status of the data and may either be red, yellow or green (Table 1). Clicking on a green or red marker will open a balloon message describing the data (Figure 3). The pop-up message provides a hyperlink to display the full abstract of the data from which data can also be downloaded.

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[1] http://www.sqlite.org/
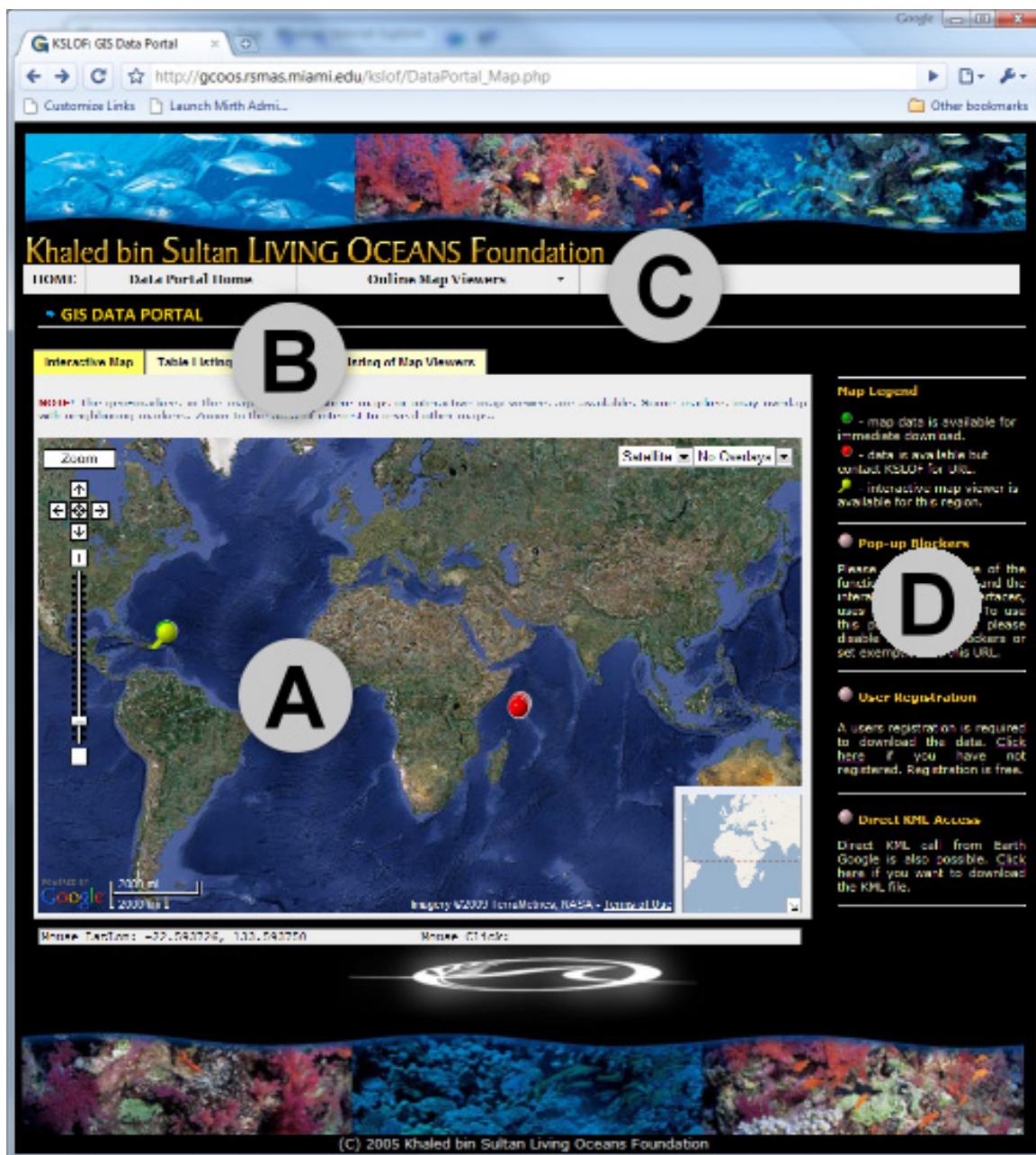
**Figure 2. The data portal user interface: (A) Interactive Google Earth interface that displays the location of the data in the repository and maps; (B) Tab functions to quickly move from a graphic interface to table listings; (C) standard drop-down menu to access online map viewers; and (D) map legend and messages.**

| Marker | Type | Remarks |
|--------|------|---------|
| 🔴 | Classified | This marker implies that geographic data is available for this area is available, but KSLOF requires the user to email KSLOF (williams@livingoceansfoundation.org) where the data will be used and distributed (as it applies) before a link is provided. |
| 🟢 | Open | This marker implies that a geographic data is available for this area and these maps may be downloaded without special permissions from the authors. |
| 📍 | Viewer | These markers represent online interactive map viewers available to users. |

Table 1. Georeferenced and color-coded markers are used to identify the type of data available.
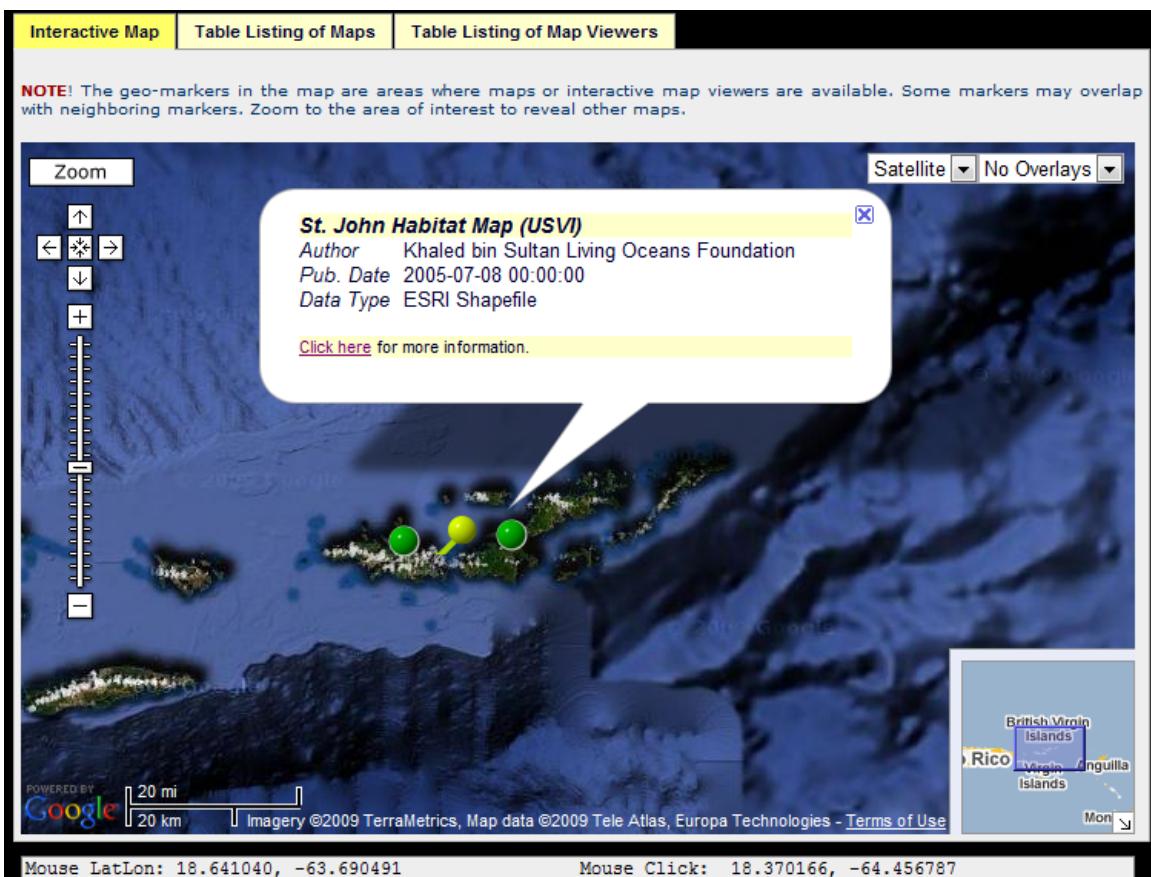


**Figure 3. Pop-up message when clicking on a data marker in the interface.**

A similar balloon message will be displayed when clicking on a marker for map viewers (Figure 4). The pop-up message provides a snapshot of the user interface of the interactive map viewer developed by KSLOF in partnership with other organizations.
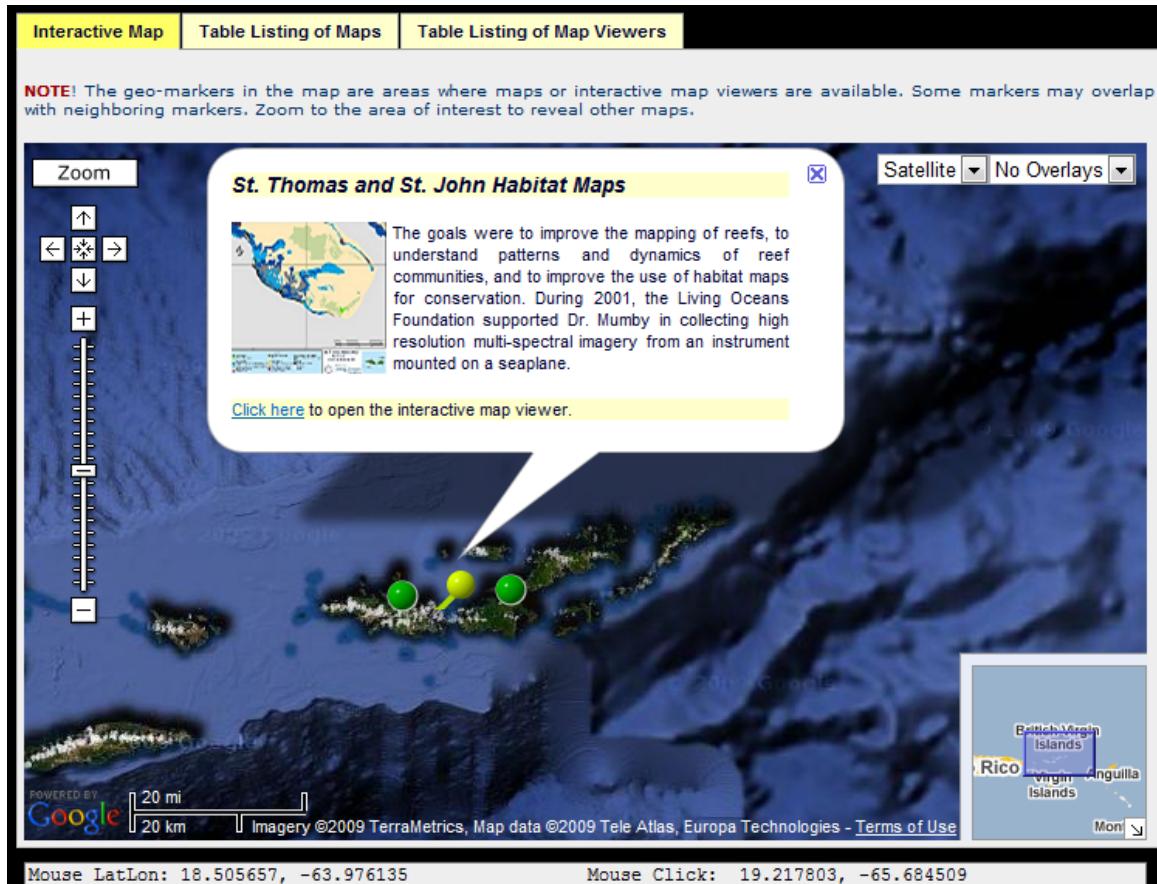


**Figure 4. Pop-up message when clicking a map viewer marker.**

It is important to note that these map viewers are hosted on a different domain. Depending on the configuration of the Internet browser in use, warning messages might be prompted to the user.

## The Table Listings

There are two table listings that represent the same set of data as presented in the interactive map as shown in Figure 2. These are: (1) Table Listing of Maps and (2) Table Listing of Map Viewers. The Table Listing of Maps provides a catalog of maps in the repository sorted by location (oftentimes, country) and title (Figure 5).

| Interactive Map | Table Listing of Maps | Table Listing of Map Viewers |

[NOTE: Some maps are still being cleared from their sources and as such, will require special permission to download the file. When requesting data from restricted list, please specify how and where the data will be used.]

| Location | Metadata | Link to Download |
|---|---|---|
| Seychelles | Title: African Banks Habitat Map (Seychelles)<br>Author: Khaled bin Sultan Living Oceans Foundation<br>Publication Date: 2007-08-01 00:00:00<br>Data Type: ESRI Shapefile<br><br>Abstract: This is a collaborative benthic hab... ...he Khaled bin Sultan Living Oceans Foundation, Univ... ...s Centre for Marine Research and Technology Ma... ...ws the key shallow water benthic habitats of A... ...s island group, southern Seychelles, Western ... ...ced by performing a classification on 17 bands ... ...ry ...os. Where data are missing due to cloud cov... ...lassifying georeferenced Landsat data (2000). Project... ...and Datum: WGS 1984. Sensor: Compact Airborne Spectrog... ...nds, 1m pixels, 434-849nm electromagnetic spectrum region. Original ... ...copyright Khaled bin Sultan Living Oceans Foundation, 2005. Landsat data is from the Millennium Cora Reefs Landsat Archive, USF Millennium Global Coral Reef Mapping Project. Image pre-processing, classification and mapsheet production was completed by Cambridge Coastal Research Unit and the Unit for Landscape Modelling, University of Cambridge, 2006. | Restricted. Please contact KSLOF for permission. |
| USVI, U.S.A. | Title: St. Thomas Habitat Map (USVI)<br>Author: Khaled bin Sultan Living Oceans Foundation<br>Publication Date: 2005-07-08 00:00:00<br>Data Type: GeoTIF<br><br>Abstract: The goals of this project we... ...f USVI reefs, to understand patterns and dynamics ... ...ve the use of habitat maps for conservation. Prin... ...University of Exeter, UK. Data was collected ar... ...mas and St. John. During 2001, the Living Ocean... ...nby to gather CASI and ground-truthing data arou... ...h... mbarked on the logistical support and research ... ...rk in the US... aimed to generate marine habitat maps ... ...s present. Such maps and databases provide important ... ...to monitor change both before and after 2001. A total of 402 s... ...t John and St Thomas were visited between 2nd and 16th April 2001. At each site geographical coordinates (using a Global Positioning System), depth and benthic community type were recorded to facilitate ground-truthing of remotely sensed imagery. At a subset of 34 sites, randomly placed 0.25 sq-meter quadrats were used to provide data on the species present within each benthic community. The subset of sites was chosen to ensure (a) data from each benthic community observed in the U.S. Virgin Islands (b) replicate data from benthic communities at different sites around both islands and | Ready for Download |

Circle callout (Seychelles row): Restricted. Please contact KSLOF for permission.

Circle callout (USVI row): Ready for Download

**Figure 5. The Table Listing of Maps in the repository is an alternative to the map interface when retrieving data. Depending on the classification of the map, some are ready for downloading while others may require special permission to download and use.**

The other table is the Table Listing of Map Viewers that KSLOF developed in partnership with other organizations (Figure 6). These viewers, while also developed to be deployed via the web, may have entirely different system requirements from this portal. Please refer to their user manuals if problems are encountered when retrieving these modules as they are maintained by their original authors. You may also contact KSLOF if there are difficulties contacting the original authors of these modules.

**Figure 6. Table List of Map Viewers that display data developed jointly by other organizations with KSLOF support.**

## User Registry

Downloading data from this portal will require that users register to a central registry, which is maintained by KSLOF. KSLOF makes it clear, through their Privacy Statement (Appendix B), to users that data collected will not be used for marketing tools, sold or revealed to others except to follow a court order for its release. Users are encouraged to provide accurate registration information in order for KSLOF to serve its client better. Registration is free to all who wish to access and use the data.

The link to the user registration form is found in the list of messages (Figure 2D) or when attempting to download data (Figure 8). The required inputs are self-explanatory, however, it should be noted that there are other required fields. KSLOF uses these to understand demographic statistics of their users which can be used to better serve the clients. Additionally, there are challenge questions to answer for security purposes when retrieving lost passwords.

Importantly, users will have to agree to the End-User License Agreement (EULA; Appendix A) to download any data from this portal. The "Submit" button will only be enabled if the check box signifying that the EULA was read and understood and user acknowledges the agreement to be bound by the terms and conditions of the EULA. If the user cannot agree with any part of the EULA, users should not download the data. Users are encouraged to communicate with KSLOF if there are parts of the EULA that cannot be understood or would like to request exceptions.

**Figure 7. User registration form.**

## Downloading and Using the Data

Prior to any download of data, the user will be prompted to provide the username and password created during registration. Additionally, users are reminded of the generic disclaimer, condensed from the EULA (Figure 8). Hyperlinks are also provided to register a user and to view the Privacy Statement.

**Disclaimer**

The data and information contained in the *Khaled bin Sultan Living Oceans Foundation* (**KSLOF**) website is provided as a public service to the Internet community. The contents of this website are subject to periodic change. Although every attempt will be made to ensure that the information is accurate and timely, the data and information is presented "*as is*" and without warranties, guaranties or representation as to the truth, accuracy or completeness of the data provided. Information contained on this website should not be mistaken for legal advice and should not be used as the exclusive basis for decision-making. Any maps provided should not be used for navigation. Use of this website is strictly voluntary and at the user's sole risk. **KSLOF** shall not be held liable for any damages suffered as a result of using, modifying, contributing or distributing the materials.

Other resources linked from these pages are maintained by independent providers. KSLOF does not monitor all linked resources and cannot guarantee their accuracy. Statements, views and opinions included in an independent provider's material are strictly those of the authors.

All questions regarding specific contents of this website should be directed to the webmaster. General comments from the public on the usefulness of our website are welcome.

**User Authentication**

KSLOF requires users to register before downloading GIS materials from this site. Registration is free. If you are a registered user, enter the username and passcode. Click here to register. Click here to view the KSLOF's Privacy Statement.

Username [ ]
Password [ ]

[ Submit ]

Figure 8. User authentication page.

Successful authentication is done only once per session.  This means that if you have already entered your username and password, then the portal will remember you as long as you do not close your browser.  However, if you are inactive for over 1 minute, the portal will request that you re-enter these parameters again.

## Moving the Data Portal

The portal may be moved to a new location as the need arises.  The following is the step-by-step procedure on how to do this.  A person with substantial experience in installing/setting-up web servers is required.  Also, you may refer to system manual on how to setup a web server.

### Step 1: The Folder Structure

The following folders should be created on the web server structure:

```
$_SERVER['DOCUMENT_ROOT']        - root directory; for all PHP and HTML files
    ↳ css                        - for Cascading Style Sheets
    ↳ data                       - for KML and SQLITE files
    ↳ images                     - for all images (JPG; PNG;GIF)
    ↳ jscript                    - for all Java scripts and Spry supporting files
```

## Step 2: Edit Database Paths

When moving the portal to another domain or folder, it is important to maintain the folder structure and contents.  However, there is still a need to manually edit the path calls to the database.  Using a text editor (Notepad for Windows-based editors or vi for Unix-based editor), edit the following files that read and/or write to the database:

| File | Line # | Remarks |
|---|---|---|
| DataPortal_Authenticate.php | 12 | Change or remove the *'gisui'* path |
| DataPortal_GenerateKML.php | 10, 183, 201 | Change or remove the *'gisui'* path |
| DataPortal_GenerateKML.php | 14 | Change or remove the *'gisui'* path |
| | 47, 69, 91, 153 | Chage absolute URL to proper URL |
| DataPortal_GenerateKML_Public.php | 9 | Change or remove the *'gisui'* path |
| | 40, 62, 84, 148 | Chage absolute URL to proper URL |
| DataPortal_Map.php | 19 | Change the Google API key |
| | 109, 128 | Chage absolute URL to proper URL |
| DataPortal_Downwload.php | 58 | Change or remove the '*gisui*' path in the href attribute. |
| DataPortal_Save_User.php | 15 | Change or remove the *'gisui'* path |

Since the portal utilizes a SQLite database, no additional procedures or installation is needed to install the database files.  Simply copy the *kslof_gis.sqlite* file to the data folder and set permission (see below) to allow editing of this file.

## Step 3: Edit Permissions

The data portal actively reads and writes to the SQLite database, *kslof_gis.sqlite* (Appendix C) in the folder called *'data'*.  Edit the permission to this folder and file to allow the web server and selected individuals to read and write to the database.  The permission to allow authorized individuals to manually edit the should also be set.

## Managing the Database

The most commonly used SQLite editor is the *Mozilla Firefox* add-on, *SQLite Manager*. This utility can be downloaded from *https://addons.mozilla.org/en-US/firefox/addon/5817* or directly from *http://code.google.com/p/sqlite-manager/* and will require that the Firefox browser be installed. The other notable freeware includes, among others, *Habanero* (developed and distributed by *ChilliSoft* (http://habanero.chillisoft.qarchive. org/)) and *DatAdmin* (developed and managed by *JenaSoft* (*http://datadmin.jenasoft.com/en/ download*)). There are other, more commercial, software tools available that may also be used.

Figures 9-12 are screen captures from the *SQLite Manager* and users are encouraged to read the User Manual.

## Adding and Modifying Data

The *SQLite Manager*'s primary user interface includes a button to add a record (Figure 9). Clicking on the "*Add Record*" button will open another window, which facilitates the adding of the data within tables (Figure 10). Clicking on a record, followed by clicking on the "*Edit Selected*" button will open the same window, but fields are pre-populated by what was saved in previous operations. It is important to note that the "*downloads*" table is auto-updated by the portal and SHOULD NOT be edited unless absolutely necessary to correct a problem (e.g. a corrupted table).



**Figure 9. *SQLite Manager* interface with all of the basic modules needed to manage the *kslof_gis.sqlite* database.**

Updating the database will not automatically update the KML files that were created from this database. To complete the process of adding a record to the portal, run the *DataPortal_GenerateKML.php* from a browser. For example, if the domain is *http://www.livingoceansfoundation.org* and this portal was moved to a folder "*gis*", then the following URL, *http://www.livingocenasfoundation.org/gis/DataPortal_GenerateKML.php* will re-create the KML files.
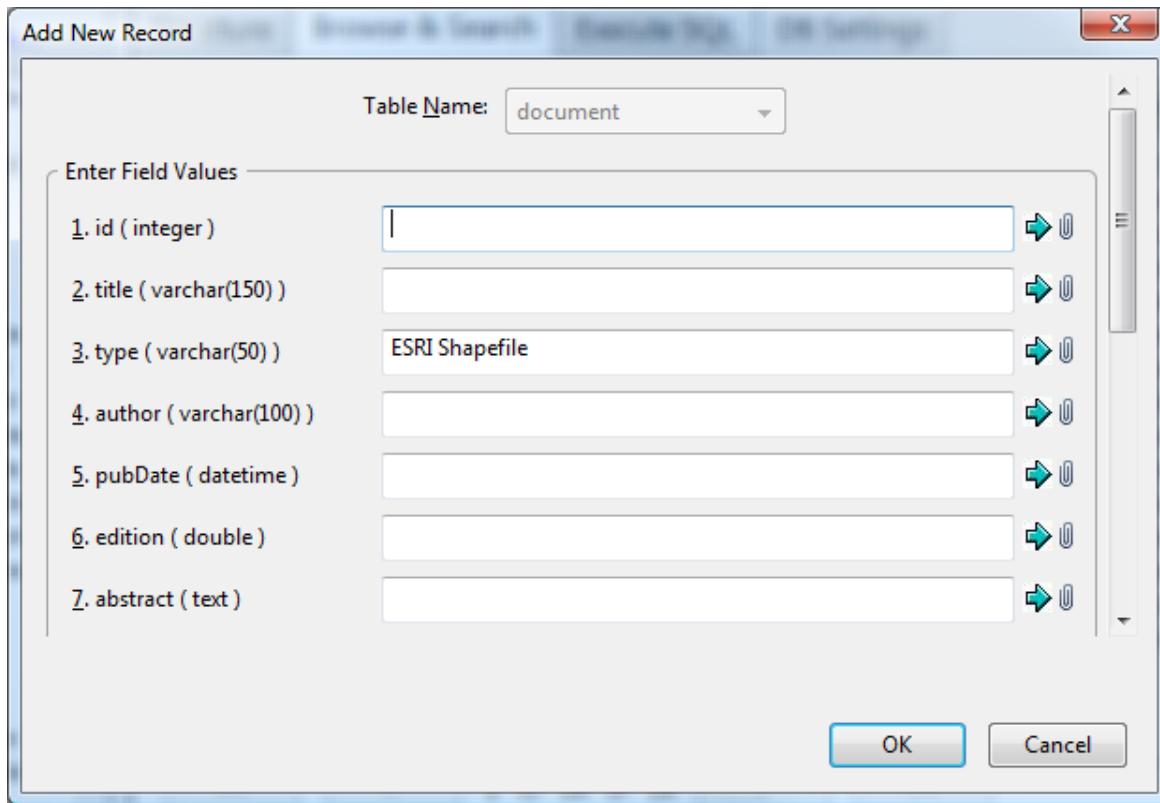


Figure 10. *SQLite Manager* interface to add a record on the table "*document*".

