



MapLocator

0.1

User Guide

Prepared by

GS Lab

Great Software Laboratory Pvt. Ltd.
7th and 8th Floor, Amar Arma Genesis
Opp. Sapphire Chambers, Baner Road
Baner, Pune - 411 045
W: +91 20 4671 1000 / 4671 1100
Fax: +91 20 4671 1234
eFax: +1 425 963 4570
<http://www.gslab.com>

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1 Introduction

This map-based portal allows users to navigate and zoom into an area of interest, visualize layers that are available on the site, locate, and mark areas and upload annotations, pictures and comments to a feature in the layer. All data on the portal can be viewed and visualized freely by all. However, contributing data, adding and annotating features, and adding comments are controlled by a system of roles and associated privileges.

2 List of features

1. Base Map

The base map provides the background visualization for the maps. These base map images are fetched from Google maps directly by the client browser based on the view port. You can choose from Google Physical, Google Satellite, Google Hybrid, and Google Streets, from the drop-down menu. On slow networks, fetching the Google images as tiles from the client could take some time.

2. Explore - Layer Selector

The portal consists of layers or maps organized by Themes and Geography. Themes show a collection of the maps into different groups that are relevant to biodiversity and conservation. Geography shows maps organized into an India level maps, and maps of specific locales. The layer tree on the left shows all the maps currently available on the portal. Click on a category to expand the tree and show a list of maps available in each category. Click on the check-box next to the map to display the map. The currently displayed map will be in bold and will show the top-most active map on the portal. The title of active map will also be displayed on the map above the map navigation toolbar. Features on this map are clickable. You can display multiple maps on the base map. All maps other than the active map displayed will be faded but will be visible on the map.

3. Search

User can search for content that is available on the portal. The portal provides two categories for search.

3.1. Simple Search : It is a simple string based search similar to "Google search" use to find the relevant content on the site which can be displayed on the map

3.2. Advanced Search: There are following options under this category

3.2.1. Geography Search: User can search for content around the location using these options:

3.2.1.1. Bounding Box Search: Users can search over particular location by marking an area on the map and search for the content inside the area.

3.2.1.2. Feature Based Search: Users can search over particular location by selecting displayed features (point, line, polygon) on the map and search for other overlapping features

3.2.2. Attribute based search: Expert users can use this option to search using an attribute in a layer, condition and some value in the text box to create a conditional query. e.g. (List of locations where rainfall > 200 mm in the rainfall layer)

4. Measure Tool

With this tool users can measure distance and area by marking points on the map.

Various measurement units supported are –

- For distance: km, yards, and miles
- For area: km², miles², Acres, Hectares

5. MAP Link

Many a times user lands up in a situation where he/she has loaded some layers and have zoomed to a particular location on the map, now the user wants to share this exact map with his/her friends without requiring the friends to manually load the map, layers and zoom. By using this tool a user can simply copy-paste the URL, which preserves the current state of the map, and share it with his/her friends.

6. Layer Ordering

The layer ordering window shows all the maps currently displayed. The top-most map in the window is the active layer. The active layer will also be shown in bold in the tree and is displayed on the map panel, above the map navigation icons. Note that only the top-most layer is clickable. The features of the active layer are also prominently displayed on the map, while all other layers are visible, but faded from view. The interface allows you to reorder the layers and change the active layer. To make any other map in the UI the active layer, click on the layer and drag it to the top of the list. Now this will be the active layer. It will be seen in bold in the layer tree, the name will be displayed on top of the map panel icons, the features in the map will be displayed brighter than the features of all other layers, and the features will be clickable. The layer ordering UI also has an information icon that will launch the map information pop-up. If layers are participatory, it shows a participatory icon. And you can close a layer and remove a map from the map view

7. Contribute

This feature allows a user to make a contribution by adding a point/line/polygon to an existing layer. A user must login to make any contribution, after logging in the UI shows a drop down which allows the user to select a layer from list of available layers (participative). Once user selects a layer a pop window with guidelines and action to be taken is shown

8. More -Legend

The legend tab is accessed by clicking on the tab in the right panel. This will bring out the legend tab. The legend is currently available only for polygon layers. The legend shows the categories and the color code for each category.

9. More- Layer Data

In the more menu, click on the Layer Data button, this will bring up a table with all the data for the features on the active map visible in the layer frame. The table allows sorting, searching, and setting pagination. The layer data will show a maximum of 250 features in the table. If there are more than 250 features of the active layer on the map frame, zoom in to see the data of a lesser number of features. The layer data table is linked to the layer. Thus clicking on a row in the layer data table will bring the pop-up of the feature on the map.

10. More – View in Google Earth

This feature enables a user to view the current map location in Google earth view i.e. 3 dimensional view. The code uses a Google earth plug-in provided by Mapfish

11. More – Download

This feature enables a user to download the active layer in various formats like kml, gml, shape and plain text. In order to download a layer the layer has to be downloadable and user has to login into the portal. The user has to select an option for download format and on click on download button fetches a tar file which contains layer data file along with the readme/metadata file

12. More -Layer Info

The layer information pop-up can be accessed by clicking on the information icon near the layer name in the layer list or by clicking on the layer title on the map panel. The layer information pop-up lists all the data that is associated with the layer. It shows the attribution, the license if any, associated with the layer, the individuals who have worked on the data. Below the basic attribution and related data, it lists associated data with the layer. Click on the + to see the layer attributes. This panel shows the data that is associated directly with the layer.

For each feature of the layer, there could be additional data. For example, at a water body location there could be a list of bird sightings. These are organized as linked data to the layer. There could be one or more linked data. Click on the + to see details of linked data. For any column in the data, there could be some general information available. For example, if there is a species associated with the data, the species could have additional taxonomic, habitat, photo essay or any other information. This data does not concern the particular location, but is like a library resource on an item in the data. These are designated as resource tables. Click on the + to see the details available on the resource associated with map.

