HOW TO USE THE WEBGIS

Note: the guide was written by taking as main reference the official documentation by Lizmap, which is the web service used to publish QGIS project online
http://docs.3liz.com/en/user_guide.html

First point: link to the projects pages

As user you will be given with a link to the project online. The default lizmap page


offers a list maps organized by folder. In the example below the folder is called prototype and the project Marine Spatial Planning.
Access to the project information sheet is done by clicking on View metadata button.

Access to the map is done either by clicking the Load the map button or the image that accompanies the project.

**Second point: the map**

The following features are by default and on the right hand side of the screen:

- Pan
  
  ![Pan Icon]

- zoom by rectangle
  
  ![Rectangle Zooming Icon]
- zoom in

- zoom to the map extent

- zoom out

- scale display as a scale bar and numerically

To zoom in and out just click several times the icons.

To zoom on an area, you need to select the *zoom by rectangle* and draw a rectangle on the map defining the area to reach. To go back to the full extent of the map click on

The layer panel is on the left hand side of the screen. Here the layers can be switched on and off by clicking on the grey square to the left of the layer's name.
By clicking on the black arrow, the layer can be expanded to see the legend associated to it.

By clicking on the "i" of information

You get the essential metadata of the layer in a new window. To close the window click on the "x"
To take full advantage of the map, you can hide the layer by clicking on the icon showing several layers (in the red circle).

The icon showing “i” just above the icon for the layers panel gives general information on the project, such as the view metadata function that we mentioned earlier on.
By clicking on the road sign icon ▲ the geolocation tab is activated. Geolocation allows you to search for areas and zoom into it.

In the example below it is possible to search by Islands names within the Falkland archipelago by clicking on the drop down menu.
The permalink icon opens the online project at a specific scale and layers organisation.

Finally by clicking on the house it is possible to return to the first page with all the projects and folders.

**Third point: Authentication**

Access to certain webGIS maps can be restricted by the administrator because of their content. Thus once you get the link http://148.251.4.143/saeri_lm3beta3/lizmap/www/ to access the restricted maps, username and login are in place for authentication by clicking on the button *Connect.*
Username and login are provided by email by sending a request to saeridata@south-atlantic-research.org and specifying the project you want to have access to.

Once authentication is enabled, you will need to click on Projects

Then scroll until the repository called protected_areas
Load the map.

In the main page you can zoom in/out or by drawing a rectangle in the area of interest or by selecting the EEZ using the geolocation tool.

Switch on and off the layers by clicking on the grey box on the left side of each layer name. Zoom to the layer by using the tooltip icon

Get access to the attribute table by clicking on the interested feature
Get access to the metadata of the layer by clicking on the icon "i" (information)

You can have access to any documentation associated to the layer from the metadata by clicking on documentation
The map has got also a background layer which is the bathymetry clipped to the South Atlantic region. In order to add the base layer look at the section called base layer and in the drop down menu select GEBCO bathymetry.

More advance features can be implemented in a webGIS service but for the purpose of this map, which wants to inform protected areas officially recognised by the governments of the SA UKOTs this is all we need.
The map publisher can add some features depending on the desired user experience:

- selecting a basemap
- locate by layer
- distance, area and perimeter measurements
- printing the map
- editing data
Locate by layer

This feature is displayed by default if it has been activated by the map publisher.

It is located above the layer management panel and is in the form of lists. Some lists need to enter a few characters before proposing locations.
Simply select a location from the list to zoom to the item.

**Measurement**

Measurement feature give you the ability to calculate:

- a distance
an area
a perimeter

It is available in the Lizmap menu bar.

The tool is activated by selecting the measurement type. Once activated, a message tells you what to do.
The measurement is displayed in the status bar.
By double-clicking on the map, the measurement is fixed. To start over, you can click on the map and restart the measurement calculation.

In the feature bar, the button on the right allows to stop using it.
It is also possible to change the measurement functionality without having to stop the feature.

**Printing**

The print feature is available in the Lizmap menu bar. It depends on the number of print compositions published by the map publisher.
Once the feature activated, a print area with the form of the composition is displayed on the map. Use this area to define the area to be printed. You can move it.
On the left, above the panel layer management, you can select the scale of printing.
Depending on the configuration of the printing composition, you can have the possibility to enter your own text.
To begin building the print file, you can click on Print. You will get a PDF file with the layout defined by the map publisher.
Editing spatial data

The map publisher can allow users to edit certain data. It also has the ability to limit possible changes:

- adding spatial object
- geometric modification
- fields modification
- deleting spatial object
The feature is available in the Lizmap menu bar. The edit menu allows you to select the data you want to update.

Once the layer selected, the edit panel appears. This varies depending on the configuration desired by the map publisher. If any changes are available you have to choose between *Add* a new object or *Select* one.
If you have selected Add, you will be asked to draw a simple form that depends on the selected data layer:

- point
- line
- polygon

In the case of line and polygon, you need to click several times to draw the shape you want.
To finish your line or your polygon you must add the last point by double-clicking the desired location. Once drawing finished, an editing form for fields will be displayed.
If you want to restart drawing the geometry, you should click *Cancel*.

If the geometry is right for you and you have entered the required information, you can *Save*. The new object will be added. You will be able to update it by selecting it.

To select an object to update, you can click on the button *Select*.
Once the selection tool is activated, you must click on the map to identify the object you want to edit.
The list of editable objects below the location of the clicks will appear. You will be able to select exactly the object to modify.
The selected object appears on the map and its geometry may be changed immediately.
You can undo geometry changes using the “Undo” button.
To validate your geometry modifications or simply access the editing form for fields, you must click *Edit*. 
A dialog box containing the editing form for fields of the object appears.
The **Save** button saves the geometry and attributes changes.

If you want to remove the object you selected, you must click **Del**.

Finally, to disable editing tool, simply click on **Stop**.