## Querying the Database

As with adding or editing a record, the database can be queried using *SQLite Manager* or other similar tools. In *SQLite Manager*, clicking on a table name will automatically list the records of that table. In some instances, this may be insufficient. *SQLite* understands most of the standard SQL language to query the database. The system is able to accomodate simple queries, which displays the total number of files downloaded by U.S.-based users, along with the advanced SQL statements (Figure 11). An example is as such:

> *SELECT*
> *COUNT (users.country) AS "Total Count"*
> *FROM*

*downloads*
*INNER JOIN users ON (downloads.username=users.username)*
*WHERE*
*(users.country = 'US')*
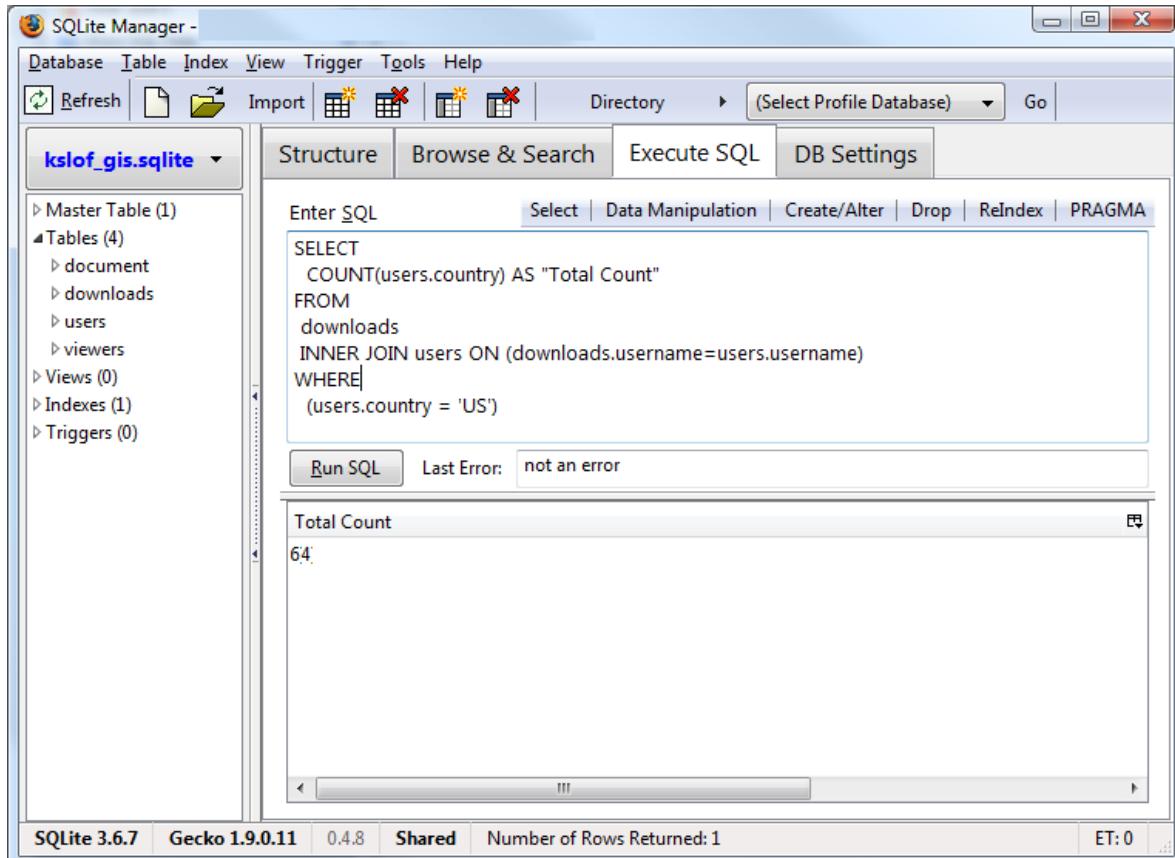


**Figure 11.** *SQLite Manager* **interface showing the results of the SQL execution to count records downloaded by a U.S.-based user.**

The following may also be used to query the database (Figure 12).

*SELECT*
*users.firstname,*
*downloads.downloadDate,*
*document.title,*
*users.lastname*
*FROM*
*downloads*
*INNER JOIN users ON (downloads.username=users.username)*
*INNER JOIN document ON (downloads.map_id=document.id)*
*GROUP BY*
*downloads.downloadDate,*
*document.title,*
*users.firstname,*
*users.lastname*

*ORDER BY*
*users.lastname,*
*users.firstname*
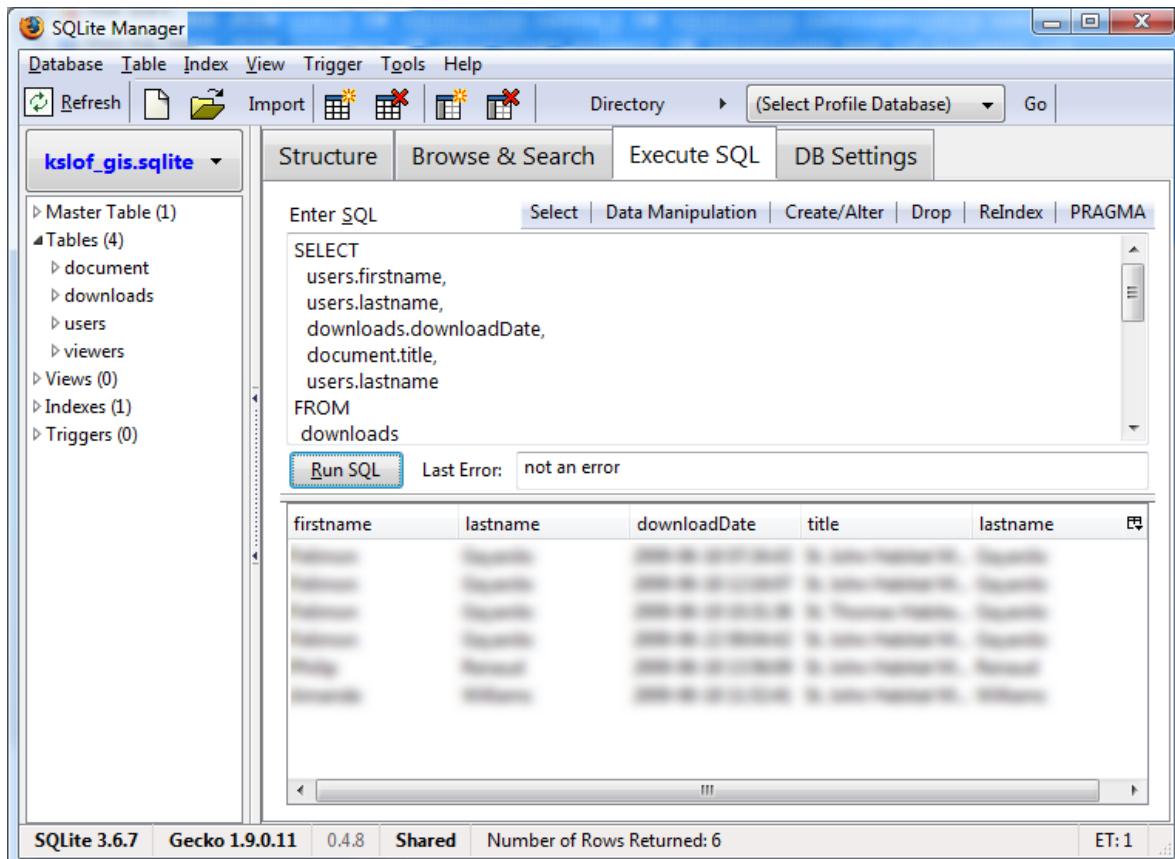


**Figure 12. The *SQLite Manager* interface shows the results of the SQL execution as a list of what users have downloaded to date (results were intentionally blurred).**

Users are encouraged to read the online manual (*http://www.sqlite.org/lang.html*) for details on how to construct the SQL statements.

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# Appendices

## Appendix A: End-User License Agreement

**END-USER AGREEMENT FOR Geographic Information Products**

BY REGISTERING TO THIS PORTAL AND USING THE KHALED BIN SULTAN LIVING OCEANS FOUNDATION GEOGRAPHIC INFORMATION PRODUCTS, YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, YOU ARE NOT PERMITTED TO DOWNLOAD OR USE THIS PORTAL.

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The downloaded data may not be re-exported, posted or otherwise exported into (or to a national or resident of) any country to which the U.S. has embargoed goods, or to anyone on the U.S. Treasury Department's list of Specially Designated Nationals or the U.S. Commerce Department's Table of Denial Orders.  You represent and warrant that you are not located in, under the control of, or a national or resident of any such country or on any such list.

6. Limited Warranty.

THE DATA DISTRIBUTED IN THIS PORTAL ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF CONDITION, UNINTERRUPTED USE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT.  The entire risk arising out of use or performance of the downloaded data remains with the user.

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You hereby agree that the Khaled bin Sultan LIVING OCEANS Foundation would be irreparably damaged if the terms of this End-User License Agreement were not specifically enforced, and therefore you agree that the Khaled bin Sultan LIVING OCEANS Foundation shall be entitled, without bond, other security, or proof of damages, to appropriate equitable remedies with respect to breaches of this End-User License Agreement, in addition to such other remedies as the Khaled bin Sultan LIVING OCEANS Foundation may otherwise have available to it under applicable laws. In the event any litigation is brought by either party in connection with this End-User License Agreement, the prevailing party in such litigation shall be entitled to recover from the other party all the costs, attorneys' fees and other expenses incurred by such prevailing party in the litigation.

9. Changes to the Agreement.

The Khaled bin Sultan LIVING OCEANS Foundation reserves the right, at its sole discretion, to change, modify, add to, supplement or delete any of the terms and conditions of this End-User License Agreement. If any future changes to this End-User License Agreement are unacceptable to you or cause you to no longer be in compliance with this End-User License Agreement, you may terminate this End-User License Agreement in accordance with Section 4 herein. You have no interest, monetary or otherwise, in any feature or content contained in the downloaded data or associated files.

10. Dispute Resolution and Governing Law

a. Informal Negotiations. To expedite resolution and control the cost of any dispute, controversy or claim related to this End-User License Agreement ("Dispute"), you and the Khaled bin Sultan LIVING OCEANS Foundation agree to first attempt to negotiate any Dispute (except those Disputes expressly provided below) informally for at least 30 days before initiating any arbitration or court proceeding. Such informal negotiations commence upon written notice from one person to the other. You will send your notice to: Khaled bin Sultan LIVING OCEANS Foundation, 8181 Professional Place, Suite 215, Landover, MD, 20785, U.S.A.

b. Binding Arbitration. If you and the Khaled bin Sultan LIVING OCEANS Foundation are unable to resolve a Dispute through informal negotiations, either you or the Khaled bin Sultan LIVING OCEANS Foundation may elect to have the Dispute finally and exclusively resolved by binding arbitration.  Any election to arbitrate by one party shall be final and binding on the other.  YOU UNDERSTAND THAT ABSENT THIS PROVISION, YOU WOULD HAVE THE RIGHT TO SUE IN COURT AND HAVE A JURY TRIAL.  The arbitration may be conducted in person, through the submission of documents, by phone or online.  The arbitrator will make a decision in writing, but need not provide a statement of reasons unless requested by a party.  The arbitrator must follow applicable law, and any award may be challenged if the arbitrator fails to do so.  Except as otherwise provided in this End-User License Agreement, you and the Khaled bin Sultan LIVING OCEANS Foundation may litigate in court to compel arbitration, stay proceeding pending arbitration, or to confirm, modify, vacate or enter judgment on the award entered by the arbitrator.

c. Restrictions.  You and the Khaled bin Sultan LIVING OCEANS Foundation agree that any arbitration shall be limited to the Dispute between the Khaled bin Sultan LIVING OCEANS Foundation and you individually.  To the full extent permitted by law, (1) no arbitration shall be joined with any other; (2) there is no right or authority for any Dispute to be arbitrated on a class-action basis or to utilize class action procedures; and (3) there is no right or authority for any Dispute to be brought in a purported representative capacity on behalf of the general public or any other persons.

d. Exceptions to Informal Negotiations and Arbitration.  You and the Khaled bin Sultan LIVING OCEANS Foundation agree that the following Disputes are not subject to the above provisions concerning informal negotiations and binding arbitration: (1) any Disputes seeking to enforce or protect, or concerning the validity of, any of your or the Khaled bin Sultan LIVING OCEANS Foundation's intellectual property rights; (2) any Dispute related to, or arising from, allegations of theft, piracy, invasion of privacy or unauthorized use; and (3) any claim for injunctive relief.

e. Location. If you are a resident of the United States, any arbitration will take place at any reasonable location convenient for you.  For residents outside the United States, any arbitration shall be initiated in the County of San Diego, State of California, United States of America.  Any Dispute not subject to arbitration (other than claims proceeding in any small claims court), or where no election to arbitrate has been made, shall be decided by a court of competent jurisdiction within the County of San Diego, State of California, United States of America, and you and the Khaled bin Sultan LIVING OCEANS Foundation agree to submit to the personal jurisdiction of that court.

f. Governing Law. Except as expressly provided otherwise, this End-User License Agreement shall be is governed by, and will be construed under, the Laws of the United States of America and the law of the State of California, without regard to choice of law principles.

g. Severability. You and the Khaled bin Sultan LIVING OCEANS Foundation agree that if any portion Section 10 is found illegal or unenforceable (except any portion of 10(d)) that portion shall be severed and the remainder of the Section shall be given full force and effect.  If Section 10(d) is found to be illegal or unenforceable then neither you nor the Khaled bin Sultan LIVING OCEANS Foundation will elect to arbitrate any Dispute falling within that portion of Section 10(d) found to be illegal or unenforceable

and such Dispute shall be decided by a court of competent jurisdiction within the County of San Diego, State of California, United States of America, and you and the Khaled bin Sultan LIVING OCEANS Foundation agree to submit to the personal jurisdiction of that court.

11. Miscellaneous.

This End-User License Agreement constitutes and contains the entire agreement between the parties with respect to the subject matter hereof and supersedes any prior oral or written agreements, provided, however, that this End-User License Agreement shall coexist with, and shall not supersede, the Terms of Use.  To the extent that the provisions of this End-User License Agreement conflict with the provisions of the Terms of Use, the conflicting provisions in the Terms of Use shall govern.

## Appendix B: KSLOF Privacy Statement (June 2009)

The Khaled bin Sultan LIVING OCEANS Foundation (KSLOF) will never use any information you may provide as a marketing tool. The list of users will not be sold or revealed to others except to follow a court order for its release. The information gathered is only that necessary to identify the user, allow KSLOF to execute statistical analysis of users using the basic demographic parameters collected, and allow KSLOF to improve its products and services. KSLOF will occasionally update this Statement of Privacy to reflect the organization and user feedback

# Appendix C: KSLOF Database Tables and SQL Structure

The system employs an *SQLite* database engine to store all data of the portal. It has the following tables:

| Table Name | Purpose | SQL |
|---|---|---|
| document | Core storage for the metadata of the data available. | CREATE TABLE document (<br>  id        integer PRIMARY KEY NOT NULL,<br>  title      varchar(150) NOT NULL,<br>  type           varchar(50) NOT NULL DEFAULT 'ESRI Shapefile',<br>  author       varchar(100),<br>  pubDate     datetime,<br>  edition       double,<br>  abstract      text,<br>  startDate     datetime,<br>  endDate       datetime,<br>  restriction    text,<br>  urlDownload    text,<br>  urlInteractive  text,<br>  lat          double,<br>  lon          double,<br>  status        integer,<br>  size          double,<br>  location      text<br>); |
| pubdatedownloads | Monitor what users are downloading. | CREATE TABLE downloads (<br>  username     varchar(50) NOT NULL,<br>  map_id       integer NOT NULL,<br>  downloadDate  datetime NOT NULL<br>); |
| users | Details about the registered user. | CREATE TABLE users (<br>  username     varchar(50) PRIMARY KEY NOT NULL,<br>  password     varchar(10) NOT NULL,<br>  firstname    varchar(150) NOT NULL,<br>  lastname     varchar(150) NOT NULL,<br>  job        varchar(150),<br>  organization  varchar(150),<br>  address1     text,<br>  city        varchar(100),<br>  state        varchar(100),<br>  pcode        varchar(10),<br>  country      varchar(50) NOT NULL,<br>  email        varchar(150),<br>  d_industry   varchar(100),<br>  d_company    varchar(100),<br>  d_role       varchar(100),<br>  challenge    varchar(100) NOT NULL, |

| | | |
|---|---|---|
| | | response    varchar(100) NOT NULL,<br>address2    text,<br>phone       text<br>); |
| viewers | List of all associated interactive map viewers. | CREATE TABLE viewers (<br>lat       double NOT NULL,<br>lon        double NOT NULL,<br>label      text,<br>description  text,<br>url       text,<br>image      text<br>); |

# Appendix C: PHP Source Codes

## DataPortal_EULA.html

```html
<!--
// Module: DataPortal_EULA.html
// Purpose: The End-User License Agreement (EULA)
// Author: Felimon Gayanilo (felimon@gayanilo.net)
// Date Last Update: 23 June 2009

// Copyright (c) 2009, Living Oceans Foundation, MD. All right reserved.
-->

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
  <title>KSLOF: Data Portal</title>
  <script src="jscript/SpryMenuBar.js" type="text/javascript"></script>
  <script src="jscript/imageswap.js" type="text/javascript"></script>
  <link href="css/DataPortal_EULA.css" rel="stylesheet" type="text/css">
  <link href="jscript/SpryMenuBarHorizontal.css" rel="stylesheet" type="text/css">
  <link href="jscript/SpryMenuBarVertical.css" rel="stylesheet" type="text/css">
</head>

<body class="twoColFixRtHdr" onLoad="MM_preloadImages('images/closeWindow_down.png')">
  <div id="container">
    <div>
      <div align="center">
        <img src="images/kslof_header_01.png" width="952" height="133">
        <ul id="KSLOF_DP_Menu" class="MenuBarHorizontal">
          <li><a href="http://livingoceansfoundation.org/" target="_self">HOME</a> </li>
          <li><a href="DataPortal_Map.php" target="_self" style="width:180px">Data Portal Home</a></li>
          <li><a class="MenuBarItemSubmenu" href="#" style="width:250px">Online Map Viewers</a>
            <ul>
              <li><a href="http://www.livingoceansfoundation.org/index.php?option=com_wrapper&Itemid=163" target="_blank">St. Croix and Buck Island Data Navigator</a> </li>
              <li><a href="http://lof.towson.edu/LOF/standard/" target="_blank">St. Thomas and St. John Habitat Mapper</a></li>
            </ul>
          </li>
          <li><a href="#" style="width:400px; height:15px"> </a></li>
        </ul>
        <p><br>
        <img src="images/kslof_header_02.png" width="952" height="29"></p>
      </div>
    </div>


    <div id="mainContent">
      <p align="center"><strong>END-USER AGREEMENT FOR Geographic Information Products </strong><br>
      </p>
      <blockquote>
```

&lt;h2 align="justify" class="style1" style=""&gt;BY REGISTERING TO THIS PORTAL AND USING THE Khaled  bin Sultan Living Oceans Foundation  Geographic Information Products, YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. IF  YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, YOU ARE NOT PERMITTED TO DOWNLOAD OR USE THIS PORTAL. &lt;/h2&gt;

&lt;/blockquote&gt;

&lt;p align="justify" class="style2"&gt;All data files that are delivered to you by Khaled bin Sultan Living Oceans Foundation, Inc. is the copyrighted work of Khaled bin Sultan Living Oceans  Foundation, Inc.  Any and all uses of the  data downloaded from this portal are governed by the terms of this End User License Agreement (&amp;quot;License Agreement&amp;quot; or &amp;quot;Agreement&amp;quot;).  The Khaled bin Sultan Living Oceans  Foundation data are distributed solely for use by authorized end users  according to the terms of the License Agreement. Any use, reproduction,  modification or distribution of the data downloaded not expressly authorized by the  terms of the License Agreement is expressly prohibited.  NOT FOR NAVIGATION:  All Living Oceans Foundation GIS data  are unsuitable for navigation and must not be used for navigation of any kind.&lt;/p&gt;

&lt;p align="justify" class="style2"&gt;     1. Grant of a  Limited Use License. Subject to your agreement to and continuing compliance  with this License Agreement, Khaled bin Sultan Living Oceans Foundation grants,  and you hereby accept, a limited, non-exclusive license to (a) install the data  on one or more computers owned by you or under your legitimate control, and (b)  use the software and data files in conjunction with the Service for your non-commercial educational and scientific research purposes only. All use of  the data downloaded from this portal are subject to this License Agreement and to the Terms of Use  agreement, both of which you must accept before you can use this software and  associated data. &lt;/p&gt;

&lt;p class="style2"&gt;2. Ownership. &lt;/p&gt;

&lt;p align="justify" class="style2"&gt;     A. All title,  ownership rights and intellectual property rights in and to the data downloaded from this portal and  all copies thereof are owned or Khaled bin Sultan Living Oceans Foundation. The  downloaded data is protected by the copyright laws of the United States,  international treaties and conventions, and other laws. The downloaded data contains  materials licensed by third parties, and the licensors of those materials may  enforce their rights in the event of any violation of this License Agreement. &lt;/p&gt;

&lt;p align="justify" class="style2"&gt;     B. You may not  transfer your rights and obligations under the License Agreement to another without  the express without the express written consent of Khaled bin Sultan Living Oceans Foundation.&lt;/p&gt;

&lt;p align="justify" class="style2"&gt;     3.  Responsibilities of End User. &lt;/p&gt;

&lt;p align="justify" class="style2"&gt;     A. Subject to  the license granted hereunder, you may create derivative products from the downloaded data  with stipulation that you &lt;strong&gt;acknowledge Khaled bin  Sultan Living Oceans Foundation in any derivative product or publication in  which you use the data or files.&lt;/strong&gt; &lt;/p&gt;

&lt;p align="justify" class="style2"&gt;     B. You agree  that you shall not, under any circumstances, &lt;/p&gt;

&lt;p align="justify" class="style2"&gt;     (i) sell, grant  a security interest in or transfer reproductions of the downloaded data to other  parties in any way not expressly authorized herein, nor shall you rent, lease  or license the downloaded data to others; &lt;/p&gt;

&lt;p align="justify" class="style2"&gt;     (ii) exploit the  downloaded data or any of its parts for any commercial purpose whatsoever.; &lt;/p&gt;

&lt;p align="justify" class="style2"&gt;     4. Termination.  &lt;/p&gt;

&lt;p align="justify" class="style2"&gt;This License Agreement is effective until terminated. You may terminate the License Agreement at any time by (i) permanently destroying all copies of the downloaded data in your possession or control; (ii) removing the downloaded data from your hard  drive; and (iii) notifying Khaled bin Sultan Living Oceans Foundation of your  intention to terminate this License Agreement. Khaled bin Sultan Living Oceans Foundation may terminate this Agreement at any time for any reason or no  reason. In such event, you must immediately and permanently destroy all copies  of the downloaded data in your possession and control and remove the associated data  files from your hard drive. Upon termination of this Agreement for any reason,  all licenses granted herein shall immediately terminate. &lt;br&gt;

&lt;/p&gt;

&lt;p align="justify" class="style2"&gt;5. Export  Controls. &lt;/p&gt;

&lt;p align="justify" class="style2"&gt;The downloaded data may not be re-exported, posted or otherwise  exported into (or to a national or resident of) any country to which the U.S.  has embargoed goods, or to anyone on the U.S.