3 Frequently Asked Questions:

Function

1. How do I open and display a map?

Expand the layer tree and click on the check-box corresponding to a map. This map will be displayed in the map frame and will be the active layer.

2. Can I see multiple maps at a time?

Yes, you can. Click on multiple maps and these will be displayed in the map frame. However, only the top-most layer is the active layer and is clickable. The top-layer will be bright and the rest of the layers are faded.

3. How do I find details about a map?

Click on the name of the map on the link, or click on the title of the active map on top of the map tool bar to display information on the map. The pop-up shows a summary of the map, the layer attributes the link tables and the resource tables associated with the map. The details tab provides a description of the map, along with links and associated references.

4. How do I see the legend of a map?

Click on the More - legend tab on the top right panel of the map to see the legend. The legend corresponds to the top-most map displayed. Currently, the legend is available only for polygon layers.

5. Why is the map legend empty?

If no map is displayed, or the top-most map is a point layer, the legend tab will be empty.

6. How do I see details of a map?

You can see the details of a map and the list of associated data by looking at the layer information pages. These can be assessed by clicking on the name of the map on the layer tree, by clicking on the map name on top of the map panel, or from the layer named, by clicking on the information icon. This will launch a pop-up with information on the layer.

7. How can I enter data?

You need to be logged in to enter data into the portal. Only certain layers are participatory and editable. These layers will be shown with a participatory icon in the layer manager. If you have permissions in the layer, the map tool bar will have an add feature icons. You can pick the tool and add feature and attach annotations with it.

8. What are the images with (plus sign) I see on the map?

The points are virtual points which show that there are too many points in a small area and it is not possible to show all the points on the map frame at the current zoom level. You will have to zoom in to see the actual points and look at the data in the map. Clicking on a red point will show a pop-up telling you the number of points at this location and asking you to zoom in to see the points. Note that the details of virtual points will not be shown in the Layer Data.

9. What is Theme and Geography tabs?

Theme and Geography are two ways in which all the maps have categorized. Under themes, maps are grouped into the topics that they represent and under geography, all maps that pertain to an area are grouped together.

10. What is the Layer Ordering?

Click on the icon on the layer tree tool bar to bring up the layer ordering. The layer manager shows the maps currently on display. You can change the order of the layers in the layer manager, look at the information on a layer, identify participatory layers, and remove layers from view.

11. Clicking on a point in the map does not show me details on the feature?

Only the features of the active layer are clickable. You may be clicking on one of the inactive layers. The active layer is brighter in the map frame. To make a layer active, open the layer manager and move the layer to the top.

12. Only certain points seem clickable, why?

Only the features of the active layer are clickable. You may be clicking on one of the inactive layers. The active layer is brighter in the map frame. To make a layer active, open the layer manager and move the layer to the top.

13. What is an active map?

An active map is the top-most among various maps displayed on the screen. Most functionality is applicable only to the active map.

14. How do I know which map is active?

All the displayed maps are listed in the layer manager. Layer manager can be opened by clicking on the icon on the layer tree. The top-most among the list is the active map.

15. How do I make a map active?

In the layer manager, drag any map to top of the list to make it active.

Data

1. How are the maps organized on the site?

Maps are organized on the site by themes and by geographical locations, or geography. Use the tab to look at the maps by theme or by geography and select the maps that you would like displayed.

2. Can I see a list of all maps on this site?

All the maps available on the site are shown in the layer tree. Expand the tree to see all the maps available.

3. How do I find the source of a map?

If you want to know what is the source of the map, how the map was created, what is the attribution of a map, click on the map name in the tree. This will launch a pop-up giving details on the map and the data associated with the map.

4. How do I see data associated with a feature on a map?

Click on any feature of the active map. This will launch a pop-up showing the summary data associated with the feature. To see all the details associated with the layer, click on the details link on the pop-up. If there are linked tables associated with the map, these will be shown in a tab in the details pop-up.

5. How do I see data associated with a set of features?

Click on the Data on Demand tab at the bottom of the map panel. This will bring up a table with the data associated with a set of features displayed on a map. To locate a site on the map, click on any row of the table. This will show a pop-up on the map with the data associated with it.

6. Where did these maps come from?

These maps are generated and compiled from various sources and are provided for academic, review and information purposes only. The sources are specified in the attribution of every map.

7. How do I use these maps?

You can use these maps under the terms and conditions specified in the site and give proper attribution for the map.

Definitions

1. What is the meaning of Abiotic and biogeography?

Abiotic refers to soil, water and climate, the non-living factors that determine the ecology and biodiversity of a location. Biogeography refers to the division of the landmass into natural units, depending on the ensemble of living systems. These are in turn influenced by the abiotic factors

2. What is Attribution?

Attribution is the original citation of the source who own the intellectual property rights for the data. They need to be acknowledged if the data is used anywhere.

3. What is the difference between created by and attribution?

While attribution is the citation of original source, created by refers to the person who converted the data into a GIS format for the portal.

4. What are layer attributes?

Layer attributes are the data associated with each feature in the map.

5. What is linked data?

Linked data is data associated with each feature of the map. For example, if a map has vegetation samples plot locations and in each vegetation sample plot there were many species that were enumerated, the species enumerated will be represented as linked data.

6. What are resource tables?

For any column in the data, there could be some general information available. For example, if there is a species associated with the data, the species could have additional taxonomic, habitat, photo essay or any other information. This data does not concern the particular location, but is like a library resource on an item in the data. These are designated as resource tables. Click on the + to see the details available on the resource associated with the map.