Treasury Department's list of  Specially Designated Nationals or the U.S. Commerce Department's Table of  Denial Orders. You represent and warrant that you are not located in, under the  control of, or a national or resident of any such country or on any such list. </p>

    <p class="style2">     6. Limited  Warranty. </p>

    <p align="justify" class="style2">THE DATA DISTRIBUTED IN THIS PORTAL IS PROVIDED &quot;AS IS&quot; WITHOUT WARRANTY OF ANY  KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED  WARRANTIES OF CONDITION, UNINTERRUPTED USE, MERCHANTABILITY, FITNESS FOR A  PARTICULAR PURPOSE, OR NONINFRINGEMENT. The entire risk arising out of use or  performance of the downloaded data remains with the user. </p>

    <p align="justify" class="style2">     7. Limitation of  Liability, Indemnity.</p>

    <p align="justify" class="style2"> KHALED BIN SULTAN LIVING OCEANS FOUNDATION SHALL NOT BE  LIABLE IN ANY WAY FOR ANY LOSS OR DAMAGE OF ANY KIND ARISING OUT OF THE DOWNLOADED DATA OR ANY USE OF THIS DATA PORTAL, INCLUDING WITHOUT LIMITATION LOSS OF DATA, LOSS OF  GOODWILL, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, OR ANY AND ALL OTHER  DAMAGES OR LOSSES.  KHALED BIN SULTAN LIVING OCEANS FOUNDATION SHALL NOT BE RESPONSIBLE FOR ANY INTERRUPTIONS OF  SERVICE, SOFTWARE OR HARDWARE FAILURES, OR ANY OTHER EVENT WHICH MAY RESULT IN  A LOSS OF DATA OR DISRUPTION OF SERVICE. IN NO EVENT WILL KHALED BIN SULTAN  LIVING OCEANS FOUNDATION BE LIABLE TO YOU FOR ANY INDIRECT, INCIDENTAL,  SPECIAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES. You hereby agree to defend, indemnify and hold Khaled bin Sultan Living Oceans Foundation harmless from and  against any claim, liability, loss, injury, damage, cost or expense (including  reasonable attorneys' fees) incurred by Khaled bin Sultan Living Oceans Foundation arising out of or from your use of the downloaded data. Some states do not  allow the exclusion or limitation of incidental or consequential damages, so  the above limitations may not apply to you. </p>

    <p align="justify" class="style2">     8. Equitable  Remedies. </p>

    <p align="justify" class="style2">You hereby agree that Khaled bin Sultan Living Oceans Foundation  would be irreparably damaged if the terms of this License Agreement were not  specifically enforced, and therefore you agree that Khaled bin Sultan Living  Oceans Foundation shall be entitled, without bond, other security, or proof of damages, to appropriate equitable remedies with respect to breaches of this  License Agreement, in addition to such other remedies as Khaled bin Sultan  Living Oceans Foundation may otherwise have available to it under applicable  laws. In the event any litigation is brought by either party in connection with  this License Agreement, the prevailing party in such litigation shall be  entitled to recover from the other party all the costs, attorneys' fees and  other expenses incurred by such prevailing party in the litigation. </p>

    <p align="justify" class="style2">     9. Changes to  the Agreement. </p>

    <p align="justify" class="style2">Khaled bin Sultan Living Oceans Foundation reserves the right, at  its sole discretion, to change, modify, add to, supplement or delete any of the  terms and conditions of this License Agreement.  If any future changes to this License  Agreement are unacceptable to you or cause you to no longer be in compliance  with this License Agreement, you may terminate this License Agreement in  accordance with Section 4 herein. You have no interest, monetary or otherwise,  in any feature or content contained in the downloaded data or associated  files. </p>

    <p align="justify" class="style2">     10. Dispute  Resolution and Governing Law </p>

    <p align="justify" class="style2">     a. Informal  Negotiations. To expedite resolution and control the cost of any dispute,  controversy or claim related to this License Agreement (&quot;Dispute&quot;),  you and Khaled bin Sultan Living Oceans Foundation agree to first attempt to  negotiate any Dispute (except those Disputes expressly provided below)  informally for at least 30 days before initiating any arbitration or court  proceeding. Such informal negotiations commence upon written notice from one  person to the other.  You will send your  notice to Khaled bin Sultan Living Oceans Foundation, 8181 Professional Place, Suite 215, Landover,  MD, 20785. </p>

    <p align="justify" class="style2">     b. Binding  Arbitration. If you and Khaled bin Sultan Living Oceans Foundation are unable  to resolve a Dispute through informal negotiations, either you or Khaled bin  Sultan Living Oceans Foundation may elect to have the Dispute finally and  exclusively resolved by binding arbitration. Any election to arbitrate by one  party shall be final and binding on the other. YOU UNDERSTAND THAT ABSENT THIS PROVISION, YOU WOULD HAVE THE RIGHT TO SUE IN COURT AND HAVE A JURY TRIAL. The  arbitration may be conducted in person, through the submission of documents, by  phone or online. The arbitrator will make a decision in writing, but need not  provide a statement of reasons unless requested by a party. The arbitrator must

follow applicable law, and any award may be challenged if the arbitrator fails  to do so. Except as otherwise provided in this License Agreement, you and Khaled  bin Sultan Living Oceans Foundation may litigate in court to compel  arbitration, stay proceeding pending arbitration, or to confirm, modify, vacate  or enter judgment on the award entered by the arbitrator. </p>

        <p align="justify" class="style2">     c. Restrictions.  You and Khaled bin Sultan Living Oceans Foundation agree that any arbitration shall  be limited to the Dispute between Khaled bin Sultan Living Oceans Foundation  and you individually. To the full extent permitted by law, (1) no arbitration  shall be joined with any other; (2) there is no right or authority for any  Dispute to be arbitrated on a class-action basis or to utilize class action  procedures; and (3) there is no right or authority for any Dispute to be  brought in a purported representative capacity on behalf of the general public  or any other persons. </p>

        <p align="justify" class="style2">     d. Exceptions to  Informal Negotiations and Arbitration. You and Khaled bin Sultan Living Oceans  Foundation agree that the following Disputes are not subject to the above  provisions concerning informal negotiations and binding arbitration: (1) any  Disputes seeking to enforce or protect, or concerning the validity of, any of  your or Khaled bin Sultan Living Oceans Foundation's intellectual property rights; (2) any Dispute related to, or arising from, allegations of theft,  piracy, invasion of privacy or unauthorized use; and (3) any claim for  injunctive relief. </p>

        <p align="justify" class="style2">     e. Location. If  you are a resident of the United    States, any arbitration will take place at  any reasonable location convenient for you. For residents outside the United States,  any arbitration shall be initiated in the County of San Diego,  State of California, United States of America. Any  Dispute not subject to arbitration (other than claims proceeding in any small  claims court), or where no election to arbitrate has been made, shall be  decided by a court of competent jurisdiction within the County of San Diego, State of California, United States of America, and you and Khaled bin Sultan  Living Oceans Foundation agree to submit to the personal jurisdiction of that  court. </p>

        <p align="justify" class="style2">     f. Governing  Law. Except as expressly provided otherwise, this License Agreement shall be is  governed by, and will be construed under, the Laws of the United States of America  and the law of the State of California,  without regard to choice of law principles. </p>

        <p align="justify" class="style2">     g. Severability.  You and Khaled bin Sultan Living Oceans Foundation agree that if any portion  Section 10 is found illegal or unenforceable (except any portion of 10(d)) that  portion shall be severed and the remainder of the Section shall be given full  force and effect. If Section 10(d) is found to be illegal or unenforceable then  neither you nor Khaled bin Sultan Living Oceans Foundation will elect to  arbitrate any Dispute falling within that portion of Section 10(d) found to be  illegal or unenforceable and such Dispute shall be decided by a court of  competent jurisdiction within the County of San Diego, State of California,  United States of America, and you and Khaled bin Sultan Living Oceans  Foundation agree to submit to the personal jurisdiction of that court. <br>

    </p>

    <p class="style2">11.  Miscellaneous. </p>

    <p align="justify" class="style2">This License Agreement constitutes and contains the entire  agreement between the parties with respect to the subject matter hereof and  supersedes any prior oral or written agreements, provided, however, that this  Agreement shall coexist with, and shall not supersede, the Terms of Use. To the  extent that the provisions of this Agreement conflict with the provisions of  the Terms of Use, the conflicting provisions in the Terms of Use shall govern. <br>

     </p>

    <p align="right" class="style2"><span class="style3">© 2009 Khaled bin Sultan Living Oceans  Foundation, Inc. All rights reserved.    </span></p>

    <p align="center"><a href="javascript:window.close();" onMouseOut="MM_swapImgRestore()" onMouseOver="MM_swapImage('CloseWindow','','images/closeWindow_down.png',1)"><img src="images/closeWindow_up.png" alt="Close Window" name="CloseWindow" width="180" height="28" border="0"></a></p>

  </div>

  <div class="clearfloat">

    <img src="images/kslof_footer.png">

  </div>

```
<!-- end #container -->
</div>

<script type="text/javascript">
<!--
var MenuBar1 = new Spry.Widget.MenuBar("KSLOF_DP_Menu",
{imgDown:"jscript/SpryMenuBarDownHover.gif", imgRight:"jscript/SpryMenuBarRightHover.gif"});
//-->
</script>
</body>
</html>
```

## Data_Portal_Registry.html

```
<!--
// Module: DataPortal_Registry.html
// Purpose: The user registry form
// Author: Felimon Gayanilo (felimon@gayanilo.net)
// Date Last Update: 23 June 2009

// Copyright (c) 2009, Living Oceans Foundation, MD. All right reserved.
-->

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
   <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
   <title>KSLOF: Data Portal Registration</title>
   <script src="jscript/SpryMenuBar.js" type="text/javascript"></script>
   <link href="jscript/SpryMenuBarHorizontal.css" rel="stylesheet" type="text/css">
   <link href="jscript/SpryMenuBarVertical.css" rel="stylesheet" type="text/css">
   <link href="css/DataPortal_Registry.css" rel="stylesheet" type="text/css">
</head>

<body class="twoColFixRtHdr">
<div id="container">
  <div>
   <div align="center">
    <img src="images/kslof_header_01.png" width="952" height="133">
    <ul id="KSLOF_DP_Menu" class="MenuBarHorizontal">
     <li><a href="http://livingoceansfoundation.org/" target="_self">HOME</a> </li>
     <li><a href="DataPortal_Map.php" target="_self" style="width:180px">Data Portal Home</a></li>
     <li><a class="MenuBarItemSubmenu" href="#" style="width:250px">Online Map Viewers</a>
        <ul>
         <li><a href="http://www.livingoceansfoundation.org/index.php?option=com_wrapper&Itemid=163"
target="_blank">St. Croix and Buck Island Data Navigator</a> </li>
         <li><a href="http://lof.towson.edu/LOF/standard/" target="_blank">St. Thomas and St. John Habitat
Mapper</a></li>
        </ul>
     </li>
     <li><a href="#" style="width:400px; height:15px"> </a></li>
    </ul>
    <p><br>
    <img src="images/kslof_header_02.png" width="952" height="29"></p>
   </div>
  </div>

  <div id="mainContent">
   <span class="style14">User Registration   </span>

<script language='javascript'>
        function verifyMe(){
        var msg='';

        if(document.getElementById('username').value==''){
```

```
            msg+='- User name\n';}

if(document.getElementById('password').value==''){
            msg+='- Password\n';}

if(document.getElementById('firstname').value==''){
            msg+='- First name\n';}

if(document.getElementById('lastname').value==''){
            msg+='- Last name\n';}

if(document.getElementById('job').value==''){
            msg+='- Job title\n';}

if(document.getElementById('organization').value==''){
            msg+='- Organization\n';}

if(document.getElementById('address1').value==''){
            msg+='- Street address\n';}

if(document.getElementById('city').value==''){
            msg+='- City\n';}

if(document.getElementById('email').value==''){
            msg+='- Email\n';}

if(document.getElementById('d_industry').value==''){
            msg+='- Best description of your industry\n';}

if(document.getElementById('d_organization').value==''){
            msg+='- Best describe your company/organization\n';}

if(document.getElementById('d_role').value==''){
            msg+='- Best description of your role\n';}

if(document.getElementById('challenge').value==''){
            msg+='- Challenge question\n';}

if(document.getElementById('response').value==''){
            msg+='- Response to the challenge question\n';}

if(document.getElementById('country').value==''){
            msg+='- Country\n';}

if(msg!=''){
            alert('The form is incomplete. The following fields are empty or invalid:\n\n'+msg);
            return false
}else{
            return true }

    }
</script>
```

```
<blockquote class="style2">
  <p class="style15">NOTE: User registration is free. <a href="DataPortal_Privacy.html" target="_blank"
style="color:#FFFFFF">Click here</a> to view KSLOF privacy statement. </p>
<form name='registration' action='DataPortal_Save_User.php' method='POST' enctype='application/x-www-form-
urlencoded' onsubmit='return verifyMe();'  style='font-size:12px; font-family:Arial, Helvetica, sans-serif'>
<table id='table_form_1' cellspacing='0' >
        <tr>
                <td colspan='2' align='right'><hr /></td>
        </tr>

        <tr>
                <td><LABEL for='username' ACCESSKEY='none' />
                 Username               </td>
                <td ><input type='text' name='username' id='username' size='20' maxlength='20'  value=''>
        </td>
        </tr>
        <tr>
                <td><LABEL for='password' ACCESSKEY='none' />
                 Password               </td>
                <td><input type='password' name='password' id='password' size='20' maxlength='20'  value=''>
        </td>
        </tr>
        <tr>
                <td><LABEL for='firstname' ACCESSKEY='none' />
                 First name             </td>
                <td><input type='text' name='firstname' id='firstname' size='50' maxlength='50'  value=''>
        </td>
        </tr>
        <tr>
                <td><LABEL for='lastname' ACCESSKEY='none' />
                 Last name              </td>
                <td><input type='text' name='lastname' id='lastname' size='50' maxlength='50'  value=''>
        </td>
        </tr>
        <tr>
                <td><LABEL for='job' ACCESSKEY='none' />Job title              </td>
                <td><input type='text' name='job' id='job' size='50' maxlength='50'  value=''>               </td>
        </tr>
        <tr>
                <td><LABEL for='organization' ACCESSKEY='none' />Organization                   </td>
                <td><input type='text' name='organization' id='organization' size='50' maxlength='50'  value=''>
        </td>
        </tr>
        <tr>
                <td><LABEL for='address1' ACCESSKEY='none' />
                Street Address          </td>
                <td><input type='text' name='address1' id='address1' size='50' maxlength='50'  value=''>
        </td>
        </tr>
        <tr>
                <td><LABEL for='address2' ACCESSKEY='none' />                   </td>
```

```
        <td><input type='text' name='address2' id='address2' size='50' maxlength='50'  value=''>
</td>
</tr>
<tr>
        <td><LABEL for='city' ACCESSKEY='none' />City              </td>
        <td><input type='text' name='city' id='city' size='50' maxlength='50'  value='>              </td>
</tr>
<tr>
        <td><LABEL for='state' ACCESSKEY='none' />State             </td>
        <td>
<select name='state' id='state'>
    <option value="  " selected="selected">(select from list if in U.S.)</option>
    <option value="AL">Alabama</option>
    <option value="AK">Alaska</option>
    <option value="AZ">Arizona</option>
    <option value="AR">Arkansas</option>
    <option value="CA">California</option>
    <option value="CO">Colorado</option>
    <option value="CT">Connecticut</option>
    <option value="DE">Delaware</option>
    <option value="DC">Dist of Columbia</option>
    <option value="FL">Florida</option>
    <option value="GA">Georgia</option>
    <option value="HI">Hawaii</option>
    <option value="ID">Idaho</option>
    <option value="IL">Illinois</option>
    <option value="IN">Indiana</option>
    <option value="IA">Iowa</option>
    <option value="KS">Kansas</option>
    <option value="KY">Kentucky</option>
    <option value="LA">Louisiana</option>
    <option value="ME">Maine</option>
    <option value="MD">Maryland</option>
    <option value="MA">Massachusetts</option>
    <option value="MI">Michigan</option>
    <option value="MN">Minnesota</option>
    <option value="MS">Mississippi</option>
    <option value="MO">Missouri</option>
    <option value="MT">Montana</option>
    <option value="NE">Nebraska</option>
    <option value="NV">Nevada</option>
    <option value="NH">New Hampshire</option>
    <option value="NJ">New Jersey</option>
    <option value="NM">New Mexico</option>
    <option value="NY">New York</option>
    <option value="NC">North Carolina</option>
    <option value="ND">North Dakota</option>
    <option value="OH">Ohio</option>
    <option value="OK">Oklahoma</option>
    <option value="OR">Oregon</option>
    <option value="PA">Pennsylvania</option>
    <option value="RI">Rhode Island</option>
```

```
<option value="SC">South Carolina</option>
<option value="SD">South Dakota</option>
<option value="TN">Tennessee</option>
<option value="TX">Texas</option>
<option value="UT">Utah</option>
<option value="VT">Vermont</option>
<option value="VA">Virginia</option>
<option value="WA">Washington</option>
<option value="WV">West Virginia</option>
<option value="WI">Wisconsin</option>
<option value="WY">Wyoming</option>
          </select>                    </td>
  </tr>
  <tr>

          <td><LABEL for='pcode' ACCESSKEY='none' />Postal code              </td>
          <td><input type='text' name='pcode' id='pcode' size='20' maxlength='20'  value=''>
  </td>
  </tr>
  <tr>

          <td><LABEL for='country' ACCESSKEY='none' />
           Country                  </td>
          <td>
<select name='country' id='country'>
    <option value="  " selected="selected">(please select a country)</option>
    <option value="--">none</option>
    <option value="AF">Afghanistan</option>
    <option value="AL">Albania</option>
    <option value="DZ">Algeria</option>
    <option value="AS">American Samoa</option>
    <option value="AD">Andorra</option>
    <option value="AO">Angola</option>
    <option value="AI">Anguilla</option>
    <option value="AQ">Antarctica</option>
    <option value="AG">Antigua and Barbuda</option>
    <option value="AR">Argentina</option>
    <option value="AM">Armenia</option>
    <option value="AW">Aruba</option>
    <option value="AU">Australia</option>
    <option value="AT">Austria</option>
    <option value="AZ">Azerbaijan</option>
    <option value="BS">Bahamas</option>
    <option value="BH">Bahrain</option>
    <option value="BD">Bangladesh</option>
    <option value="BB">Barbados</option>
    <option value="BY">Belarus</option>
    <option value="BE">Belgium</option>
    <option value="BZ">Belize</option>
    <option value="BJ">Benin</option>
    <option value="BM">Bermuda</option>
    <option value="BT">Bhutan</option>
    <option value="BO">Bolivia</option>
    <option value="BA">Bosnia and Herzegowina</option>
```

```
<option value="BW">Botswana</option>
<option value="BV">Bouvet Island</option>
<option value="BR">Brazil</option>
<option value="IO">British Indian Ocean Territory</option>
<option value="BN">Brunei Darussalam</option>
<option value="BG">Bulgaria</option>
<option value="BF">Burkina Faso</option>
<option value="BI">Burundi</option>
<option value="KH">Cambodia</option>
<option value="CM">Cameroon</option>
<option value="CA">Canada</option>
<option value="CV">Cape Verde</option>
<option value="KY">Cayman Islands</option>
<option value="CF">Central African Republic</option>
<option value="TD">Chad</option>
<option value="CL">Chile</option>
<option value="CN">China</option>
<option value="CX">Christmas Island</option>
<option value="CC">Cocos (Keeling) Islands</option>
<option value="CO">Colombia</option>
<option value="KM">Comoros</option>
<option value="CG">Congo</option>
<option value="CD">Congo, the Democratic Republic of the</option>
<option value="CK">Cook Islands</option>
<option value="CR">Costa Rica</option>
<option value="CI">Cote d'Ivoire</option>
<option value="HR">Croatia (Hrvatska)</option>
<option value="CU">Cuba</option>
<option value="CY">Cyprus</option>
<option value="CZ">Czech Republic</option>
<option value="DK">Denmark</option>
<option value="DJ">Djibouti</option>
<option value="DM">Dominica</option>
<option value="DO">Dominican Republic</option>
<option value="TP">East Timor</option>
<option value="EC">Ecuador</option>
<option value="EG">Egypt</option>
<option value="SV">El Salvador</option>
<option value="GQ">Equatorial Guinea</option>
<option value="ER">Eritrea</option>
<option value="EE">Estonia</option>
<option value="ET">Ethiopia</option>
<option value="FK">Falkland Islands (Malvinas)</option>
<option value="FO">Faroe Islands</option>
<option value="FJ">Fiji</option>
<option value="FI">Finland</option>
<option value="FR">France</option>
<option value="FX">France, Metropolitan</option>
<option value="GF">French Guiana</option>
<option value="PF">French Polynesia</option>
<option value="TF">French Southern Territories</option>
<option value="GA">Gabon</option>
```

```
<option value="GM">Gambia</option>
<option value="GE">Georgia</option>
<option value="DE">Germany</option>
<option value="GH">Ghana</option>
<option value="GI">Gibraltar</option>
<option value="GR">Greece</option>
<option value="GL">Greenland</option>
<option value="GD">Grenada</option>
<option value="GP">Guadeloupe</option>
<option value="GU">Guam</option>
<option value="GT">Guatemala</option>
<option value="GN">Guinea</option>
<option value="GW">Guinea-Bissau</option>
<option value="GY">Guyana</option>
<option value="HT">Haiti</option>
<option value="HM">Heard and Mc Donald Islands</option>
<option value="VA">Holy See (Vatican City State)</option>
<option value="HN">Honduras</option>
<option value="HK">Hong Kong</option>
<option value="HU">Hungary</option>
<option value="IS">Iceland</option>
<option value="IN">India</option>
<option value="ID">Indonesia</option>
<option value="IR">Iran (Islamic Republic of)</option>
<option value="IQ">Iraq</option>
<option value="IE">Ireland</option>
<option value="IL">Israel</option>
<option value="IT">Italy</option>
<option value="JM">Jamaica</option>
<option value="JP">Japan</option>
<option value="JO">Jordan</option>
<option value="KZ">Kazakhstan</option>
<option value="KE">Kenya</option>
<option value="KI">Kiribati</option>
<option value="KP">Korea, Democratic People's Republic of</option>
<option value="KR">Korea, Republic of</option>
<option value="KW">Kuwait</option>
<option value="KG">Kyrgyzstan</option>
<option value="LA">Lao People's Democratic Republic</option>
<option value="LV">Latvia</option>
<option value="LB">Lebanon</option>
<option value="LS">Lesotho</option>
<option value="LR">Liberia</option>
<option value="LY">Libyan Arab Jamahiriya</option>
<option value="LI">Liechtenstein</option>
<option value="LT">Lithuania</option>
<option value="LU">Luxembourg</option>
<option value="MO">Macau</option>
<option value="MK">Macedonia, The Former Yugoslav Republic of</option>
<option value="MG">Madagascar</option>
<option value="MW">Malawi</option>
<option value="MY">Malaysia</option>
```

```
<option value="MV">Maldives</option>
<option value="ML">Mali</option>
<option value="MT">Malta</option>
<option value="MH">Marshall Islands</option>
<option value="MQ">Martinique</option>
<option value="MR">Mauritania</option>
<option value="MU">Mauritius</option>
<option value="YT">Mayotte</option>
<option value="MX">Mexico</option>
<option value="FM">Micronesia, Federated States of</option>
<option value="MD">Moldova, Republic of</option>
<option value="MC">Monaco</option>
<option value="MN">Mongolia</option>
<option value="MS">Montserrat</option>
<option value="MA">Morocco</option>
<option value="MZ">Mozambique</option>
<option value="MM">Myanmar</option>
<option value="NA">Namibia</option>
<option value="NR">Nauru</option>
<option value="NP">Nepal</option>
<option value="NL">Netherlands</option>
<option value="AN">Netherlands Antilles</option>
<option value="NC">New Caledonia</option>
<option value="NZ">New Zealand</option>
<option value="NI">Nicaragua</option>
<option value="NE">Niger</option>
<option value="NG">Nigeria</option>
<option value="NU">Niue</option>
<option value="NF">Norfolk Island</option>
<option value="MP">Northern Mariana Islands</option>
<option value="NO">Norway</option>
<option value="OM">Oman</option>
<option value="PK">Pakistan</option>
<option value="PW">Palau</option>
<option value="PA">Panama</option>
<option value="PG">Papua New Guinea</option>
<option value="PY">Paraguay</option>
<option value="PE">Peru</option>
<option value="PH">Philippines</option>
<option value="PN">Pitcairn</option>
<option value="PL">Poland</option>
<option value="PT">Portugal</option>
<option value="PR">Puerto Rico</option>
<option value="QA">Qatar</option>
<option value="RE">Reunion</option>
<option value="RO">Romania</option>
<option value="RU">Russian Federation</option>
<option value="RW">Rwanda</option>
<option value="KN">Saint Kitts and Nevis</option>
<option value="LC">Saint LUCIA</option>
<option value="VC">Saint Vincent and the Grenadines</option>
<option value="WS">Samoa</option>
```

```
<option value="SM">San Marino</option>
<option value="ST">Sao Tome and Principe</option>
<option value="SA">Saudi Arabia</option>
<option value="SN">Senegal</option>
<option value="SC">Seychelles</option>
<option value="SL">Sierra Leone</option>
<option value="SG">Singapore</option>
<option value="SK">Slovakia (Slovak Republic)</option>
<option value="SI">Slovenia</option>
<option value="SB">Solomon Islands</option>
<option value="SO">Somalia</option>
<option value="ZA">South Africa</option>
<option value="GS">South Georgia and the South Sandwich Islands</option>
<option value="ES">Spain</option>
<option value="LK">Sri Lanka</option>
<option value="SH">St. Helena</option>
<option value="PM">St. Pierre and Miquelon</option>
<option value="SD">Sudan</option>
<option value="SR">Suriname</option>
<option value="SJ">Svalbard and Jan Mayen Islands</option>
<option value="SZ">Swaziland</option>
<option value="SE">Sweden</option>
<option value="CH">Switzerland</option>
<option value="SY">Syrian Arab Republic</option>
<option value="TW">Taiwan, Province of China</option>
<option value="TJ">Tajikistan</option>
<option value="TZ">Tanzania, United Republic of</option>
<option value="TH">Thailand</option>
<option value="TG">Togo</option>
<option value="TK">Tokelau</option>
<option value="TO">Tonga</option>
<option value="TT">Trinidad and Tobago</option>
<option value="TN">Tunisia</option>
<option value="TR">Turkey</option>
<option value="TM">Turkmenistan</option>
<option value="TC">Turks and Caicos Islands</option>
<option value="TV">Tuvalu</option>
<option value="UG">Uganda</option>
<option value="UA">Ukraine</option>
<option value="AE">United Arab Emirates</option>
<option value="GB">United Kingdom</option>
<option value="US">United States</option>
<option value="UM">United States Minor Outlying Islands</option>
<option value="UY">Uruguay</option>
<option value="UZ">Uzbekistan</option>
<option value="VU">Vanuatu</option>
<option value="VE">Venezuela</option>
<option value="VN">Viet Nam</option>
<option value="VG">Virgin Islands (British)</option>
<option value="VI">Virgin Islands (U.S.)</option>
<option value="WF">Wallis and Futuna Islands</option>
<option value="EH">Western Sahara</option>
```

```
        <option value="YE">Yemen</option>
        <option value="YU">Yugoslavia</option>
        <option value="ZM">Zambia</option>
        <option value="ZW">Zimbabwe</option>
    </select>            </td>
      </tr>
      <tr>
              <td><LABEL for='phone' ACCESSKEY='none' />Office phone            </td>
              <td><input type='text' name='phone' id='phone' size='50' maxlength='50'  value=''>
      </td>
      </tr>
      <tr>
              <td><LABEL for='email' ACCESSKEY='none' />Email            </td>
              <td><input type='text' name='email' id='email' size='50' maxlength='50'  value=''>
      </td>
      </tr>
      <tr>
              <td colspan='2' align='right'><br /></td>
      </tr>
      <tr>
              <td><LABEL for='d_industry' ACCESSKEY='none' />What best describes your industry?</td>
              <td>
    <select name='d_industry' id='d_industry'>
      <option value="  " selected="selected">(select from the list)</option>
      <option value="Administrator">Administrator</option>
      <option value="Archaelogy">Archaelogy</option>
      <option value="Architecture/Engineering/Construction">Architecture/Engineering/Construction</option>
      <option value="Assessor/Cadastral Records">Assessor/Cadastral Records</option>
      <option value="Banking/Credit Unions/Financial Services">Banking/Credit Unions/Financial
Services</option>
      <option value="Cartography">Cartography</option>
      <option value="Conservation">Conservation</option>
      <option value="Defense/Intelligence">Defense/Intelligence</option>
      <option value="Demographics/Census/Election">Demographics/Census/Election</option>
      <option value="Electric/Gas Utility">Electric/Gas Utility</option>
      <option value="Coastal/Environmental Management">Coastal/Environmental Management</option>
      <option value="Federal Solution">Federal Solution</option>
      <option value="Forestry">Forestry</option>
      <option value="Fisheries">Fisheries</option>
      <option value="GIS Services">GIS Services</option>
      <option value="Health and Human Services">Health and Human Services</option>
      <option value="Higher Education">Higher Education</option>
      <option value="Insurance">Insurance</option>
      <option value="K-12 Education">K-12 Education</option>
      <option value="Law Enforcement">Law Enforcement</option>
      <option value="Library/Museum">Library/Museum</option>
      <option value="Media/Publishing">Media/Publishing</option>
      <option value="Mining">Mining</option>
      <option value="Natural Resources">Natural Resources</option>
      <option value="Petroleum/Pipeline">Petroleum/Pipeline</option>
      <option value="Planning/Economic Development">Planning/Economic Development</option>
      <option value="Public Safety/Emergency Management">Public Safety/Emergency Management</option>
```

```
<option value="Public Works">Public Works</option>
<option value="Real Estate">Real Estate</option>
<option value="Retail/Commercial Business">Retail/Commercial Business</option>
<option value="Survey">Survey</option>
<option value="Telecommunication">Telecommunication</option>
<option value="Transportation/Fleet Management">Transportation/Fleet Management</option>
<option value="Water Resources">Water Resources</option>
<option value="Others">Others</option>
</select>              </td>
    </tr>
    <tr>
            <td><LABEL for='d_company' ACCESSKEY='none' />What best describe your
company/organization?</td>
            <td>
<select name='d_company' id='d_company'>
    <option value="  " selected="selected">(select from the list)</option>
    <option value="City/Town/Country Government">City/Town/Country Government</option>
    <option value="Commercial/Private Business">Commercial/Private Business</option>
    <option value="Education - Faculty/Staff">Education - Faculty/Staff</option>
    <option value="Education - Student">Education - Student</option>
    <option value="Non-Profit Organization">Non-Profit Organization</option>
    <option value="Non-U.S. National Government">Non-U.S. National Government</option>
    <option value="Regional Agency/Government">Regional Agency/Government</option>
    <option value="State Agency/Govenrmnet">State Agency/Govenrmnet</option>
    <option value="U.S. Federal Government/Tribes">U.S. Federal Government/Tribes</option>
</select>              </td>
    </tr>
    <tr>
            <td><LABEL for='d_role' ACCESSKEY='none' />What best describe your role within
organization?</td>
            <td>
<select name='d_role' id='d_role'>
    <option value="  " selected="selected">(select from the list)</option>
    <option value="C-Level Executive">C-Level Executive</option>
    <option value="Sr. Executive">Sr. Executive</option>
    <option value="GIS Manager/Supervisor">GIS Manager/Supervisor</option>
    <option value="GIS Analyst">GIS Analyst</option>
    <option value="IT Manager/Supervisor">IT Manager/Supervisor</option>
    <option value="IT Technician">IT Technician</option>
    <option value="Non-GIS/IT Manager/Supervisor">Non-GIS/IT Manager/Supervisor</option>
    <option value="System/Software Developer">System/Software Developer</option>
    <option value="Educator">Educator</option>
    <option value="Others">Others</option>
</select>              </td>
    </tr>
    <tr>
            <td colspan='2' align='right'><div align="left">
             <p> </p>
             <p><span class="style5">The following is for password retrieval only if needed.</span><br />
              </p>
            </div></td>
    </tr>
```

```
                <tr>
                        <td><LABEL for='challenge' ACCESSKEY='none' />
                         Select a challenge question:</td>
                        <td>
        <select name='challenge' id='challenge'>
          <option value="  " selected="selected">(select from the list)</option>
            <option value="What street did you grow up on?">What street did you grow up on?</option>
            <option value="What city were you born in?">What city were you born in?</option>
            <option value="What was the name of your favorite pet?">What was the name of your favorite
pet?</option>
            <option value="What was the name of the first school you went to?">What was the name of the first
school you went to?</option>
            <option value="What was your father's middle name?">What was your father's middle name?</option>
        </select>              </td>
            </tr>
            <tr>

                        <td><LABEL for='response' ACCESSKEY='none' />
                         Answer to challenge question               </td>
                        <td class=><input type='text' name='response' id='response' size='50' maxlength='50'  value=''>
            </td>
            </tr>
            <tr>

                        <td colspan='2' align='right'><br /></td>
            </tr>
            <tr>
            <tr>

                        <td colspan='2' align='left'><label>
                         <input type="checkbox" name="iagree" id="iagree" onclick="if
(this.checked){this.form.submit.disabled=0} else {this.form.submit.disabled=1}">
                            Check this box if you <span class="style15">acknowledge</span> that you have read <span
class="style15">and understand the <a href="DataPortal_EULA.html" target="_blank"
style="color:#CCCCCC">License Agreement</a> and  </span>you <span class="style15">are acknowledging the
agreement to be bound by the terms and  conditions of the License Agreement</span>. <br>
                        </label>
                         <label></label></td>
            </tr>
            <tr>

                        <td colspan='2' align='right'><br /></td>
            </tr>
            <tr>

                        <td colspan='2' align='right'><div align="center">
                         <input type='submit' name='submit' value='Submit' disabled="1">
                          
                         <input type='reset' name='reset' value='Reset'>
                         <br />
                         </div></td>
            </tr>
</table>
</form>
</blockquote >
   <!-- end #mainContent -->
 </div>
```

```
<div class="clearfloat">
   <img src="images/kslof_footer.png">
</div>
<!-- end #container -->
</div>


<script type="text/javascript">
<!--
var MenuBar1 = new Spry.Widget.MenuBar("KSLOF_DP_Menu", {imgDown:"jscript/SpryMenuBarDownHover.gif",
imgRight:"jscript/SpryMenuBarRightHover.gif"});
//-->
</script>
</body>
</html>
```

## DataPortal_Download.php

```php
<?php
        // Module: DataPortal_Download.php
        // Purpose: Form used to verify and effect data download
        // Author: Felimon Gayanilo (felimon@gayanilo.net)
        // Date Last Update: 23 June 2009

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   // This module require user authentication
        include "DataPortal_Authenticate.php";
?>

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8">
<title>KSLOF: Data Portal</title>
<script src="jscript/SpryMenuBar.js" type="text/javascript"></script>
<link href="jscript/SpryMenuBarHorizontal.css" rel="stylesheet" type="text/css">
<link href="css/DataPortal_Download.css" rel="stylesheet" type="text/css">
</head>

<body class="twoColFixRtHdr">
<div id="container">
 <div>
  <div align="center">
   <img src="images/kslof_header_01.png" width="952" height="133">
  </div>
 </div>
 <div id="mainContent"  style="color:#000000"><hr />
<p align="left" style="font-size: 12px; font-weight: bold; color: #FFFF00; font-family:"Times New Roman", Times,
serif">CONFIRM DATA DOWNLOAD</p>
<div align="left">
<?php
                if (isset($_GET['map_id'])) {
                        $map_id = $_GET['map_id'];
                        // read database
                        $db = $_SERVER['DOCUMENT_ROOT']."/kslof/data/kslof_gis.sqlite";
                        try{
                                $DB_conn = new PDO("sqlite:".$db);
                                $DB_conn->beginTransaction();
                                $DB_conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);

                                $sql = "SELECT firstname, lastname, country FROM users WHERE username
LIKE '" . $login . "'";

                                foreach ($DB_conn->query($sql) as $record) {
                                        $firstname = $record['firstname'];
                                        $lastname = $record['lastname'];
                                        $country = $record['country'];
                                }
```

```
                                        $sql1 = "SELECT * FROM document WHERE id LIKE '" . $map_id . "'";
                                        foreach ($DB_conn->query($sql1) as $record1) {
                                                $urlDownload = $record1['urlDownload'];
                                        }

                                        echo '<p> </p><hr />';
                                        echo '<p style="font-size:12px; color:#FFFFFF">Data Requested by: ' .
$firstname . ' ' . $lastname . ' (from ' . $country . ')</p>';
                                        echo '<p style="font-size:12px; color:#FFFFFF"><a href=gisui/data/' .
$urlDownload . '>Click here </a> to start the data download of ' . $title . ' (' . $size . ' MB) or <a
href="javascript:window.close();">click here </a> to cancel and close window.</p>';
                                        echo '<hr />';

                                        // register the download first (even cancelled operation)
                                        $sql = "INSERT INTO downloads (username,map_id,downloadDate) VALUES (";
                                        $sql .= "'" . $login . "',";
                                        $sql .= $_GET['map_id']. ",";
                                        $sql .= "'" . date('Y-m-d H:i:s') . "')";

                                        $DB_conn->exec($sql);
                                        $DB_conn->commit();
                                        $DB_conn = null;

                                } catch (PDOException $e) {
                                        echo "Error!" . $e->getMessage() . "<br/>";
                                        die();
                                }
                        }
                ?>
</div>
    <!-- end #mainContent -->
  </div>
<div class="clearfloat">
    <img src="images/kslof_footer.png">
</div>
<!-- end #container -->
</div>

</body>
</html>
```

## DataPortal_Details.php

```
<!--
// Module: DataPortal_Details.php
// Purpose: Display the metadata details of the data requested
// Author: Felimon Gayanilo (felimon@gayanilo.net)
// Date Last Update: 23 June 2009

// Copyright (c) 2009, Living Oceans Foundation, MD. All right reserved.
-->

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
   <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
   <title>KSLOF: Metadata</title>
   <script src="jscript/SpryMenuBar.js" type="text/javascript"></script>
   <link href="jscript/SpryMenuBarHorizontal.css" rel="stylesheet" type="text/css">
   <link href="jscript/SpryMenuBarVertical.css" rel="stylesheet" type="text/css">
   <link href="css/DataPortal_Details.css" rel="stylesheet" type="text/css">
</head>

<body class="twoColFixRtHdr">
<div id="container">
 <div>
   <div align="center">
    <img src="images/kslof_header_01.png" width="952" height="133">
    <ul id="KSLOF_DP_Menu" class="MenuBarHorizontal">
     <li><a href="http://livingoceansfoundation.org/" target="_self">HOME</a> </li>
     <li><a href="DataPortal_Map.php" target="_self" style="width:180px">Data Portal Home</a></li>
     <li><a class="MenuBarItemSubmenu" href="#" style="width:250px">Online Map Viewers</a>
        <ul>
         <li><a href="http://www.livingoceansfoundation.org/index.php?option=com_wrapper&Itemid=163"
target="_blank">St. Croix and Buck Island Data Navigator</a> </li>
         <li><a href="http://lof.towson.edu/LOF/standard/" target="_blank">St. Thomas and St. John Habitat
Mapper</a></li>
        </ul>
     </li>
     <li><a href="#" style="width:400px; height:15px"> </a></li>
    </ul>
    <p><br>
    <img src="images/kslof_header_02.png" width="952" height="29"></p>
   </div>
 </div>


 <div id="mainContent"  style="color:#000000">
<p align="left" style="font-size: 12px; font-weight: bold; color: #FFFF00; font-family:"Times New Roman", Times,
serif">METADATA</p>
<div align="left">
<?php
                if (isset($_GET['map_id'])) {
                        $map_id = $_GET['map_id'];
```

```php
                // read database
                $db = $_SERVER['DOCUMENT_ROOT']."/kslof/data/kslof_gis.sqlite";
                try{
                        $DB_conn = new PDO("sqlite:".$db);
                        $DB_conn->beginTransaction();
                        $DB_conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
                        $flag = 0;
                        $sql = "SELECT * FROM document WHERE id LIKE '" . $map_id . "'";

                        foreach ($DB_conn->query($sql) as $record) {
                                $title = $record['title'];
                                $type =  $record['type'];
                                $author =  $record['author'];
                                $pubDate =  $record['pubDate'];
                                $edition =  $record['edition'];
                                $startDate =  $record['startDate'];
                                $endDate =  $record['endDate'];
                                $abstract =  $record['abstract'];
                                $size =  $record['size'];
                                $url =  $record['urlDownload'];
                                $restriction = $record['restriction'];
                        }
                        $DB_conn = null;

                } catch (PDOException $e) {
                                echo "Error!" . $e->getMessage() . "<br/>";
                                die();
                }
                $output = '<table width="100%" border="0" style="font-size: 12px; color: #000000; font-
family:"Times New Roman", Times, serif">';
                $output .= ' <tr>';
                $output .= '   <td width="20%" bgcolor="#FFFFCC" style="color:#000000">Title</td>';
                $output .= '   <td width="80%" bgcolor="#FFFFCC" style="color:#000000"><strong>' . $title .
'</strong></td>';
                $output .= ' </tr>';

                $output .= ' <tr>';
                $output .= '   <td bgcolor="#CCCCCC" style="color:#000000">Data Type</td>';
                $output .= '   <td bgcolor="#CCCCCC" style="color:#000000">' . $type . '</td>';
                $output .= ' </tr>';
                $output .= ' <tr>';
                $output .= '   <td bgcolor="#CCCCCC" style="color:#000000">Author</td>';
                $output .= '   <td bgcolor="#CCCCCC" style="color:#000000">' . $author . '</td>';
                $output .= ' </tr>';
                $output .= ' <tr>';
                $output .= '   <td bgcolor="#CCCCCC" style="color:#000000">Publication Date</td>';
                $output .= '   <td bgcolor="#CCCCCC" style="color:#000000">' . $pubDate . '</td>';
                $output .= ' </tr>';
                $output .= ' <tr">';
                $output .= '   <td bgcolor="#CCCCCC" style="color:#000000">Collection Period</td>';
                $output .= '   <td bgcolor="#CCCCCC" style="color:#000000">' . $startDate . ' to ' .
$endDate . '</td>';
```

```
                                    $output .= '  </tr>';
                                    $output .= '  <tr>';
                                    $output .= '    <td valign="top" bgcolor="#CCCCCC"
style="color:#000000">Abstract</td>';
                                    $output .= '    <td bgcolor="#CCCCCC" style="color:#000000">' . $abstract . '</td>';
                                    $output .= '  </tr>';
                                    $output .= '  <tr>';
                                    $output .= '    <td bgcolor="#CCCCCC" style="color:#000000">File size</td>';
                                    $output .= '    <td bgcolor="#CCCCCC" style="color:#000000">' . $size . ' MB </td>';
                                    $output .= '  </tr>';
                                    $output .= '  <tr>';
                                    $output .= '    <td> </td>';
                                    $output .= '    <td> </td>';
                                    $output .= '  </tr>';
                                    $output .= '  <tr>';
                                    if ($restriction == "classified") {
                                    $output .= '    <td colspan="2" align="center">[<a
href="mailto:williams@livingoceansfoundation.org?subject=Data Request from Restricted List">Contact KSLOF for
Data Download</a>] [<a href="javascript:window.close();">Close Window</a>]</td>';
                                    } else {
                                    $output .= '    <td colspan="2" align="center"><a href=
DataPortal_Download.php?map_id=' . $map_id . '>[Download Data]</a>  <a
href="javascript:window.close();">[Close Window]</a></td>';
                                    }
                                    $output .= '  </tr>';
                                    $output .= '</table>';
                                    echo $output;
                            }
            ?>
</div>
    <!-- end #mainContent -->
  </div>
<div class="clearfloat">
    <img src="images/kslof_footer.png">
</div>
<!-- end #container -->
</div>


<script type="text/javascript">
<!--
var MenuBar1 = new Spry.Widget.MenuBar("KSLOF_DP_Menu", {imgDown:"jscript/SpryMenuBarDownHover.gif",
imgRight:"jscript/SpryMenuBarRightHover.gif"});
//-->
</script>
</body>
</html>
```

## DataPortal_Map.php

```
<!--
   // Module: DataPortal_Map.html
   // Purpose: This is the main interface
   // Author: Felimon Gayanilo (felimon@gayanilo.net)
   // Date Last Update: 23 June 2009

   // Copyright (c) 2009, Living Oceans Foundation, MD. All right reserved.
-->

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
  <meta name="description" content="KSLOF data portal to their GIS data repository." />
  <meta name="keywords" content="KSLOF, gis, data portal, interactive GUI, living oceans" />
  <meta name="author" content="Felimon Gayanilo (felimon@gayanilo.net)" />
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
  <title>KSLOF: GIS Data Portal</title>

  <script
src="http://maps.google.com/maps?file=api&amp;v=2&amp;key=ABQIAAAAOeEdgK_7eAuWZBYoYFiWuRQVXmG3
54ieVKhEZX0Tx8GFduzZ3xRToSRbx8a8OTUUJil07_jhAxWKwg" type="text/javascript"></script>
  <script src="jscript/dragzoom.js" type="text/javascript"></script>
  <script src="jscript/ModStatusControl.js" type="text/javascript"></script>
  <script src="jscript/SpryTabbedPanels.js" type="text/javascript"></script>
  <script src="jscript/SpryMenuBar.js" type="text/javascript"></script>

  <script type="text/javascript">
    //<![CDATA[
    var mtUnique;
    function MapTypeControl() {
      if (mtUnique == null)
        mtUnique = 0;
      else
        mtUnique += 1;
      this.unique = mtUnique.toString();

    }

    MapTypeControl.prototype = new GControl();
    MapTypeControl.prototype.initialize = function(map) {

      var container = document.createElement("div");
      container.style.fontFamily='Arial';
      container.style.fontSize='x-small';

      // add Terrain to the list
      var cboMap = document.createElement("SELECT");
      cboMap.id = "cboMap" + this.unique;
      map.addMapType(G_PHYSICAL_MAP);

      var min = 0;
```

```
    var max = 12;

    var license = "<a href='http://www.maps-for-free.com/html/about.html' target='_blank'>License</a>";
    var copyright = new GCopyright(1, new GLatLngBounds(new GLatLng(-90, -180), new GLatLng(90, 180)), 0,
license);
    var copyrightCollection = new GCopyrightCollection("Relief Maps: ");
    copyrightCollection.addCopyright(copyright);

    // Relief Map to the list
    var relief = [new GTileLayer(copyrightCollection, min, max)];
    relief[0].getTileUrl = function(a,b) {
        return "http://maps-for-free.com/layer/relief/z" + b + "/row" + a.y + "/" + b + "_" + a.x + "-" + a.y + ".jpg";
};
    reliefLayer = new GMapType(relief, G_SATELLITE_MAP.getProjection(), "Relief", {minResolution:min,
maxResolution:max});
    map.addMapType(reliefLayer);
    map.setMapType(G_SATELLITE_MAP);
    map.removeMapType(G_HYBRID_MAP);

    var mts = map.getMapTypes();
    for(var i=0;i < mts.length; i++)
    {
        var o = document.createElement("OPTION");
        o.text=mts[i].getName();
        o.value=i;
        cboMap.options.add(o);
    }

    cboMap.selectedIndex = 1; //terrain map is the default
    cboMap.title ="Select the basemap type";
    container.appendChild(cboMap);

    var unique = this.unique;

    GEvent.addDomListener(cboMap, "change", function() {

      var sel = document.getElementById("cboMap" + unique);
      var mt1 = map.getMapTypes()[sel.options[sel.selectedIndex].value];
      map.setMapType(mt1);

    });

    var cboGrid = document.createElement("SELECT");
    cboGrid.id = "cboGrid" + this.unique;
    var o = document.createElement("OPTION");
    o.text="No Overlays";
    o.value=0;
    cboGrid.options.add(o);
    var o = document.createElement("OPTION");
    o.text="+ Labels";
    o.value=1;
    cboGrid.options.add(o);
```

```
    cboGrid.selectedIndex = 0;

    cboGrid.title ="Select an overlay";
    container.appendChild(cboGrid);

    var ReliefMap = this.ReliefMap;

    GEvent.addDomListener(cboGrid, "change", function() {
      map.clearOverlays();
      //redraw the points with data
      var geoXml = new GGeoXml("http://www.kbslof.org/gisui/data/kslof_DataPortal.kml");
      map.addOverlay(geoXml);

      var cboGrid = document.getElementById('cboGrid'+unique);

      if (cboGrid.options[cboGrid.selectedIndex].value == 1){
        // Radar map requested
        map.addOverlay(new GTileLayerOverlay(G_HYBRID_MAP.getTileLayers()[1]));
      }
    });
    map.getContainer().appendChild(container);
    return container;
}
MapTypeControl.prototype.getDefaultPosition = function() {
  return new GControlPosition(G_ANCHOR_TOP_RIGHT, new GSize(7, 7));
}

  function load() {
    if (GBrowserIsCompatible()) {
      var geoXml = new GGeoXml("http://www.kbslof.org/gisui/data/kslof_DataPortal.kml");
      var map = new GMap2(document.getElementById('map'), {draggableCursor:"crosshair"});
      map.addControl(new MapTypeControl());
      map.addControl(new GScaleControl());
      map.setCenter(new GLatLng(3.2000, -8.5000), 2);
      map.addControl(new GOverviewMapControl());
      map.enableContinuousZoom();
      map.enableDoubleClickZoom();

      // add zoom control
      var boxStyleOpts = { opacity: .2, border: "2px solid yellow" };
      var otherOpts = {
        buttonHTML: "<img src='images/zoom_inactive.gif' />",
        buttonZoomingHTML: "<img src='images/zoom_active.gif' />",
        buttonStartingStyle: {width: '0px', height: '0px'},
        overlayRemoveTime: 0 };
        map.addControl(new DragZoomControl(boxStyleOpts, otherOpts, {}),
          new GControlPosition(G_ANCHOR_TOP_LEFT, new GSize(5,10)));   // this is the zoom botton

      var topLeft = new GControlPosition(G_ANCHOR_TOP_LEFT, new GSize(10,40));
      var mapTypeControl = new GLargeMapControl();
      map.addControl(mapTypeControl, topLeft);
```

```
        map.addControl(new MStatusControl({DMS:false, position:new
GControlPosition(G_ANCHOR_BOTTOM_LEFT, new GSize(0, -30))}));
        map.addOverlay(geoXml);
          }
      }

        //]]>
    </script>
    <link href="jscript/SpryMenuBarHorizontal.css" rel="stylesheet" type="text/css">
    <link href="jscript/SpryTabbedPanels.css" rel="stylesheet" type="text/css">
    <link href="css/DataPortal_Map.css" rel="stylesheet" type="text/css">
</head>

<body class="twoColFixRtHdr" onLoad="load();" onUnload="GUnload()">
<div id="container">
 <div>
   <div align="center">
          <img src="images/kslof_header_01.png" width="952" height="133">
   <ul id="KSLOF_DP_Menu" class="MenuBarHorizontal">
     <li><a href="http://livingoceansfoundation.org/" target="_self">HOME</a>        </li>
     <li><a href="DataPortal_Map.php" target="_self" style="width:180px">Data Portal Home</a></li>
     <li><a class="MenuBarItemSubmenu" href="#" style="width:250px">Online Map Viewers</a>
        <ul>
         <li><a href="http://www.livingoceansfoundation.org/index.php?option=com_wrapper&Itemid=163"
target="_blank">St. Croix and Buck Island Data Navigator</a> </li>
         <li><a href="http://lof.towson.edu/LOF/standard/" target="_blank">St. Thomas and St. John Habitat
Mapper</a></li>
      </ul>
      </li>
     <li><a href="#" style="width:400px; height:15px"> </a></li>
    </ul>
   <p><br>
    <img src="images/kslof_header_02.png" width="952" height="29"></p>
   </div>
 </div>

 <div id="sidebar1">
   <span class="style1"  style="margin-top:0">
   <hr  style="margin-top:0">
   <p style="margin-top:0; color:#FFCC33"><strong><img src="images/pin.png" width="16" height="16"> Pop-up
Blockers</strong></p>
   <p align="justify">Please note that some of the functions in this portal and the interactive user interfaces, uses
pop-up windows. To use this portal effectively, please disable all pop-up blockers or set exemptions to this
URL.</p>
   <hr>
   <p align="justify" style="color:#FFCC33"><strong><img src="images/pin.png" alt="" width="16" height="16">
User Registration</strong></p>
   </span>
   <p align="justify"><span class="style1">A users registration is required to download the data. </span><span
class="style10"><a href="DataPortal_Registry.html" target="_blank"><span class="style1"> Click
here</span></a></span><span class="style1"> if you have not registered. Registration is free.</span></p>
   <hr><span class="style1">
```

```
    <p style="color:#FFCC33"><strong><img src="images/pin.png" alt="" width="16" height="16"> Direct KML
Access</strong></p>
    <p align="justify">Direct KML call from Earth Google is also possible. <a
href="DataPortal_GenerateKML_Public.php"><span class="style1"> Click here</span></a> if you want to
download the KML file. </p>
    <hr />
    </span> </div>
  <div id="mainContent">
          <div id="TabbedPanels1" class="TabbedPanels">
           <ul class="TabbedPanelsTabGroup">
            <li class="TabbedPanelsTab style3" tabindex="0">Interactive Map</li>
            <li class="TabbedPanelsTab style3" tabindex="0">Table Listing of Maps</li>
            <li class="TabbedPanelsTab" tabindex="0">Table Listing of Map Viewers</li>
           </ul>
           <div class="TabbedPanelsContentGroup">

     <span class="TabbedPanelsContent">
      <p align="justify"><span class="style5" style="margin-top:0"><strong style="color:#990000">NOTE</strong>!
The geo-markers in the map are areas where maps or interactive map viewers are available. Some markers may
overlap with neighboring markers. Zoom to the area of interest to reveal other maps.</span></p>
          <div id="map" style="width: 725px; height: 450px" align="center"> </div>
     </span>
          <div>
     <p style="margin-left: 20px; font-size:11px; color:#003366; font-family:Arial, Helvetica, sans-serif">[NOTE:
Some maps are still being cleared from their sources and as such, will require special permission to download the
file. When requesting data from restricted list, please specify how and where the data will be used.]</p>
          <?php

// create the dynamic table from the database

        echo '    <table width="90%" border="1" cellpadding="10" cellspacing="0" style="margin-left: 20px;">';
   echo '     <tr>';
        echo '      <td width="15%" align="center" style="font-size:11px; color:#003366; font-family:Arial,
Helvetica, sans-serif">Location</td>';
   echo '     <td width="65%" align="center" style="font-size:11px; color:#003366; font-family:Arial, Helvetica,
sans-serif">Metadata</td>';
   echo '     <td width="19%" align="center" style="font-size:11px; color:#003366; font-family:Arial, Helvetica,
sans-serif">Link to Download</td>';
   echo '     </tr>';

        // start reading the database (for documents)
        try {
                $db = $_SERVER['DOCUMENT_ROOT']."/kslof/data/kslof_gis.sqlite";
                $dbh = new PDO("sqlite:".$db);
                //$dbh->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
                //$dbh->beginTransaction();
                $sql = "SELECT * FROM document ORDER BY location, title";
                foreach ($dbh->query($sql) as $row) {
                        echo '  <tr>';
                        echo '   <td align="center" style="font-size:11px; color:#003366; font-family:Arial,
Helvetica, sans-serif">' . $row['location'] . '</td>';
```

```
echo '        <td align="left" style="font-size:11px; color:#003366; font-family:Arial,
Helvetica, sans-serif">';
echo '        Title: <strong>' . $row['title'] . '</strong><br />';
echo '        Author: ' . $row['author']. '<br />';
echo '        Publication Date: ' . $row['pubDate'] . '<br />';
echo '        Data Type: ' . $row['type'] . '<br /><br />';
echo '        <div align="justify"><u> Abstract: </u>' . $row['abstract'] . '</div> <br />';
echo '                </td>';
if ($row['restriction']=='classified') {
echo '        <td align="center" style="font-size:11px; color:#003366; font-family:Arial,
Helvetica, sans-serif">Restricted. Please <a href="mailto:williams@livingoceansfoundation.org?subject=Data
Request from Restricted List">contact KSLOF</a> for permission.</td>';
} else {
echo '        <td align="center" style="font-size:11px; color:#003366; font-family:Arial,
Helvetica, sans-serif"><a href=DataPortal_Details.php?map_id=' . $row['id'] . ' target="_blank">Ready for
Download</a></td>';
}
echo '   </tr>';
}
echo '    </table>';
} catch (PDOException $e) {
//$dbh->rollBack();
die();
}
// delete object
$dbh = null;
?>
    <p> </p>
    </div>
        <div class="TabbedPanelsContent">
    <p style="margin-left: 20px; font-size:11px; color:#003366; font-family:Arial, Helvetica, sans-serif">[NOTE:
These interactive map viewers are located in a different domain.]</p>
            <?php
        try {
            $db = $_SERVER['DOCUMENT_ROOT']."/kslof/data/kslof_gis.sqlite";
            $dbh = new PDO("sqlite:".$db);
            // start reading the database (for viewers)
            echo '<table width="90%" border="1" cellpadding="10" cellspacing="0" style="margin-left:
20px;">';
            echo '   <tr>';
            echo '     <td width="80%" align="center" style="font-size:11px; color:#003366; font-family:Arial,
Helvetica, sans-serif">Viewer Details</td>';
            echo '     <td width="19%" align="center" style="font-size:11px; color:#003366; font-
family:Arial, Helvetica, sans-serif">External Link</td>';
            echo '   </tr>';

            $sql = "SELECT * FROM viewers";
            foreach ($dbh->query($sql) as $row) {
                echo '   <tr>';
                echo '     <td align="left" style="font-size:11px; color:#003366; font-family:Arial,
Helvetica, sans-serif">';
                echo '     Title:<strong>' . $row['label'] . '</strong><br />';
```

```
                          echo '        <br />';
                          echo '       Description: ' . $row['description'] . '<br />';
                          echo '                 </td>';
                          echo '     <td align="center" style="font-size:11px; color:#003366; font-family:Arial,
Helvetica, sans-serif"><a href= ' . $row['url'] . ' target="_blank">Open Viewer</a></td>';
                          echo '   </tr>';
                    }
                          echo '</table>';
            } catch (PDOException $e) {
                    //$dbh->rollBack();
                    die();
            }
            // delete object
            $dbh = null;
?>
       <p> </p>


     </div>
           </div>
    </div>
    <!-- end #mainContent -->
  </div>
<div class="clearfloat">
   <img src="images/kslof_footer.png">
</div>
<!-- end #container -->
</div>
<script type="text/javascript">
<!--
var TabbedPanels1 = new Spry.Widget.TabbedPanels("TabbedPanels1");
var MenuBar1 = new Spry.Widget.MenuBar("KSLOF_DP_Menu", {imgDown:"jscript/SpryMenuBarDownHover.gif",
imgRight:"jscript/SpryMenuBarRightHover.gif"});
//-->
</script>
</body>
</html>
```

## DataPortal_GenerateKML_Public.php

```php
<?php
        // Module: DataPortal_GenerateKML_Public.php
        // Purpose: Dynamically generates the KML files for Earth Google application
        // Author: Felimon Gayanilo (felimon@gayanilo.net)
        // Date Last Update: 23 June 2009

        // Copyright (c) 2009, Living Oceans Foundation, MD. All right reserved.

        $db = $_SERVER['DOCUMENT_ROOT']."/kslof/data/kslof_gis.sqlite";
        try{
                $dbh = new PDO("sqlite:".$db);
                $dbh->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
        } catch (PDOException $e) {
                $dbh->rollBack();
                echo "Error!" . $e->getMessage() . "<br />";
                die();
        }

        // place the header (inside a <document> tag
        $kml_output = '<?xml version="1.0" encoding="UTF-8"?>';
        $kml_output .=    "\015\012";
        $kml_output .= '<kml xmlns="http://www.opengis.net/kml/2.2"> ';
        $kml_output .=    "\015\012";
        $kml_output .= '   <Document>';
        $kml_output .=    "\015\012";
        $kml_output .= '            <Style id="classified">';
        $kml_output .=    "\015\012";
        $kml_output .= '        <BalloonStyle> ';
        $kml_output .=    "\015\012";
    $kml_output .= '       <text>$[description]</text> ';
        $kml_output .=    "\015\012";
    $kml_output .= '       </BalloonStyle>';
        $kml_output .=    "\015\012";
        $kml_output .= '                   <IconStyle>';
        $kml_output .=    "\015\012";
        $kml_output .= '                    <scale>0.6</scale>';
        $kml_output .=    "\015\012";
        $kml_output .= '                          <Icon>';
        $kml_output .=    "\015\012";
        $kml_output .= '
<href>http://www.kbslof.org/gisui/images/classified.png</href>';
        $kml_output .=    "\015\012";
        $kml_output .= '                           </Icon>';
        $kml_output .=    "\015\012";
        $kml_output .= '                    </IconStyle>';
        $kml_output .=    "\015\012";
        $kml_output .= '            </Style>';
        $kml_output .=    "\015\012";
        $kml_output .= '            <Style id="open">';
        $kml_output .=    "\015\012";
        $kml_output .= '        <BalloonStyle> ';
```

```
        $kml_output .=    "\015\012";
$kml_output .= '         <text>$[description]</text> ';
        $kml_output .=    "\015\012";
$kml_output .= '        </BalloonStyle>';
        $kml_output .=    "\015\012";
        $kml_output .= '                          <IconStyle>';
        $kml_output .=    "\015\012";
        $kml_output .= '                            <scale>0.6</scale>';
        $kml_output .=    "\015\012";
        $kml_output .= '                                 <Icon>';
        $kml_output .=    "\015\012";
        $kml_output .= '
        <href>http://www.kbslof.org/gisui/images/open.png</href>';
        $kml_output .=    "\015\012";
        $kml_output .= '                                 </Icon>';
        $kml_output .=    "\015\012";
        $kml_output .= '                          </IconStyle>';
        $kml_output .=    "\015\012";
        $kml_output .= '            </Style>';
        $kml_output .=    "\015\012";
        $kml_output .= '            <Style id="viewer">';
        $kml_output .=    "\015\012";
        $kml_output .= '        <BalloonStyle> ';
        $kml_output .=    "\015\012";
$kml_output .= '         <text>$[description]</text> ';
        $kml_output .=    "\015\012";
$kml_output .= '        </BalloonStyle>';
        $kml_output .=    "\015\012";
        $kml_output .= '                          <IconStyle>';
        $kml_output .=    "\015\012";
        $kml_output .= '                            <scale>0.6</scale>';
        $kml_output .=    "\015\012";
        $kml_output .= '                                 <Icon>';
        $kml_output .=    "\015\012";
        $kml_output .= '
        <href>http://www.kbslof.org/gisui/images/viewer.png</href>';
        $kml_output .=    "\015\012";
        $kml_output .= '                                 </Icon>';
        $kml_output .=    "\015\012";
        $kml_output .= '                          </IconStyle>';
        $kml_output .=    "\015\012";
        $kml_output .= '            </Style>';
        $kml_output .=    "\015\012";

        $sql = "SELECT * FROM document";
        foreach ($dbh->query($sql) as $row) {
                // create placemark for each record
                $kml_output .= '            <Placemark>';
                $kml_output .=    "\015\012";
                $kml_output .= '            <name>' . $row['title'] . ' </name>';
                $kml_output .=    "\015\012";
                $kml_output .= '                     <description><![CDATA[';
```

```
$kml_output .=    "\015\012";
$kml_output .= '<table width="360" border="0" cellspacing="0" cellpadding="0"
style="color:#000066; font-family:"times new roman", times, serif">';
$kml_output .=    "\015\012";
// put title
$kml_output .= ' <tr>';
$kml_output .=    "\015\012";
$kml_output .= '   <td colspan="2" bgcolor="#FFFFCC" style="color:#000033"
align="left"><em><span style="font-weight:bold; font-size:14px">' . $row['title'] . '</span></em> </td>';
$kml_output .=    "\015\012";
$kml_output .= ' </tr>';
$kml_output .=    "\015\012";
// put the author
$kml_output .= ' <tr>';
$kml_output .=    "\015\012";
$kml_output .= '   <td style="color:#000033"  align="left"> <em>Author </em> </td>';
$kml_output .=    "\015\012";
$kml_output .= '   <td style="color:#000033"  align="left">' . $row['author'] . ' </td>';
$kml_output .=    "\015\012";
$kml_output .= ' </tr>';
$kml_output .=    "\015\012";
// put publication date
$kml_output .= ' <tr>';
$kml_output .=    "\015\012";
$kml_output .= '   <td style="color:#000033"  align="left"> <em>Pub. Date </em> </td>';
$kml_output .=    "\015\012";
$kml_output .= '   <td style="color:#000033"  align="left">' . $row['pubDate'] . ' </td>';
$kml_output .=    "\015\012";
$kml_output .= ' </tr>';
$kml_output .=    "\015\012";
// put data type
$kml_output .= ' <tr>';
$kml_output .=    "\015\012";
$kml_output .= '   <td style="color:#000033"  align="left"> <em>Data Type </em> </td>';
$kml_output .=    "\015\012";
$kml_output .= '   <td style="color:#000033"  align="left">' . $row['type'] . ' </td>';
$kml_output .=    "\015\012";
$kml_output .= ' </tr>';
$kml_output .=    "\015\012";
// put space
$kml_output .= ' <tr>';
$kml_output .=    "\015\012";
$kml_output .= '   <td colspan="2" style="color:#000033" align="left">   </td>';
$kml_output .=    "\015\012";
$kml_output .= ' </tr>';
$kml_output .=    "\015\012";
// put link to more details
$kml_output .= ' <tr>';
$kml_output .=    "\015\012";
$kml_output .= '   <td colspan="2" bgcolor="#FFFFCC" style="color:#000033; font-size:11px"
align="left">For more information, visit http://www.kbslof.org/gisui/DataPortal_Details.php?map_id=' . $row['id']
. '</td>';
```

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```
            $kml_output .=    "\015\012";
            $kml_output .= ' </tr>';
            $kml_output .=    "\015\012";

            $kml_output .= '</table>';
            $kml_output .=    "\015\012";
            $kml_output .= ']]></description>';
            $kml_output .=    "\015\012";
            $kml_output .= '<styleUrl>#' . $row['restriction'] . '</styleUrl>';
            $kml_output .=    "\015\012";
            $kml_output .= '                    <Point>';
            $kml_output .=    "\015\012";
            $kml_output .= '                        <coordinates>' . $row['lon'] . ', ' . $row['lat'] . ',
0</coordinates>';
            $kml_output .=    "\015\012";
            $kml_output .= '                    </Point>';
            $kml_output .=    "\015\012";
            $kml_output .= '         </Placemark>';
            $kml_output .=    "\015\012";
        }
        // populate the viewers as well
        $sql = "SELECT * FROM viewers";
        foreach ($dbh->query($sql) as $row) {
            // create placemark for each record
            $kml_output .= '         <Placemark>';
            $kml_output .=    "\015\012";
            $kml_output .= '             <name>' . $row['label'] . '</name>';
            $kml_output .=    "\015\012";
            $kml_output .= '                     <description><![CDATA[';
            $kml_output .=    "\015\012";
            $kml_output .= '<table width="360" border="0" cellspacing="0" cellpadding="0"
style="color:#000066; font-family:"times new roman", times, serif"  align="left">';
            $kml_output .=    "\015\012";
            // put title
            $kml_output .= ' <tr>';
            $kml_output .=    "\015\012";
            $kml_output .= '   <td colspan="3" bgcolor="#FFFFCC" style="color:#000033"
align="left"><em><span style="font-weight:bold; font-size:14px" align="left"> ' . $row['label'] . '</span></em>
</td>';
            $kml_output .=    "\015\012";
            $kml_output .= ' </tr>';
            $kml_output .=    "\015\012";
            // put space
            $kml_output .= ' <tr>';
            $kml_output .=    "\015\012";
            $kml_output .= '   <td colspan="3" style="color:#000033" align="left"> </td>';
            $kml_output .=    "\015\012";
            $kml_output .= ' </tr>';
            $kml_output .=    "\015\012";
            // put the image and description
            $kml_output .= ' <tr>';
            $kml_output .=    "\015\012";
```

```
                $kml_output .= '   <td style="color:#000033" align="left" valign="top"><img src="' .
$row['image'] . '" width="100" height="98" /></td>';
                $kml_output .=    "\015\012";
                $kml_output .= '   <td style="color:#000033" align="left"> </td>';
                $kml_output .=    "\015\012";
                $kml_output .= '   <td style="color:#000033" align="left"><div align="justify" style="font-
size:11px; font-family:Arial, Helvetica, sans-serif">' . $row['description'] . '</div></td>';
                $kml_output .=    "\015\012";
                $kml_output .= ' </tr>';
                $kml_output .=    "\015\012";
                // put space
                $kml_output .= ' <tr>';
                $kml_output .=    "\015\012";
                $kml_output .= '   <td colspan="3" style="color:#000033" align="left"> </td>';
                $kml_output .=    "\015\012";
                $kml_output .= ' </tr>';
                $kml_output .=    "\015\012";
                // put the link
                $kml_output .= ' <tr>';
                $kml_output .=    "\015\012";
                $kml_output .= '   <td colspan="3" bgcolor="#FFFFCC" style="color:#000033; font-size:11px"
align="left"> URL: ' . $row['url'] . '</td>';
                $kml_output .=    "\015\012";
                $kml_output .= ' </tr>';
                $kml_output .=    "\015\012";
                $kml_output .= '</table>';
                $kml_output .=    "\015\012";
                $kml_output .= ']]></description>';
                $kml_output .=    "\015\012";
                $kml_output .= '<styleUrl>#viewer</styleUrl>';
                $kml_output .=    "\015\012";
                $kml_output .= '                         <Point>';
                $kml_output .=    "\015\012";
                $kml_output .= '                                   <coordinates>' . $row['lon'] . ', ' . $row['lat'] . ',
0</coordinates>';
                $kml_output .=    "\015\012";
                $kml_output .= '                         </Point>';
                $kml_output .=    "\015\012";
                $kml_output .= '          </Placemark>';
                $kml_output .=    "\015\012";
        }
        // enter final footer
        $kml_output .= ' </Document>';
        $kml_output .=    "\015\012";
        $kml_output .= '</kml>';
        $kml_output .=    "\015\012";

        // close the database handler
        $dbh = null;

        // create the file
        header("Content-type: application/vnd.google-earth.kml+xml");
```

```
header("Content-disposition: kml; filename=kslof_DataPortal.kml");
print $kml_output;
?>
```

## DataPortal_GenerateKML.php

```php
<?php
        // Module: DataPortal_GenerateKML.php
        // Purpose: Recreates the KML files (to be server light)
        // Author: Felimon Gayanilo (felimon@gayanilo.net)
        // Date Last Update: 23 June 2009

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        echo "GENERATING KML FILE" . "<br />";
        date_default_timezone_set('UTC');
        $today = getdate();
        echo date(DATE_RFC822) . "<br /> <br />";

        $db = $_SERVER['DOCUMENT_ROOT']."/kslof/data/kslof_gis.sqlite";
        echo "(1) Opening the datatbase <br />";
        try{
                $dbh = new PDO("sqlite:".$db);
                $dbh->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
        } catch (PDOException $e) {
                $dbh->rollBack();
                echo "Error!" . $e->getMessage() . "<br />";
                die();
        }

        // place the header (inside a <document> tag
        echo "(2) Memory-writing the KML <br />";
        $kml_output = '<?xml version="1.0" encoding="UTF-8"?>';
        $kml_output .=    "\015\012";
        $kml_output .= '<kml xmlns="http://www.opengis.net/kml/2.2"> ';
        $kml_output .=    "\015\012";
        $kml_output .= '   <Document>';
        $kml_output .=    "\015\012";
        $kml_output .= '             <Style id="classified">';
        $kml_output .=    "\015\012";
        $kml_output .= '       <BalloonStyle> ';
        $kml_output .=    "\015\012";
$kml_output .= '        <text>$[description]</text> ';
        $kml_output .=    "\015\012";
$kml_output .= '      </BalloonStyle>';
        $kml_output .=    "\015\012";
        $kml_output .= '                        <IconStyle>';
        $kml_output .=    "\015\012";
        $kml_output .= '                          <scale>0.6</scale>';
        $kml_output .=    "\015\012";
        $kml_output .= '                                 <Icon>';
        $kml_output .=    "\015\012";
        $kml_output .= '
<href>http://www.kbslof.org/gisui/images/classified.png</href>';
        $kml_output .=    "\015\012";
        $kml_output .= '                                 </Icon>';
        $kml_output .=    "\015\012";
```

```
$kml_output .= '                              </IconStyle>';
$kml_output .=    "\015\012";
$kml_output .= '             </Style>';
$kml_output .=    "\015\012";
$kml_output .= '             <Style id="open">';
$kml_output .=    "\015\012";
$kml_output .= '        <BalloonStyle> ';
$kml_output .=    "\015\012";
$kml_output .= '        <text>$[description]</text> ';
$kml_output .=    "\015\012";
$kml_output .= '        </BalloonStyle>';
$kml_output .=    "\015\012";
$kml_output .= '                    <IconStyle>';
$kml_output .=    "\015\012";
$kml_output .= '                     <scale>0.6</scale>';
$kml_output .=    "\015\012";
$kml_output .= '                          <Icon>';
$kml_output .=    "\015\012";
$kml_output .= '
<href>http://www.kbslof.org/gisui/images/open.png</href>';
$kml_output .=    "\015\012";
$kml_output .= '                          </Icon>';
$kml_output .=    "\015\012";
$kml_output .= '                    </IconStyle>';
$kml_output .=    "\015\012";
$kml_output .= '             </Style>';
$kml_output .=    "\015\012";
$kml_output .= '             <Style id="viewer">';
$kml_output .=    "\015\012";
$kml_output .= '        <BalloonStyle> ';
$kml_output .=    "\015\012";
$kml_output .= '        <text>$[description]</text> ';
$kml_output .=    "\015\012";
$kml_output .= '        </BalloonStyle>';
$kml_output .=    "\015\012";
$kml_output .= '                    <IconStyle>';
$kml_output .=    "\015\012";
$kml_output .= '                     <scale>0.6</scale>';
$kml_output .=    "\015\012";
$kml_output .= '                          <Icon>';
$kml_output .=    "\015\012";
$kml_output .= '
<href>http://www.kbslof.org/gisui/images/viewer.png</href>';
$kml_output .=    "\015\012";
$kml_output .= '                          </Icon>';
$kml_output .=    "\015\012";
$kml_output .= '                    </IconStyle>';
$kml_output .=    "\015\012";
$kml_output .= '             </Style>';
$kml_output .=    "\015\012";

$sql = "SELECT * FROM document";
```

```php
foreach ($dbh->query($sql) as $row) {
        // create placemark for each record
        $kml_output .= '            <Placemark>';
        $kml_output .=    "\015\012";
        $kml_output .= '                        <description><![CDATA[';
        $kml_output .=    "\015\012";
        $kml_output .= '<table width="360" border="0" cellspacing="0" cellpadding="0"
style="color:#000066; font-family:"times new roman", times, serif">';
        $kml_output .=    "\015\012";
        // put title
        $kml_output .= ' <tr>';
        $kml_output .=    "\015\012";
        $kml_output .= '   <td colspan="2" bgcolor="#FFFFCC" style="color:#000033"
align="left"><em><span style="font-weight:bold; font-size:14px">' . $row['title'] . '</span></em> </td>';
        $kml_output .=    "\015\012";
        $kml_output .= ' </tr>';
        $kml_output .=    "\015\012";
        // put the author
        $kml_output .= ' <tr>';
        $kml_output .=    "\015\012";
        $kml_output .= '   <td style="color:#000033"  align="left"> <em>Author </em> </td>';
        $kml_output .=    "\015\012";
        $kml_output .= '   <td style="color:#000033"  align="left"> ' . $row['author'] . ' </td>';
        $kml_output .=    "\015\012";
        $kml_output .= ' </tr>';
        $kml_output .=    "\015\012";
        // put publication date
        $kml_output .= ' <tr>';
        $kml_output .=    "\015\012";
        $kml_output .= '   <td style="color:#000033"  align="left"> <em>Pub. Date </em> </td>';
        $kml_output .=    "\015\012";
        $kml_output .= '   <td style="color:#000033"  align="left">' . $row['pubDate'] . ' </td>';
        $kml_output .=    "\015\012";
        $kml_output .= ' </tr>';
        $kml_output .=    "\015\012";
        // put data type
        $kml_output .= ' <tr>';
        $kml_output .=    "\015\012";
        $kml_output .= '   <td style="color:#000033"  align="left"> <em>Data Type </em> </td>';
        $kml_output .=    "\015\012";
        $kml_output .= '   <td style="color:#000033"  align="left"> ' . $row['type'] . ' </td>';
        $kml_output .=    "\015\012";
        $kml_output .= ' </tr>';
        $kml_output .=    "\015\012";
        // put space
        $kml_output .= ' <tr>';
        $kml_output .=    "\015\012";
        $kml_output .= '   <td colspan="2" style="color:#000033" align="left">   </td>';
        $kml_output .=    "\015\012";
        $kml_output .= ' </tr>';
        $kml_output .=    "\015\012";
        // put link to more details
```

```
$kml_output .= '  <tr>';
$kml_output .=    "\015\012";
$kml_output .= '    <td colspan="2" bgcolor="#FFFFCC" style="color:#000033; font-size:11px"
align="left"> <a href=http://www.kbslof.org/gisui/DataPortal_Details.php?map_id=' . $row['id'] . '> Click here</a>
for more information.</td>';
$kml_output .=    "\015\012";
$kml_output .= '  </tr>';
$kml_output .=    "\015\012";

$kml_output .= '</table>';
$kml_output .=    "\015\012";
$kml_output .= ']]></description>';
$kml_output .=    "\015\012";
$kml_output .= '<styleUrl>#' . $row['restriction'] . '</styleUrl>';
$kml_output .=    "\015\012";
$kml_output .= '                         <Point>';
$kml_output .=    "\015\012";
$kml_output .= '                              <coordinates>' . $row['lon'] . ', ' . $row['lat'] . ',
0</coordinates>';
$kml_output .=    "\015\012";
$kml_output .= '                         </Point>';
$kml_output .=    "\015\012";
$kml_output .= '            </Placemark>';
$kml_output .=    "\015\012";
}
// populate the viewers as well
$sql = "SELECT * FROM viewers";
foreach ($dbh->query($sql) as $row) {
            // create placemark for each record
            $kml_output .= '            <Placemark>';
            $kml_output .=    "\015\012";
            $kml_output .= '                         <description><![CDATA[';
            $kml_output .=    "\015\012";
            $kml_output .= '<table width="360" border="0" cellspacing="0" cellpadding="0"
style="color:#000066; font-family:"times new roman", times, serif"  align="left">';
            $kml_output .=    "\015\012";
            // put title
            $kml_output .= '  <tr>';
            $kml_output .=    "\015\012";
            $kml_output .= '    <td colspan="3" bgcolor="#FFFFCC" style="color:#000033"
align="left"><em><span style="font-weight:bold; font-size:14px" align="left"> ' . $row['label'] . '</span></em>
</td>';
            $kml_output .=    "\015\012";
            $kml_output .= '  </tr>';
            $kml_output .=    "\015\012";
            // put space
            $kml_output .= '  <tr>';
            $kml_output .=    "\015\012";
            $kml_output .= '    <td colspan="3" style="color:#000033" align="left"> </td>';
            $kml_output .=    "\015\012";
            $kml_output .= '  </tr>';
            $kml_output .=    "\015\012";
```

```
            // put the image and description
            $kml_output .= '  <tr>';
            $kml_output .=    "\015\012";
            $kml_output .= '    <td style="color:#000033" align="left" valign="top"><img src="' .
$row['image'] . '" width="100" height="98" /></td>';
            $kml_output .=    "\015\012";
            $kml_output .= '    <td style="color:#000033" align="left"> </td>';
            $kml_output .=    "\015\012";
            $kml_output .= '    <td style="color:#000033" align="left"><div align="justify" style="font-
size:11px; font-family:Arial, Helvetica, sans-serif">' . $row['description'] . '</div></td>';
            $kml_output .=    "\015\012";
            $kml_output .= '  </tr>';
            $kml_output .=    "\015\012";
            // put space
            $kml_output .= '  <tr>';
            $kml_output .=    "\015\012";
            $kml_output .= '    <td colspan="3" style="color:#000033" align="left"> </td>';
            $kml_output .=    "\015\012";
            $kml_output .= '  </tr>';
            $kml_output .=    "\015\012";
            // put the link
            $kml_output .= '  <tr>';
            $kml_output .=    "\015\012";
            $kml_output .= '    <td colspan="3"  bgcolor="#FFFFCC" style="color:#000033; font-size:11px"
align="left"> <a href=' . $row['url'] . '> Click here</a> to open the interactive map viewer.</td>';
            $kml_output .=    "\015\012";
            $kml_output .= '  </tr>';
            $kml_output .=    "\015\012";
            $kml_output .= '</table>';
            $kml_output .=    "\015\012";
            $kml_output .= ']]></description>';
            $kml_output .=    "\015\012";
            $kml_output .= '<styleUrl>#viewer</styleUrl>';
            $kml_output .=    "\015\012";
            $kml_output .= '                        <Point>';
            $kml_output .=    "\015\012";
            $kml_output .= '                              <coordinates>' . $row['lon'] . ', ' . $row['lat'] . ',
0</coordinates>';
            $kml_output .=    "\015\012";
            $kml_output .= '                        </Point>';
            $kml_output .=    "\015\012";
            $kml_output .= '            </Placemark>';
            $kml_output .=    "\015\012";
        }
        // enter final footer
        $kml_output .= '  </Document>';
        $kml_output .=    "\015\012";
        $kml_output .= '</kml>';
        $kml_output .=    "\015\012";

        // close the database handler
        $dbh = null;
```

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```
// create the file
$file =  $_SERVER['DOCUMENT_ROOT']."/kslof/data/kslof_DataPortal.kml";
echo "(3) Overwrite any existing file <br />";
if (file_exists($file)) {
        unlink($file);
}
$fdh = fopen($file, 'x')    or die("Cannot create: $php_errormsg");
echo "(4) Writing updated file (" . $file . ") <br />";
fwrite ($fdh, $kml_output);
echo "(5) Closing the new file and now ready for use <br /> <br />";
fclose($fdh);
echo "Done!";
?>
```

## DataPortal_Save_User.php

```php
<?php
        // Module: DataPortal_Save_User.php
        // Purpose: To save the $_POSRT parameters from the user registry
        // Author: Felimon Gayanilo (felimon@gayanilo.net)
        // Date Last Update: 23 June 2009

        // Copyright (c) 2009, Living Oceans Foundation, MD. All right reserved.

        // set error flag
        $error_flag = 'none';
        // check is username is already take
        if(isset($_POST["username"])) {
                // open and check database
                $username = $_POST["username"];
                $db = $_SERVER['DOCUMENT_ROOT']."/gisui/data/kslof_gis.sqlite";
                try{
                        $DB_conn = new PDO("sqlite:".$db);
                        $DB_conn->beginTransaction();
                        $DB_conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
                        $sql = "SELECT username FROM users WHERE username LIKE " . $username;
                        $count = 0;
                        foreach ($DB_conn->query($sql) as $record) {
                                $count += 1;
                        }
                        if ($count > 1) {
                                $error_flag = "> The username has already been taken. Please try another
one.";
                        }
                } catch (PDOException $e) {
                                echo "Error!" . $e->getMessage() . "<br/>";
                                die();
                }

        } else {
        $error_flag = "> The username is required.";
        }

        // check if password, firstname, lastname, country, challenge,response are not null
        if(!isset($_POST["password"])) {
                if ($error_flag = 'none') {$error_flag="";}
                $error_flag .=      "\015\012";
                $error_flag .= "> The password value is required.";
        }
        if(!isset($_POST["firstname"])) {
                if ($error_flag = 'none') {$error_flag="";}
                $error_flag .=      "\015\012";
                $error_flag .= "> The firstname is required for user identification.";
        }
        if(!isset($_POST["lastname"])) {
                if ($error_flag = 'none') {$error_flag="";}
                $error_flag .=      "\015\012";
```

```
            $error_flag .= "> The lastname is required for user identification.";
        }
        if(!isset($_POST["country"])) {
                if ($error_flag = 'none') {$error_flag="";}
                $error_flag .=       "\015\012";
                $error_flag .= "> The name of the country where the data will be copied is required.";
        }
        if(!isset($_POST["challenge"])) {
                if ($error_flag = 'none') {$error_flag="";}
                $error_flag .=       "\015\012";
                $error_flag .= "> The challenge question was not selected. Please provide an entry.";
        }
        if(!isset($_POST["response"])) {
                if ($error_flag = 'none') {$error_flag="";}
                $error_flag .=       "\015\012";
                $error_flag .= "> The response to the challenge question cannot be null. Please provide an
entry.";
        }
        if ($error_flag = "none") {
                // save the values
                $db = $_SERVER['DOCUMENT_ROOT']."/kslof/data/kslof_gis.sqlite";
                try{
                        $DB_conn = new PDO("sqlite:".$db);
                        $DB_conn->beginTransaction();
                        $DB_conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);

                        $username = $_POST["username"];
                        $password = $_POST["password"];
                        $firstname = $_POST["firstname"];
                        $lastname = $_POST["lastname"];
                        $job_title = $_POST["job"];
                        $organization = $_POST["organization"];
                        $address1 = $_POST["address1"];
                        $address2 = $_POST["address2"];
                        $city = $_POST["city"];
                        $state = $_POST["state"];
                        $pcode = $_POST["pcode"];
                        $country = $_POST["country"];
                        $phone = $_POST["phone"];
                        $email = $_POST["email"];
                        $d_industry = $_POST["d_industry"];
                        $d_company = $_POST["d_company"];
                        $d_role = $_POST["d_role"];
                        $challenge = $_POST["challenge"];
                        $response = $_POST["response"];

                        $sql = "INSERT INTO users
(username,password,firstname,lastname,job,organization,address1,address2,city,state,pcode,country,phone,emai
l,d_industry,d_company,d_role,challenge,response) VALUES (";
                        $sql .= $username . ",";
                        $sql .= $password . ",";
                        $sql .= $firstname . ",";
```

```php
            $sql .= $lastname . ",";
            $sql .= $job_title . ",";
            $sql .= $organization . ",";
            $sql .= $address1 . ",";
            $sql .= $address2 . ",";
            $sql .= $city . ",";
            $sql .= $state . ",";
            $sql .= $pcode . ",";
            $sql .= $country . ",";
            $sql .= $phone . ",";
            $sql .= $email . ",";
            $sql .= $d_industry . ",";
            $sql .= $d_company . ",";
            $sql .= $d_role . ",";
            $sql .= $challenge . ",";
            $sql .= $response . ")";
            //echo $sql . "<br />";

            $DB_conn->exec($sql);
            $DB_conn->commit();
            $DB_conn = null;

            echo 'The user profile is saved. <a href="javascript:window.close();">Close this
Window</a> and proceed with login to download.';

        } catch (PDOException $e) {
                echo "The user profile was not saved. Please contact KSLOF if the following
error persist:" . $e->getMessage() . "<br/>";
                echo '<a href="javascript:window.close();">Close this Window</a> and try
registering again.';
                die();
        }
        }
 ?>
```

## imageswap.js

```
// Module: imageswap.js
// Purpose: Dynamically swap images on mouse over
// Author: Felimon Gayanilo (felimon@gayanilo.net)
// Date Last Update: 23 June 2009

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function MM_swapImgRestore() { //v3.0
  var i,x,a=document.MM_sr; for(i=0;a&&i<a.length&&(x=a[i])&&x.oSrc;i++) x.src=x.oSrc;
}
function MM_preloadImages() { //v3.0
  var d=document; if(d.images){ if(!d.MM_p) d.MM_p=new Array();
    var i,j=d.MM_p.length,a=MM_preloadImages.arguments; for(i=0; i<a.length; i++)
    if (a[i].indexOf("#")!=0){ d.MM_p[j]=new Image; d.MM_p[j++].src=a[i];}}
}

function MM_findObj(n, d) { //v4.01
  var p,i,x;  if(!d) d=document; if((p=n.indexOf("?"))>0&&parent.frames.length) {
    d=parent.frames[n.substring(p+1)].document; n=n.substring(0,p);}
  if(!(x=d[n])&&d.all) x=d.all[n]; for (i=0;!x&&i<d.forms.length;i++) x=d.forms[i][n];
  for(i=0;!x&&d.layers&&i<d.layers.length;i++) x=MM_findObj(n,d.layers[i].document);
  if(!x && d.getElementById) x=d.getElementById(n); return x;
}

function MM_swapImage() { //v3.0
  var i,j=0,x,a=MM_swapImage.arguments; document.MM_sr=new Array; for(i=0;i<(a.length-2);i+=3)
   if ((x=MM_findObj(a[i]))!=null){document.MM_sr[j++]=x; if(!x.oSrc) x.oSrc=x.src; x.src=a[i+2];}
}
```

## MenuBar.js

```
/* SpryMenuBar.js - Revision: Spry Preview Release 1.4 */

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// POSSIBILITY OF SUCH DAMAGE.

/*************************************************************************

 SpryMenuBar.js
 This file handles the JavaScript for Spry Menu Bar.  You should have no need
 to edit this file.  Some highlights of the MenuBar object is that timers are
 used to keep submenus from showing up until the user has hovered over the parent
 menu item for some time, as well as a timer for when they leave a submenu to keep
 showing that submenu until the timer fires.

 *************************************************************************/

// Modified by: Felimon Gayanilo (University of Miami, 2009)
// WARNING! Do not distribute this version. Always refer to original copy.

var Spry;
if(!Spry)
{
        Spry = {};
}
if(!Spry.Widget)
{
        Spry.Widget = {};
```

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```
}

// Constructor for Menu Bar
// element should be an ID of an unordered list (<ul> tag)
// preloadImage1 and preloadImage2 are images for the rollover state of a menu
Spry.Widget.MenuBar = function(element, opts)
{
        this.init(element, opts);
};

Spry.Widget.MenuBar.prototype.init = function(element, opts)
{
        this.element = this.getElement(element);

        // represents the current (sub)menu we are operating on
        this.currMenu = null;

        var isie = (typeof document.all != 'undefined' && typeof window.opera == 'undefined' &&
navigator.vendor != 'KDE');
        if(typeof document.getElementById == 'undefined' || (navigator.vendor == 'Apple Computer, Inc.' &&
typeof window.XMLHttpRequest == 'undefined') || (isie && typeof document.uniqueID == 'undefined'))
        {
                // bail on older unsupported browsers
                return;
        }

        // load hover images now
        if(opts)
        {
                for(var k in opts)
                {
                        var rollover = new Image;
                        rollover.src = opts[k];
                }
        }

        if(this.element)
        {
                this.currMenu = this.element;
                var items = this.element.getElementsByTagName('li');
                for(var i=0; i<items.length; i++)
                {
                        this.initialize(items[i], element, isie);
                        if(isie)
                        {
                                this.addClassName(items[i], "MenuBarItemIE");
                                items[i].style.position = "static";
                        }
                }
                if(isie)
                {
                        if(this.hasClassName(this.element, "MenuBarVertical"))
```

```
                        {
                                this.element.style.position = "relative";
                        }
                        var linkitems = this.element.getElementsByTagName('a');
                        for(var i=0; i<linkitems.length; i++)
                        {
                                linkitems[i].style.position = "relative";
                        }
                }
        }
};

Spry.Widget.MenuBar.prototype.getElement = function(ele)
{
        if (ele && typeof ele == "string")
                return document.getElementById(ele);
        return ele;
};

Spry.Widget.MenuBar.prototype.hasClassName = function(ele, className)
{
        if (!ele || !className || !ele.className || ele.className.search(new RegExp("\\b" + className + "\\b"))
== -1)
        {
                return false;
        }
        return true;
};

Spry.Widget.MenuBar.prototype.addClassName = function(ele, className)
{
        if (!ele || !className || this.hasClassName(ele, className))
                return;
        ele.className += (ele.className ? " " : "") + className;
};

Spry.Widget.MenuBar.prototype.removeClassName = function(ele, className)
{
        if (!ele || !className || !this.hasClassName(ele, className))
                return;
        ele.className = ele.className.replace(new RegExp("\\s*\\b" + className + "\\b", "g"), "");
};

// addEventListener for Menu Bar
// attach an event to a tag without creating obtrusive HTML code
Spry.Widget.MenuBar.prototype.addEventListener = function(element, eventType, handler, capture)
{
        try
        {
                if (element.addEventListener)
                {
                        element.addEventListener(eventType, handler, capture);
```

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```
			}
			else if (element.attachEvent)
			{
					element.attachEvent('on' + eventType, handler);
			}
		}
		catch (e) {}
};


// createIframeLayer for Menu Bar
// creates an IFRAME underneath a menu so that it will show above form controls and ActiveX
Spry.Widget.MenuBar.prototype.createIframeLayer = function(menu)
{
		var layer = document.createElement('iframe');
		layer.tabIndex = '-1';
		layer.src = 'javascript:false;';
		menu.parentNode.appendChild(layer);

		layer.style.left = menu.offsetLeft + 'px';
		layer.style.top = menu.offsetTop + 'px';
		layer.style.width = menu.offsetWidth + 'px';
		layer.style.height = menu.offsetHeight + 'px';
};


// removeIframeLayer for Menu Bar
// removes an IFRAME underneath a menu to reveal any form controls and ActiveX
Spry.Widget.MenuBar.prototype.removeIframeLayer =  function(menu)
{
		var layers = menu.parentNode.getElementsByTagName('iframe');
		while(layers.length > 0)
		{
				layers[0].parentNode.removeChild(layers[0]);
		}
};


// clearMenus for Menu Bar
// root is the top level unordered list (<ul> tag)
Spry.Widget.MenuBar.prototype.clearMenus = function(root)
{
		var menus = root.getElementsByTagName('ul');
		for(var i=0; i<menus.length; i++)
		{
				this.hideSubmenu(menus[i]);
		}
		this.removeClassName(this.element, "MenuBarActive");
};


// bubbledTextEvent for Menu Bar
// identify bubbled up text events in Safari so we can ignore them
Spry.Widget.MenuBar.prototype.bubbledTextEvent = function()
{
```

```
            return (navigator.vendor == 'Apple Computer, Inc.' && (event.target == event.relatedTarget.parentNode
|| (event.eventPhase == 3 && event.target.parentNode == event.relatedTarget)));
};


// showSubmenu for Menu Bar
// set the proper CSS class on this menu to show it
Spry.Widget.MenuBar.prototype.showSubmenu = function(menu)
{
        if(this.currMenu)
        {
                this.clearMenus(this.currMenu);
                this.currMenu = null;
        }

        if(menu)
        {
                this.addClassName(menu, "MenuBarSubmenuVisible");
                if(typeof document.all != 'undefined' && typeof window.opera == 'undefined' &&
navigator.vendor != 'KDE')
                {
                        if(!this.hasClassName(this.element, "MenuBarHorizontal") ||
menu.parentNode.parentNode != this.element)
                        {
                                menu.style.top = menu.parentNode.offsetTop + 'px';
                        }
                }
                if(typeof document.uniqueID != "undefined")
                {
                        this.createIframeLayer(menu);
                }
        }
        this.addClassName(this.element, "MenuBarActive");
};

// hideSubmenu for Menu Bar
// remove the proper CSS class on this menu to hide it
Spry.Widget.MenuBar.prototype.hideSubmenu = function(menu)
{
        if(menu)
        {
                this.removeClassName(menu, "MenuBarSubmenuVisible");
                if(typeof document.all != 'undefined' && typeof window.opera == 'undefined' &&
navigator.vendor != 'KDE')
                {
                        menu.style.top = '';
                        menu.style.left = '';
                }
                this.removeIframeLayer(menu);
        }
};

// initialize for Menu Bar
```

```
// create event listeners for the Menu Bar widget so we can properly
// show and hide submenus
Spry.Widget.MenuBar.prototype.initialize = function(listitem, element, isie)
{
        var opentime, closetime;
        var link = listitem.getElementsByTagName('a')[0];
        var submenus = listitem.getElementsByTagName('ul');
        var menu = (submenus.length > 0 ? submenus[0] : null);

        var hasSubMenu = false;
        if(menu)
        {
                this.addClassName(link, "MenuBarItemSubmenu");
                hasSubMenu = true;
        }

        if(!isie)
        {
                // define a simple function that comes standard in IE to determine
                // if a node is within another node
                listitem.contains = function(testNode)
                {
                        // this refers to the list item
                        if(testNode == null)
                        {
                                return false;
                        }
                        if(testNode == this)
                        {
                                return true;
                        }
                        else
                        {
                                return this.contains(testNode.parentNode);
                        }
                };
        }

        // need to save this for scope further down
        var self = this;

        this.addEventListener(listitem, 'mouseover', function(e)
        {
                if(self.bubbledTextEvent())
                {
                        // ignore bubbled text events
                        return;
                }
                clearTimeout(closetime);
                if(self.currMenu == listitem)
                {
                        self.currMenu = null;
```

```
            }
            // show menu highlighting
            self.addClassName(link, hasSubMenu ? "MenuBarItemSubmenuHover" : "MenuBarItemHover");
            if(menu && !self.hasClassName(menu, "MenuBarSubmenuVisible"))
            {
                    opentime = window.setTimeout(function(){self.showSubmenu(menu);}, 250);
            }
        }, false);

        this.addEventListener(listitem, 'mouseout', function(e)
        {
            if(self.bubbledTextEvent())
            {
                    // ignore bubbled text events
                    return;
            }

            var related = (typeof e.relatedTarget != 'undefined' ? e.relatedTarget : e.toElement);
            if(!listitem.contains(related))
            {
                    clearTimeout(opentime);
                    self.currMenu = listitem;

                    // remove menu highlighting
                    self.removeClassName(link, hasSubMenu ? "MenuBarItemSubmenuHover" :
"MenuBarItemHover");
                    if(menu)
                    {
                            closetime = window.setTimeout(function(){self.hideSubmenu(menu);}, 600);
                    }
            }
        }, false);
};
```

## TabbedPanels.js

```
/* SpryTabbedPanels.js - Revision: Spry Preview Release 1.4 */

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var Spry;
if (!Spry) Spry = {};
if (!Spry.Widget) Spry.Widget = {};

Spry.Widget.TabbedPanels = function(element, opts)
{
        this.element = this.getElement(element);
        this.defaultTab = 0; // Show the first panel by default.
        this.bindings = [];
        this.tabSelectedClass = "TabbedPanelsTabSelected";
        this.tabHoverClass = "TabbedPanelsTabHover";
        this.tabFocusedClass = "TabbedPanelsTabFocused";
        this.panelVisibleClass = "TabbedPanelsContentVisible";
        this.focusElement = null;
        this.hasFocus = false;
        this.currentTabIndex = 0;
        this.enableKeyboardNavigation = true;

        Spry.Widget.TabbedPanels.setOptions(this, opts);
```

```
        // If the defaultTab is expressed as a number/index, convert
        // it to an element.

        if (typeof (this.defaultTab) == "number")
        {
                if (this.defaultTab < 0)
                        this.defaultTab = 0;
                else
                {
                        var count = this.getTabbedPanelCount();
                        if (this.defaultTab >= count)
                                this.defaultTab = (count > 1) ? (count - 1) : 0;
                }

                this.defaultTab = this.getTabs()[this.defaultTab];
        }

        // The defaultTab property is supposed to be the tab element for the tab content
        // to show by default. The caller is allowed to pass in the element itself or the
        // element's id, so we need to convert the current value to an element if necessary.

        if (this.defaultTab)
                this.defaultTab = this.getElement(this.defaultTab);

        this.attachBehaviors();
};

Spry.Widget.TabbedPanels.prototype.getElement = function(ele)
{
        if (ele && typeof ele == "string")
                return document.getElementById(ele);
        return ele;
}

Spry.Widget.TabbedPanels.prototype.getElementChildren = function(element)
{
        var children = [];
        var child = element.firstChild;
        while (child)
        {
                if (child.nodeType == 1 /* Node.ELEMENT_NODE */)
                        children.push(child);
                child = child.nextSibling;
        }
        return children;
};

Spry.Widget.TabbedPanels.prototype.addClassName = function(ele, className)
{
        if (!ele || !className || (ele.className && ele.className.search(new RegExp("\\b" + className +
"\\b")) != -1))
```

```
                return;
        ele.className += (ele.className ? " " : "") + className;
};

Spry.Widget.TabbedPanels.prototype.removeClassName = function(ele, className)
{
        if (!ele || !className || (ele.className && ele.className.search(new RegExp("\\b" + className +
"\\b")) == -1))
                return;
        ele.className = ele.className.replace(new RegExp("\\s*\\b" + className + "\\b", "g"), "");
};

Spry.Widget.TabbedPanels.setOptions = function(obj, optionsObj, ignoreUndefinedProps)
{
        if (!optionsObj)
                return;
        for (var optionName in optionsObj)
        {
                if (ignoreUndefinedProps && optionsObj[optionName] == undefined)
                        continue;
                obj[optionName] = optionsObj[optionName];
        }
};

Spry.Widget.TabbedPanels.prototype.getTabGroup = function()
{
        if (this.element)
        {
                var children = this.getElementChildren(this.element);
                if (children.length)
                        return children[0];
        }
        return null;
};

Spry.Widget.TabbedPanels.prototype.getTabs = function()
{
        var tabs = [];
        var tg = this.getTabGroup();
        if (tg)
                tabs = this.getElementChildren(tg);
        return tabs;
};

Spry.Widget.TabbedPanels.prototype.getContentPanelGroup = function()
{
        if (this.element)
        {
                var children = this.getElementChildren(this.element);
                if (children.length > 1)
                        return children[1];
        }
```

```
                return null;
};


Spry.Widget.TabbedPanels.prototype.getContentPanels = function()
{
        var panels = [];
        var pg = this.getContentPanelGroup();
        if (pg)
                panels = this.getElementChildren(pg);
        return panels;
};


Spry.Widget.TabbedPanels.prototype.getIndex = function(ele, arr)
{
        ele = this.getElement(ele);
        if (ele && arr && arr.length)
        {
                for (var i = 0; i < arr.length; i++)
                {
                        if (ele == arr[i])
                                return i;
                }
        }
        return -1;
};


Spry.Widget.TabbedPanels.prototype.getTabIndex = function(ele)
{
        var i = this.getIndex(ele, this.getTabs());
        if (i < 0)
                i = this.getIndex(ele, this.getContentPanels());
        return i;
};


Spry.Widget.TabbedPanels.prototype.getCurrentTabIndex = function()
{
        return this.currentTabIndex;
};


Spry.Widget.TabbedPanels.prototype.getTabbedPanelCount = function(ele)
{
        return Math.min(this.getTabs().length, this.getContentPanels().length);
};


Spry.Widget.TabbedPanels.addEventListener = function(element, eventType, handler, capture)
{
        try
        {
                if (element.addEventListener)
                        element.addEventListener(eventType, handler, capture);
                else if (element.attachEvent)
                        element.attachEvent("on" + eventType, handler);
```

```
        }
        catch (e) {}
};

Spry.Widget.TabbedPanels.prototype.onTabClick = function(e, tab)
{
        this.showPanel(tab);
};

Spry.Widget.TabbedPanels.prototype.onTabMouseOver = function(e, tab)
{
        this.addClassName(tab, this.tabHoverClass);
};

Spry.Widget.TabbedPanels.prototype.onTabMouseOut = function(e, tab)
{
        this.removeClassName(tab, this.tabHoverClass);
};

Spry.Widget.TabbedPanels.prototype.onTabFocus = function(e, tab)
{
        this.hasFocus = true;
        this.addClassName(this.element, this.tabFocusedClass);
};

Spry.Widget.TabbedPanels.prototype.onTabBlur = function(e, tab)
{
        this.hasFocus = false;
        this.removeClassName(this.element, this.tabFocusedClass);
};

Spry.Widget.TabbedPanels.ENTER_KEY = 13;
Spry.Widget.TabbedPanels.SPACE_KEY = 32;

Spry.Widget.TabbedPanels.prototype.onTabKeyDown = function(e, tab)
{
        var key = e.keyCode;
        if (!this.hasFocus || (key != Spry.Widget.TabbedPanels.ENTER_KEY && key !=
Spry.Widget.TabbedPanels.SPACE_KEY))
                return true;

        this.showPanel(tab);

        if (e.stopPropagation)
                e.stopPropagation();
        if (e.preventDefault)
                e.preventDefault();

        return false;
};

Spry.Widget.TabbedPanels.prototype.preorderTraversal = function(root, func)
```

```
{
        var stopTraversal = false;
        if (root)
        {
                stopTraversal = func(root);
                if (root.hasChildNodes())
                {
                        var child = root.firstChild;
                        while (!stopTraversal && child)
                        {
                                stopTraversal = this.preorderTraversal(child, func);
                                try { child = child.nextSibling; } catch (e) { child = null; }
                        }
                }
        }
        return stopTraversal;
};

Spry.Widget.TabbedPanels.prototype.addPanelEventListeners = function(tab, panel)
{
        var self = this;
        Spry.Widget.TabbedPanels.addEventListener(tab, "click", function(e) { return self.onTabClick(e, tab); },
false);
        Spry.Widget.TabbedPanels.addEventListener(tab, "mouseover", function(e) { return
self.onTabMouseOver(e, tab); }, false);
        Spry.Widget.TabbedPanels.addEventListener(tab, "mouseout", function(e) { return
self.onTabMouseOut(e, tab); }, false);

        if (this.enableKeyboardNavigation)
        {
                // XXX: IE doesn't allow the setting of tabindex dynamically. This means we can't
                // rely on adding the tabindex attribute if it is missing to enable keyboard navigation
                // by default.

                // Find the first element within the tab container that has a tabindex or the first
                // anchor tag.

                var tabIndexEle = null;
                var tabAnchorEle = null;

                this.preorderTraversal(tab, function(node) {
                        if (node.nodeType == 1 /* NODE.ELEMENT_NODE */)
                        {
                                var tabIndexAttr = tab.attributes.getNamedItem("tabindex");
                                if (tabIndexAttr)
                                {
                                        tabIndexEle = node;
                                        return true;
                                }
                                if (!tabAnchorEle && node.nodeName.toLowerCase() == "a")
                                        tabAnchorEle = node;
                        }
```

```
                              return false;
                  });

                  if (tabIndexEle)
                              this.focusElement = tabIndexEle;
                  else if (tabAnchorEle)
                              this.focusElement = tabAnchorEle;

                  if (this.focusElement)
                  {
                              Spry.Widget.TabbedPanels.addEventListener(this.focusElement, "focus", function(e) {
return self.onTabFocus(e, tab); }, false);
                              Spry.Widget.TabbedPanels.addEventListener(this.focusElement, "blur", function(e) {
return self.onTabBlur(e, tab); }, false);
                              Spry.Widget.TabbedPanels.addEventListener(this.focusElement, "keydown", function(e)
{ return self.onTabKeyDown(e, tab); }, false);
                  }
         }
};

Spry.Widget.TabbedPanels.prototype.showPanel = function(elementOrIndex)
{
         var tpIndex = -1;

         if (typeof elementOrIndex == "number")
                  tpIndex = elementOrIndex;
         else // Must be the element for the tab or content panel.
                  tpIndex = this.getTabIndex(elementOrIndex);

         if (!tpIndex < 0 || tpIndex >= this.getTabbedPanelCount())
                  return;

         var tabs = this.getTabs();
         var panels = this.getContentPanels();

         var numTabbedPanels = Math.max(tabs.length, panels.length);

         for (var i = 0; i < numTabbedPanels; i++)
         {
                  if (i != tpIndex)
                  {
                              if (tabs[i])
                                       this.removeClassName(tabs[i], this.tabSelectedClass);
                              if (panels[i])
                              {
                                       this.removeClassName(panels[i], this.panelVisibleClass);
                                       panels[i].style.display = "none";
                              }
                  }
         }

         this.addClassName(tabs[tpIndex], this.tabSelectedClass);
```

```
        this.addClassName(panels[tpIndex], this.panelVisibleClass);
        panels[tpIndex].style.display = "block";

        this.currentTabIndex = tpIndex;
};


Spry.Widget.TabbedPanels.prototype.attachBehaviors = function(element)
{
        var tabs = this.getTabs();
        var panels = this.getContentPanels();
        var panelCount = this.getTabbedPanelCount();

        for (var i = 0; i < panelCount; i++)
                this.addPanelEventListeners(tabs[i], panels[i]);

        this.showPanel(this.defaultTab);
};
```

## dragzoom.js

```
/*
* DragZoomControl Class v1.3
*  Copyright (c) 2005-2007, Andre Lewis, andre@earthcode.com
*
* Back Button functionality
*  Copyright (c)  2007, Richard Garland, papabear.newyork@gmail.com
*
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* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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* limitations under the License.
*
* This class lets you add a control to the map which will let the user
*  zoom by dragging a rectangle.
*  More info on original GZoom at http://earthcode.com
*
* Back Button functionality provides the user with a one click means to return the map state
*  to its state prior to the DragZoom.  Sequential DragZooms are backed out in reverse order.
*/

/**
 * Constructor for DragZoomControl, which takes 3 option hashes and
 *  uses them to customize the control.
 * @param {opts_boxStyle} Named optional arguments:
 *  opts_boxStyle.opacity {Number} Opacity from 0-1
 *  opts_boxStyle.fillColor {String} Hex value of fill color
 *  opts_boxStyle.border {String} CSS-style declaration of border
 * @param {opts_other} Named optional arguments:
 *  opts_other.buttonHTML {String} The zoom button HTML in non-activated state
 *  opts_other.buttonStartingStyle {Object} A hash of css styles for the
 *    zoom button which are common to both un-activated and activated state
 *  opts_other.buttonStyle {Object} A hash of css styles for the zoom button
 *    which will be applied when the button is in un-activated state.
 *  opts_other.rightMouseZoomOutEnabled {Boolean} Whether to zoom out when a drag
 *    with the right mouse button occurs.
 *  opts_other.buttonZoomingHTML {String} HTML which is placed in the
 *    zoom button when the button is activated.
 *  opts_other.buttonZoomingStyle {Object} A hash of css styles for the
 *    zoom button which will be applied when the button is activated.
 *  opts_other.overlayRemoveTime {Number} The number of milliseconds to wait before
 *    removing the rectangle indicating the zoomed-in area after the zoom has happened.
 *  opts_other.stickyZoomEnabled {Boolean} Whether or not the control stays in
 *    "zoom mode" until turned off. When true, the user can zoom repeatedly,
 *    until clicking on the zoom button again to turn zoom mode off.
```

```
*   opts_other.backButtonEnabled {Boolean} enables Back Button functionality
*   opts_other.backButtonHTML {String} The back button HTML
*   opts_other.backButtonStyle {Object} A hash of css styles for the back button
*     which will be applied when the button is created.
*   opts_other.minDragSize {Number} The minimum size of the rectangle when it is
*     released for a zoom to happen.
* @param {opts_callbacks} Named optional arguments:
*   opts_callbacks.buttonclick {Function} Called when the DragZoom is activated
*     by clicking on the "zoom" button.
*   opts_callbacks.dragstart {Function} Called when user starts to drag a rectangle.
*     Callback args are x,y -- the PIXEL values, relative to the upper-left-hand
*     corner of the map, where the user began dragging.
*   opts_callbacks.dragging {Function} Called repeatedly while the user is dragging.
*     Callback args are startX,startY, currentX,currentY -- the PIXEL values of the
*     start of the drag, and the current drag point, respectively.
*   opts_callbacks.dragend {Function} Called when the user releases the mouse button
*     after dragging the rectangle. Callback args are: NW {GLatLng}, NE {GLatLng},
*     SE {GLatLng}, SW {GLatLng}, NW {GPoint}, NE {GPoint}, SE {GPoint}, SW {GPoint}.
*     The first 4 are the latitudes/longitudes; the last 4 are the pixel coords on the map.
*   opts_callbacks.backbuttonclick {Function} Called when the back button is activated
*     after the map context is restored. Callback args: methodCall (boolean) set true if
*     this backbuttonclick was to restore context set by the mathod call, else false.
* Method
*   this.saveMapContext(text) Call to push map context onto the backStack and set the button text
*   this.initiateZoom() Call to simulate clicking the dragZoom button
*   this.initiateZoomBack() Call to simulate clicking the dragZoom back button
**/

/**
*  Versions
*  1.0 original version (v 189) 5/24/2007
*  1.1 backbutton functionality added  (v 211) 7/30/2007
*  1.2 bug fixes and 2 new methods 9/6/2007
*    fix text selection conflict in IE
*    fix align-text:center inheritance problem in IE
*    create methods initiateZoom and initiateZoomBack which call buttonclick_() and backbuttonclick_()
*
*  WARNING: This version was modified by F. Gayanilo, University of Miami (2009). Do not distribute
*  version. Always refer to  http://gmaps-utility-
library.googlecode.com/svn/trunk/dragzoom/release/src/dragzoom.js
**/

function DragZoomControl(opts_boxStyle, opts_other, opts_callbacks) {
 // Holds all information needed globally
 // Not all globals are initialized here
 this.globals = {
   draggingOn: false,
   cornerTopDiv: null,
   cornerRightDiv: null,
   cornerBottomDiv: null,
   cornerLeftDiv: null,
   mapPosition: null,
```

```
  outlineDiv: null,
  mapWidth: 0,
  mapHeight: 0,
  mapRatio: 0,
  startX: 0,
  startY: 0,
  borderCorrection: 0
};

//box style options
this.globals.style = {
  opacity: .2,
  fillColor: "#000",
  border: "2px solid blue"
};

var style = this.globals.style;
for (var s in opts_boxStyle) {
  style[s]=opts_boxStyle[s];
}

var borderStyleArray = style.border.split(' ');
style.outlineWidth = parseInt(borderStyleArray[0].replace(/\D/g,''));
style.outlineColor = borderStyleArray[2];
style.alphaIE = 'alpha(opacity=' + (style.opacity * 100) + ')';

// map context stack for back button
this.globals.backStack = [];

// Other options
this.globals.options={
  buttonHTML: 'zoom ...',
  buttonStartingStyle:
    {width: '52px', border: '1px solid black', padding: '2px'},
  buttonStyle: {background: '#FFF'},
  backButtonHTML: 'zoom back',
  backButtonStyle: {background: '#FFF', display: 'none'},
  buttonZoomingHTML: 'Drag a region on the map',
  buttonZoomingStyle: {background: '#FF0'},
  overlayRemoveTime: 6000,
  backButtonEnabled: false,
  stickyZoomEnabled: false,
  rightMouseZoomOutEnabled: false,
  minDragSize: 0
};

for (var s in opts_other) {
  this.globals.options[s] = opts_other[s]
}

// callbacks: buttonclick, dragstart, dragging, dragend, backbuttonclick
if (opts_callbacks == null) {
```

```
   opts_callbacks = {}
  }
  this.globals.callbacks = opts_callbacks;
};


DragZoomControl.prototype = new GControl();


/**
 * Methods
 */


/**
 * Method called to save the map context before the zoom.
 * Back Button functionality:
 * @param {text} text string for the back button
 */
DragZoomControl.prototype.saveMapContext = function(text) {
  if (this.globals.options.backButtonEnabled) {
    this.saveBackContext_(text,true);
    this.globals.backButtonDiv.style.display = 'block';
  }
};


/**
 * Method called to initiate a dragZoom as if the user had clicked the dragZoom button.
 */
DragZoomControl.prototype.initiateZoom = function() {this.buttonclick_()};


/**
 * Method called to initiate a dragZoom back operation as if the user had clicked the dragZoom back button.
 * Back Button functionality:
 */
DragZoomControl.prototype.initiateZoomBack = function() {if (this.globals.options.backButtonEnabled)
this.backbuttonclick_()};


/**
 * Creates a new button to control gzoom and appends to the button container div.
 * @param {DOM Node} buttonContainerDiv created in main .initialize code
 */
DragZoomControl.prototype.initButton_ = function(buttonContainerDiv) {
  var G = this.globals;
  var buttonDiv = document.createElement('div');
  buttonDiv.innerHTML = G.options.buttonHTML;
  DragZoomUtil.style([buttonDiv], {cursor: 'pointer', zIndex:200});
  DragZoomUtil.style([buttonDiv], G.options.buttonStartingStyle);
  DragZoomUtil.style([buttonDiv], G.options.buttonStyle);
  buttonContainerDiv.appendChild(buttonDiv);
  return buttonDiv;
};


/**
 * Creates a second new button to control backup zoom and appends to the button container div.
```

```
 * @param {DOM Node} buttonContainerDiv created in main .initialize code
 */
DragZoomControl.prototype.initBackButton_ = function(buttonContainerDiv) {
 var G = this.globals;
 var backButtonDiv = document.createElement('div');
 backButtonDiv.innerHTML = G.options.backButtonHTML;
 DragZoomUtil.style([backButtonDiv], {cursor: 'pointer', zIndex:200});
 DragZoomUtil.style([backButtonDiv], G.options.buttonStartingStyle);
 DragZoomUtil.style([backButtonDiv], G.options.backButtonStyle);
 buttonContainerDiv.appendChild(backButtonDiv);
 return backButtonDiv;
};

/**
 * Sets button mode to zooming or otherwise, changes CSS & HTML.
 * @param {String} mode Either "zooming" or not.
 */
DragZoomControl.prototype.setButtonMode_ = function(mode){
 var G = this.globals;
 if (mode == 'zooming') {
  G.buttonDiv.innerHTML = G.options.buttonZoomingHTML;
  DragZoomUtil.style([G.buttonDiv], G.options.buttonStartingStyle);
  DragZoomUtil.style([G.buttonDiv], G.options.buttonZoomingStyle);
 } else {
  G.buttonDiv.innerHTML = G.options.buttonHTML;
  DragZoomUtil.style([G.buttonDiv], G.options.buttonStartingStyle);
  DragZoomUtil.style([G.buttonDiv], G.options.buttonStyle);
 }
};

/**
 * Is called by GMap2's addOverlay method. Creates the zoom control
 * divs and appends to the map div.
 * @param {GMap2} map The map that has had this DragZoomControl added to it.
 * @return {DOM Object} Div that holds the gzoomcontrol button
 */
DragZoomControl.prototype.initialize = function(map) {
 var G = this.globals;
 var me = this;
 var mapDiv = map.getContainer();

 // Create div for both buttons
 var buttonContainerDiv = document.createElement("div");
 DragZoomUtil.style([buttonContainerDiv], {cursor: 'pointer', zIndex: 150});

 // create and init the zoom button
 //DOM:button
 var buttonDiv = this.initButton_(buttonContainerDiv);

 // create and init the back button
 //DOM:button
 var backButtonDiv = this.initBackButton_(buttonContainerDiv);
```

```
// Add the two buttons to the map
mapDiv.appendChild(buttonContainerDiv);

//DOM:map covers
var zoomDiv = document.createElement("div");
var DIVS_TO_CREATE = ['outlineDiv', 'cornerTopDiv', 'cornerLeftDiv', 'cornerRightDiv', 'cornerBottomDiv'];
for (var i=0; i<DIVS_TO_CREATE.length; i++) {
  var id = DIVS_TO_CREATE[i];
  var div = document.createElement("div");
  DragZoomUtil.style([div], {position: 'absolute', display: 'none'});
  zoomDiv.appendChild(div);
  G[id] = div;
}
DragZoomUtil.style([zoomDiv], {position: 'absolute', display: 'none', overflow: 'hidden', cursor: 'crosshair', zIndex:
101});
mapDiv.appendChild(zoomDiv);

// add event listeners
GEvent.addDomListener(buttonDiv, 'click', function(e) {
  me.buttonclick_(e);
});
GEvent.addDomListener(backButtonDiv, 'click', function(e) {
  me.backbuttonclick_(e);
});
GEvent.addDomListener(zoomDiv, 'mousedown', function(e) {
  me.coverMousedown_(e);
});
GEvent.addDomListener(document, 'mousemove', function(e) {
  me.drag_(e);
});
GEvent.addDomListener(document, 'mouseup', function(e) {
  me.mouseup_(e);
});

// get globals
G.mapPosition = DragZoomUtil.getElementPosition(mapDiv);
G.buttonDiv = buttonDiv;
G.backButtonDiv = backButtonDiv;
G.mapCover = zoomDiv;
G.map = map;

G.borderCorrection = G.style.outlineWidth * 2;
this.setDimensions_();

//styles
this.initStyles_();

// disable text selection on map cover
G.mapCover.onselectstart = function() {return false};

return buttonContainerDiv;
```

```
};

/**
 * Required by GMaps API for controls.
 * @return {GControlPosition} Default location for control
 */
DragZoomControl.prototype.getDefaultPosition = function() {
  return new GControlPosition(G_ANCHOR_TOP_LEFT, new GSize(3, 120));
};

/**
 * Function called when mousedown event is captured.
 * @param {Object} e
 */
DragZoomControl.prototype.coverMousedown_ = function(e){
 var G = this.globals;
 var pos = this.getRelPos_(e);
 G.startX = pos.left;
 G.startY = pos.top;

 if (e.which) {
   var rightMouse = (e.which != 1);
 } else if (e.button) {
   var rightMouse = (e.button != 1);
 }
 G.draggingRightMouse = rightMouse;

 DragZoomUtil.style([G.mapCover], {background: 'transparent', opacity: 1, filter: 'alpha(opacity=100)'});
 DragZoomUtil.style([G.outlineDiv], {left: G.startX + 'px', top: G.startY + 'px', display: 'block', width: '1px', height:
'1px'});
 G.draggingOn = true;

 G.cornerTopDiv.style.top = (G.startY - G.mapHeight) + 'px';
 G.cornerTopDiv.style.display ='block';
 G.cornerLeftDiv.style.left = (G.startX - G.mapWidth) +'px';
 G.cornerLeftDiv.style.top = G.startY + 'px';
 G.cornerLeftDiv.style.display = 'block';

 G.cornerRightDiv.style.left = G.startX + 'px';
 G.cornerRightDiv.style.top = G.startY + 'px';
 G.cornerRightDiv.style.display = 'block';
 G.cornerBottomDiv.style.left = G.startX + 'px';
 G.cornerBottomDiv.style.top = G.startY + 'px';
 G.cornerBottomDiv.style.width = '0px';
 G.cornerBottomDiv.style.display = 'block';

 // invoke the callback if provided
 if (G.callbacks.dragstart != null) {
   G.callbacks.dragstart(G.startX, G.startY);
 }

 return false;
```

```
};

/**
 * Function called when drag event is captured
 * @param {Object} e
 */
DragZoomControl.prototype.drag_ = function(e){
 var G = this.globals;
 if(G.draggingOn) {
  var pos = this.getRelPos_(e);
  var rect = this.getRectangle_(G.startX, G.startY, pos, G.mapRatio);

  if (rect.left) {
    addX = -rect.width;
  } else {
    addX = 0;
  }

  if (rect.top) {
    addY = -rect.height;
  } else {
    addY = 0;
  }

  DragZoomUtil.style([G.outlineDiv], {left: G.startX + addX + 'px', top: G.startY + addY + 'px', display: 'block', width:
'1px', height: '1px'});

  G.outlineDiv.style.width = rect.width + "px";
  G.outlineDiv.style.height = rect.height + "px";

  G.cornerTopDiv.style.height = ((G.startY + addY) - (G.startY - G.mapHeight)) + 'px';
  G.cornerLeftDiv.style.top = (G.startY + addY) + 'px';
  G.cornerLeftDiv.style.width = ((G.startX + addX) - (G.startX - G.mapWidth)) + 'px';
  G.cornerRightDiv.style.top = G.cornerLeftDiv.style.top;
  G.cornerRightDiv.style.left = (G.startX + addX + rect.width + G.borderCorrection) + 'px';
  G.cornerBottomDiv.style.top = (G.startY + addY + rect.height + G.borderCorrection) + 'px';
  G.cornerBottomDiv.style.left = (G.startX - G.mapWidth + ((G.startX + addX) - (G.startX - G.mapWidth))) + 'px';
  G.cornerBottomDiv.style.width = (rect.width + G.borderCorrection) + 'px';

  // invoke callback if provided
  if (G.callbacks.dragging != null) {
    G.callbacks.dragging(G.startX, G.startY, rect.endX, rect.endY)
  }

  return false;
 }
};

/**
 * Function called when mouseup event is captured
 * @param {Event} e
 */
```

```
DragZoomControl.prototype.mouseup_ = function(e){
 var G = this.globals;
 if (G.draggingOn) {
  var pos = this.getRelPos_(e);
  G.draggingOn = false;

  var rect = this.getRectangle_(G.startX, G.startY, pos, G.mapRatio);

  if (rect.left) rect.endX = rect.startX - rect.width;
  if (rect.top) rect.endY = rect.startY - rect.height;

  this.resetDragZoom_();

  if (rect.width >= G.options.minDragSize && rect.height >= G.options.minDragSize) {
   var nwpx = new GPoint(rect.startX, rect.startY);
   var nepx = new GPoint(rect.endX, rect.startY);
   var sepx = new GPoint(rect.endX, rect.endY);
   var swpx = new GPoint(rect.startX, rect.endY);
   var nw = G.map.fromContainerPixelToLatLng(nwpx);
   var ne = G.map.fromContainerPixelToLatLng(nepx);
   var se = G.map.fromContainerPixelToLatLng(sepx);
   var sw = G.map.fromContainerPixelToLatLng(swpx);

   var zoomAreaPoly = new GPolyline([nw, ne, se, sw, nw], G.style.outlineColor, G.style.outlineWidth + 1,.4);

   try{
    G.map.addOverlay(zoomAreaPoly);
    setTimeout (function() {G.map.removeOverlay(zoomAreaPoly)}, G.options.overlayRemoveTime);
   }catch(e) {}

   var polyBounds = zoomAreaPoly.getBounds();
   var ne = polyBounds.getNorthEast();
   var sw = polyBounds.getSouthWest();
   var se = new GLatLng(sw.lat(), ne.lng());
   var nw = new GLatLng(ne.lat(), sw.lng());
   if (G.options.rightMouseZoomOutEnabled && G.draggingRightMouse) {
    var mapSpan = G.map.getBounds().toSpan();
    var polySpan = polyBounds.toSpan();
    var dSize = Math.max(mapSpan.lat()/polySpan.lat(), mapSpan.lng()/polySpan.lng());
    var zoomLevel = G.map.getZoom() - Math.ceil(Math.log(dSize, 2));
   } else {
    var zoomLevel = G.map.getBoundsZoomLevel(polyBounds);
   }
   var center = polyBounds.getCenter();
   G.map.setCenter(center, zoomLevel);

   // invoke callback if provided
   if (G.callbacks.dragend != null) {
    G.callbacks.dragend(nw, ne, se, sw, nwpx, nepx, sepx, swpx);
   }
  }
```

```
      //re-init if sticky
    if (G.options.stickyZoomEnabled) {
      //GLog.write("stickyZoomEnabled, re-initting");
      this.initCover_();
      if (G.options.backButtonEnabled) this.saveBackContext_(G.options.backButtonHTML,false); // save the map
context for back button
      G.backButtonDiv.style.display='none';
    }
  }
};


/**
 * Set the cover sizes according to the size of the map
 */
DragZoomControl.prototype.setDimensions_ = function() {
  var G = this.globals;
  var mapSize = G.map.getSize();
  G.mapWidth  = mapSize.width;
  G.mapHeight = mapSize.height;
  G.mapRatio  = G.mapHeight / G.mapWidth;
  // set left:0px in next <div>s in case we inherit text-align:center from map <div> in IE.
  DragZoomUtil.style([G.mapCover, G.cornerTopDiv, G.cornerRightDiv, G.cornerBottomDiv, G.cornerLeftDiv],
      {top: '0px', left: '0px', width: G.mapWidth + 'px', height: G.mapHeight +'px'});
};


/**
 * Initializes styles based on global parameters
 */
DragZoomControl.prototype.initStyles_ = function(){
  var G = this.globals;
  DragZoomUtil.style([G.mapCover, G.cornerTopDiv, G.cornerRightDiv, G.cornerBottomDiv, G.cornerLeftDiv],
    {filter: G.style.alphaIE, opacity: G.style.opacity, background:G.style.fillColor});
  G.outlineDiv.style.border = G.style.border;
};


/**
 * Function called when the zoom button's click event is captured.
 */
DragZoomControl.prototype.buttonclick_ = function(){
  var G = this.globals;
  G.backButtonDiv.style.display='none';
  if (G.mapCover.style.display == 'block') { // reset if clicked before dragging
    this.resetDragZoom_();
    if (G.options.backButtonEnabled) {
      this.restoreBackContext_();  // pop the backStack on a button reset
      if (G.backStack.length==0) G.backButtonDiv.style.display='none';
    }
  } else {
    this.initCover_();
    if ( G.options.backButtonEnabled ) this.saveBackContext_(G.options.backButtonHTML,false); // save the map
context for back button
  }
```

```
};

/**
 * Back Button functionality:
 * Function called when the back button's click event is captured.
 * calls the function to set the map context back to where it was before the zoom.
 */
DragZoomControl.prototype.backbuttonclick_ = function(){
 var G = this.globals;
 if (G.options.backButtonEnabled && G.backStack.length > 0) {
  this.restoreBackContext_();
   // invoke the callback if provided
   if (G.callbacks['backbuttonclick'] != null) {
    G.callbacks.backbuttonclick(G.methodCall);
   }
 }
};

/**
 * Back Button functionality:
 * Saves the map context and pushes it on the backStack for later use by the back button
 */
DragZoomControl.prototype.saveBackContext_ = function(text,methodCall) {
 var G = this.globals;
 var backFrame = {};
 backFrame["center"] = G.map.getCenter();
 backFrame["zoom"] = G.map.getZoom();
 backFrame["maptype"] = G.map.getCurrentMapType();
 backFrame["text"] = G.backButtonDiv.innerHTML; // this saves the previous button text
 backFrame["methodCall"] = methodCall; //This determines if it was an internal or method call
 G.backStack.push(backFrame);
 G.backButtonDiv.innerHTML = text;
 // Back Button is turned on in resetDragZoom_()
};

/**
 * Back Button functionality:
 * Pops the previous map context off of the backStack and restores the map to that context
 */
DragZoomControl.prototype.restoreBackContext_ = function() {
 var G = this.globals;
 var backFrame = G.backStack.pop();
 G.map.setCenter(backFrame["center"],backFrame["zoom"],backFrame["maptype"]);
 G.backButtonDiv.innerHTML = backFrame["text"];
 G.methodCall = backFrame["methodCall"];
 if (G.backStack.length==0) G.backButtonDiv.style.display = 'none'; // if we're at the top of the stack, hide the back
botton
};

/**
 * Shows the cover over the map
 */
```

```
DragZoomControl.prototype.initCover_ = function(){
 var G = this.globals;
 G.mapPosition = DragZoomUtil.getElementPosition(G.map.getContainer());
 this.setDimensions_();
 this.setButtonMode_('zooming');
 DragZoomUtil.style([G.mapCover], {display: 'block', background: G.style.fillColor});
 DragZoomUtil.style([G.outlineDiv], {width: '0px', height: '0px'});

 //invoke callback if provided
 if(G.callbacks['buttonclick'] != null){
   G.callbacks.buttonclick();
 }
};

/**
 * Gets position of the mouse relative to the map
 * @param {Object} e
 */
DragZoomControl.prototype.getRelPos_ = function(e) {
 var pos = DragZoomUtil.getMousePosition(e);
 var G = this.globals;
 return {top: (pos.top - G.mapPosition.top),
      left: (pos.left - G.mapPosition.left)};
};

/**
 * Figures out the rectangle the user's trying to draw
 * @param {Number} startX
 * @param {Number} startY
 * @param {Object} pos
 * @param {Number} ratio
 * @return {Object} Describes the rectangle
 */
DragZoomControl.prototype.getRectangle_ = function(startX, startY, pos, ratio){
 var left = false;
 var top = false;
 var dX = pos.left - startX;
 var dY = pos.top - startY;
 if (dX < 0) {
   dX = dX * -1;
   left = true;
 }
 if (dY < 0) {
   dY = dY * -1;
   top = true;
 }
 delta = dX > dY ? dX : dY;

 return {
   startX: startX,
   startY: startY,
   endX: startX + delta,
```

```
    endY: startY + parseInt(delta * ratio),
    width: delta,
    height: parseInt(delta * ratio),
    left:left,
    top:top
  }
};

/**
 * Resets CSS and button display when drag zoom done
 */
DragZoomControl.prototype.resetDragZoom_ = function() {
 var G = this.globals;
 DragZoomUtil.style([G.mapCover, G.cornerTopDiv, G.cornerRightDiv, G.cornerBottomDiv, G.cornerLeftDiv],
   {display: 'none', opacity: G.style.opacity, filter: G.style.alphaIE});
 G.outlineDiv.style.display = 'none';
 this.setButtonMode_('normal');
 if (G.options.backButtonEnabled && (G.backStack.length > 0)) G.backButtonDiv.style.display = 'block'; // show
the back button
};

/* utility functions in DragZoomUtil.namespace */
var DragZoomUtil={};

/**
 * Alias function for getting element by id
 * @param {String} sId
 * @return {Object} DOM object with sId id
 */
DragZoomUtil.gE = function(sId) {
 return document.getElementById(sId);
};

/**
 * A general-purpose function to get the absolute position
 * of the mouse.
 * @param {Object} e  Mouse event
 * @return {Object} Describes position
 */
DragZoomUtil.getMousePosition = function(e) {
 var posX = 0;
 var posY = 0;
 if (!e) var e = window.event;
 if (e.pageX || e.pageY) {
  posX = e.pageX;
  posY = e.pageY;
 } else if (e.clientX || e.clientY){
  posX = e.clientX +
   (document.documentElement.scrollLeft ? document.documentElement.scrollLeft : document.body.scrollLeft);
  posY = e.clientY +
   (document.documentElement.scrollTop ? document.documentElement.scrollTop : document.body.scrollTop);
 }
```

```
  return {left: posX, top: posY};
 };


 /**
  * Gets position of element
  * @param {Object} element
  * @return {Object} Describes position
  */
 DragZoomUtil.getElementPosition = function(element) {
  var leftPos = element.offsetLeft;        // initialize var to store calculations
  var topPos = element.offsetTop;          // initialize var to store calculations
  var parElement = element.offsetParent;    // identify first offset parent element
  while (parElement != null ) {             // move up through element hierarchy
    leftPos += parElement.offsetLeft;      // appending left offset of each parent
    topPos += parElement.offsetTop;
    parElement = parElement.offsetParent;  // until no more offset parents exist
  }
  return {left: leftPos, top: topPos};
 };


 /**
  * Applies styles to DOM objects
  * @param {String/Object} elements Either comma-delimited list of ids
  *   or an array of DOM objects
  * @param {Object} styles Hash of styles to be applied
  */
 DragZoomUtil.style = function(elements, styles){
  if (typeof(elements) == 'string') {
    elements = DragZoomUtil.getManyElements(elements);
  }
  for (var i = 0; i < elements.length; i++){
    for (var s in styles) {
      elements[i].style[s] = styles[s];
    }
  }
 };
 /**
  * Gets DOM elements array according to list of IDs
  * @param {String} elementsString Comma-delimited list of IDs
  * @return {Array} Array of DOM elements corresponding to s
  */
 DragZoomUtil.getManyElements = function(idsString){
  var idsArray = idsString.split(',');
  var elements = [];
  for (var i = 0; i < idsArray.length; i++){
    elements[elements.length] = DragZoomUtil.gE(idsArray[i])
  };
  return elements;
 };
```

## ModStatusControl.js

```
/*
ModStatusControl (Original is MStatus by Marcelo Montagana)

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or unexpected things might happen to your control :-)


------------------------------------------------------------
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------------------------------------------------------------


Note: This script contains code to prevent hotlinking. (marked with 'REMOVE')
You need to remove it when saving the file to your server.



Usage:
        map.addControl(new MStatusControl());
        map.addControl(new MStatusControl(options?));
        map.addControl(new MStatusControl({DMS:true}));

MStatusControl options:
        DMS: Boolean - Default: false - Show Degrees, Minutes, Seconds
        Position: GControlPosition()
        vertical: Boolean - Default: false - Make the control taller and more narrow
        background: HTML color - Default: '#eeeeee';
        foreground: HTML color - Default: '#000000';
*/
// Modified by: Felimon Gayanilo (University of Miami, 2009)
// WARNING! Do not distribute this version. Always refer to original copy.

//////////////////////////////////////////////////////////////////////////


function MStatusControl(MOptions) {
        MOptions = MOptions ? MOptions : {};
        this.DMS = MOptions.DMS ? MOptions.DMS : false;
        this.background = MOptions.background ? MOptions.background : '#eeeeee';
        this.foreground = MOptions.foreground ? MOptions.foreground : '#000000';
        this.vertical = MOptions.vertical ? MOptions.vertical : false;
        this.position = MOptions.position ? MOptions.position : new
GControlPosition(G_ANCHOR_BOTTOM_LEFT, new GSize(0, 45));
```

```
                this.parent = MOptions.container ? MOptions.container : null;

}

MStatusControl.prototype = new GControl(true,true);

MStatusControl.prototype.initialize = function(map) {

        var globalThis_3456 = this;
        this.map = map;
        this.projection = this.map.getCurrentMapType().getProjection();

        this.container = document.createElement('div');

        if (!this.vertical) {
                var w = this.map.getContainer().clientWidth - 2;
                this.container.style.width = w + 'px';
        }

        this.container.style.backgroundColor = this.background;
        this.container.style.border = '1px solid gray';

        var innerDiv = document.createElement('div');
        this.container.appendChild(innerDiv);

        //var crDiv = document.createElement('div');
        //this.container.appendChild(crDiv);
        //crDiv.innerHTML = 'Marcelo Montagna&copy;2008 - <a style="color: #aaaaaa;"
href="http://maps.forum.nu" target="_blank">http://maps.forum.nu</a>';
        //crDiv.style.padding = '2px';
        //crDiv.style.marginTop = '2px';
        //crDiv.style.textAlign = 'right';
        //crDiv.style.color =  '#aaaaaa';
        //crDiv.style.backgroundColor =  '#eeeeee';
        //crDiv.style.font = 'normal 10px verdana';


        var oTable = document.createElement('table');

        oTable.setAttribute('cellSpacing','0');
        oTable.setAttribute('cellPadding','0');
        oTable.setAttribute('border','0');
        if (!this.vertical) {
                oTable.style.width = '100%';
        }

        innerDiv.appendChild(oTable);


        var oTableBody = document.createElement('tbody');
        oTable.appendChild(oTableBody);
```

```
if (this.vertical) {
//-----------------------
            var oRow = document.createElement('tr');
            oTableBody.appendChild(oRow);

            this.centerDisplay = document.createElement('td');
            this.setStyleValue(this.centerDisplay);
//            this.centerDisplay.style.width = iWidth + 'px';

            oRow.appendChild(this.centerDisplay);

    //-----------------------

            var oRow = document.createElement('tr');
            oTableBody.appendChild(oRow);

            this.zDisplay = document.createElement('td');
            this.setStyleValue(this.zDisplay);
            oRow.appendChild(this.zDisplay);

    //-----------------------

            var oRow = document.createElement('tr');
            oTableBody.appendChild(oRow);

            this.swDisplay = document.createElement('td');
            this.setStyleValue(this.swDisplay);
            oRow.appendChild(this.swDisplay);

    //-----------------------

            var oRow = document.createElement('tr');
            oTableBody.appendChild(oRow);

            this.neDisplay = document.createElement('td');
            this.setStyleValue(this.neDisplay);
            oRow.appendChild(this.neDisplay);

    //-----------------------

            var oRow = document.createElement('tr');
            oTableBody.appendChild(oRow);

            this.mouseDisplay = document.createElement('td');
            this.setStyleValue(this.mouseDisplay);
//            this.mouseDisplay.style.width = iWidth + 'px';
            oRow.appendChild(this.mouseDisplay);

    //-----------------------
```

```
            var oRow = document.createElement('tr');
            oTableBody.appendChild(oRow);

            this.mousePxDisplay = document.createElement('td');
            this.setStyleValue(this.mousePxDisplay);
            oRow.appendChild(this.mousePxDisplay);

    //-----------------------

            var oRow = document.createElement('tr');
            oTableBody.appendChild(oRow);

            this.mouseTileDisplay = document.createElement('td');
            this.setStyleValue(this.mouseTileDisplay);
            oRow.appendChild(this.mouseTileDisplay);
    //-----------------------

            var oRow = document.createElement('tr');
            oTableBody.appendChild(oRow);

            this.clickDisplay = document.createElement('td');
            this.setStyleValue(this.clickDisplay);
            oRow.appendChild(this.clickDisplay);
    //-----------------------



    }
    else {
    //-----------------------
            var oRow = document.createElement('tr');
            oTableBody.appendChild(oRow);

            this.centerDisplay = document.createElement('td');
            this.setStyleValue(this.centerDisplay);
//          this.centerDisplay.style.width = iWidth + 'px';
            oRow.appendChild(this.centerDisplay);

            this.mouseDisplay = document.createElement('td');
            this.setStyleValue(this.mouseDisplay);
//          this.mouseDisplay.style.width = iWidth + 'px';
            oRow.appendChild(this.mouseDisplay);

    //-----------------------

            var oRow = document.createElement('tr');
            oTableBody.appendChild(oRow);

            this.swDisplay = document.createElement('td');
            this.setStyleValue(this.swDisplay);
            oRow.appendChild(this.swDisplay);
```

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```
        this.mousePxDisplay = document.createElement('td');
        this.setStyleValue(this.mousePxDisplay);
        oRow.appendChild(this.mousePxDisplay);
//------------------------

        var oRow = document.createElement('tr');
        oTableBody.appendChild(oRow);

        this.neDisplay = document.createElement('td');
        this.setStyleValue(this.neDisplay);
        oRow.appendChild(this.neDisplay);

        this.mouseTileDisplay = document.createElement('td');
        this.setStyleValue(this.mouseTileDisplay);
        oRow.appendChild(this.mouseTileDisplay);
//------------------------

        var oRow = document.createElement('tr');
        oTableBody.appendChild(oRow);

        this.zDisplay = document.createElement('td');
        this.setStyleValue(this.zDisplay);
        oRow.appendChild(this.zDisplay);

        this.clickDisplay = document.createElement('td');
        this.setStyleValue(this.clickDisplay);
        oRow.appendChild(this.clickDisplay);
//------------------------

}


//this.mouseDisplay.innerHTML = 'Mouse LatLon: '
this.centerDisplay.innerHTML = 'Mouse LatLon: '
//this.mousePxDisplay.innerHTML = 'Mouse Px: '
//this.mouseTileDisplay.innerHTML = 'Mouse Tile: '
//this.clickDisplay.innerHTML = 'Mouse Click: '
this.mouseDisplay.innerHTML = 'Mouse Click: '



if (this.parent) {
        this.parent.appendChild(container);
}
else {
        this.map.getContainer().appendChild(this.container);
}

GEvent.addListener(this.map, "click", function(ol,pt){globalThis_3456.MMapClick(pt)});
GEvent.addListener(this.map, "moveend", function(){globalThis_3456.MMoveEnd()});
GEvent.addListener(this.map, "zoomend", function(){globalThis_3456.MZoomEnd()});
```

```
        GEvent.addListener(this.map, "mousemove", function(pt){globalThis_3456.MMouseMove(pt)});


this.MMapClick = function (pt) {
        var point = pt ? pt : null;
        if (point) {
                if (this.DMS) {
                        //this.clickDisplay.innerHTML = 'Mouse Click:  ' +
this.degToDms(point.lat()) + ', ' + this.degToDms(point.lng());
                        this.mouseDisplay.innerHTML = 'Mouse Click:  ' +
this.degToDms(point.lat()) + ', ' + this.degToDms(point.lng());
                }
                else {
                        //this.clickDisplay.innerHTML = 'Mouse Click:  ' +
point.lat().toFixed(6) + ', ' + point.lng().toFixed(6);
                        this.mouseDisplay.innerHTML = 'Mouse Click:  ' +
point.lat().toFixed(6) + ', ' + point.lng().toFixed(6);
                }
        }

}

this.MMoveEnd = function() {
        this.MUpdateStatus();
}
this.MZoomEnd = function() {
        this.MUpdateStatus();
}


this.MMouseMove = function(mousePt) {
        var zoom = this.map.getZoom();
        var mousePx = this.projection.fromLatLngToPixel(mousePt, zoom);

        if (this.DMS) {
                //this.mouseDisplay.innerHTML = 'Mouse LatLon: ' + this.degToDms(mousePt.lat())
+ ', ' + this.degToDms(mousePt.lng());
                this.centerDisplay.innerHTML = 'Mouse LatLon: ' + this.degToDms(mousePt.lat()) +
', ' + this.degToDms(mousePt.lng());
        }
        else {
                //this.mouseDisplay.innerHTML = 'Mouse LatLon: ' + mousePt.lat().toFixed(6) +
', ' + mousePt.lng().toFixed(6);
                this.centerDisplay.innerHTML = 'Mouse LatLon: ' + mousePt.lat().toFixed(6) +
', ' + mousePt.lng().toFixed(6);
        }
        //this.mousePxDisplay.innerHTML = 'Mouse Px:     ' + mousePx.x +
', ' + mousePx.y;
        //this.mouseTileDisplay.innerHTML = 'Mouse Tile:   ' + Math.floor(mousePx.x /
256) + ', ' + Math.floor(mousePx.y / 256);
}
```

```
this.MUpdateStatus = function() {
        var center = this.map.getCenter();
        var zoom = this.map.getZoom();

        var bounds = this.map.getBounds();
        var SW = bounds.getSouthWest();
        var NE = bounds.getNorthEast();

        if (this.DMS) {
                //this.centerDisplay.innerHTML = 'Map Center:   ' +
this.degToDms(center.lat()) + ', ' + this.degToDms(center.lng());
                //this.swDisplay.innerHTML = 'Map SW:      '
+ this.degToDms(SW.lat()) + ', ' + this.degToDms(SW.lng());
                //this.neDisplay.innerHTML = 'Map NE:      '
+ this.degToDms(NE.lat()) + ', ' + this.degToDms(NE.lng());
                //this.zDisplay.innerHTML = 'Map Zoom:     ' + zoom;
        }
        else {
                //this.centerDisplay.innerHTML = 'Map Center: ' + center.lat().toFixed(6) + ', '
+ center.lng().toFixed(6);
                //this.swDisplay.innerHTML = 'Map SW:     ' +
SW.lat().toFixed(6) + ', ' + SW.lng().toFixed(6);
                //this.neDisplay.innerHTML = 'Map NE:     ' +
NE.lat().toFixed(6) + ', ' + NE.lng().toFixed(6);
                //this.zDisplay.innerHTML = 'Map Zoom:   ' + zoom;
        }
}

        this.MUpdateStatus();

        return this.container;
}



MStatusControl.prototype.degToDms = function(dec) {

        var deg = Math.floor(Math.abs(dec));
        var min = Math.floor((Math.abs(dec)-deg)*60);
        var sec = (Math.round((((Math.abs(dec) - deg) - (min/60)) * 60 * 60) * 100) / 100 ) ;

        var len = String(deg).length
        deg = Array(3 + 1 - len).join('0') + deg;
        var len = String(min).length
        min = Array(2 + 1 - len).join('0') + min;
        var len = String(sec).length
        sec = Array(5 + 1 - len).join('0') + sec;

        deg = dec < 0 ? '-' + deg : deg;
```

```
        var dms  = deg + '&deg ' + min + '\' ' + sec + '"';
        return dms;
}


MStatusControl.prototype.getDefaultPosition = function() {
        return this.position;
}


//////////////////////////////


MStatusControl.prototype.setStyleValue = function(obj) {
        obj.style.padding = '0px';
        obj.style.paddingRight = '2px';
        obj.style.paddingLeft = '2px';
        obj.style.textAlign = 'left';
        obj.style.color = this.foreground;
        obj.style.backgroundColor = this.background;
        obj.style.font = 'normal 12px courier new';
        obj.style.lineHeight = '14px'
        obj.setAttribute('noWrap','true');
        if (!this.vertical) {
                obj.style.width = '50%'
        }
}

MStatusControl.prototype.show = function () {
        this.container.style.display = '';
}

MStatusControl.prototype.hide = function () {
        this.container.style.display = 'none';
}

MStatusControl.prototype.toggle = function () {
        this.container.style.display = this.container.style.display == '' ? 'none' : '';
}

//////////// END MStatusControl /////////////////
```
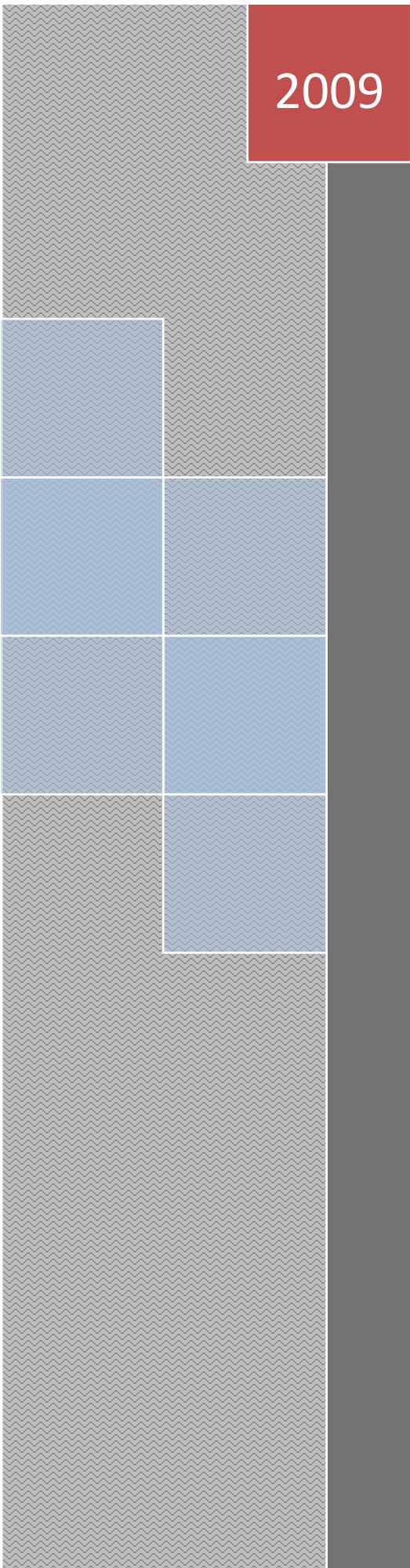
2009