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Progetto RED-CODE-Intereg IIIB CADSES



User and Administrator Manual

SW Red Code Fire Safety

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1. Presentation of software RedCode-Fire Safety

The software described in this manual, named **Red Code Fire Safety** (from now on Red Code for brevity) has been developed for government organizations which have the duty to plan and coordinate fire control measures for a predetermined territory. The following information is managed by the software:

- territory that needs to be safeguarded (ex. protected areas);
- resources available to carry out safeguarding activities (organizations, manpower and vehicles).

The system also tracks geographically the location of certain resources through an integrated GIS (Geographical Information System) system. The whole software has been developed in Java language, using open source libraries and components.

The use of the system (**client's side**) takes place in two ways:

- through the web to manage all information present in the data base (input, data research);
- with GIS to use any of the geographical location functions.

A different SW module corresponds to each of the two sw usage methods:

- Red Code Web;
- Red Code Gis .

The use of Red Code Web functions takes place through an internet browser internet (MS Explorer, Firefox).

To be able to use the Red Code Gis functions, you will need to install the sw supplied.

For security reasons and to avoid a slow down in performance, it is not possible to use the Red Code GIS sw through remote internet access.

Two components must be activated on the server side of the system:

- GeoDataBase, based on an Open Source PostGIS product;
- Red Code Web Server which uses the Open Source product Apache TomCat.

The main components of the system are shown in the following figure:

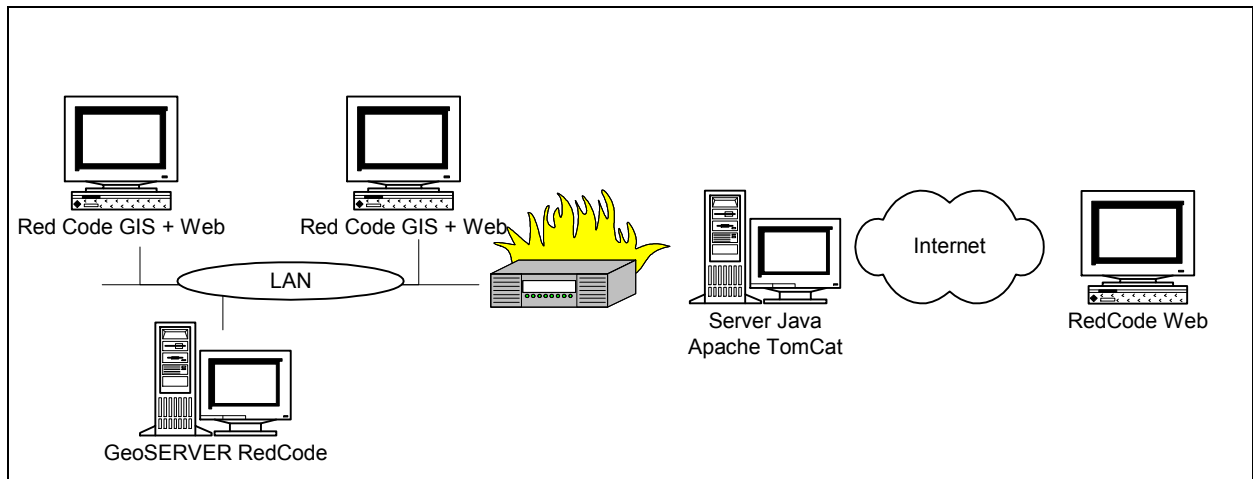


Figure 1- Red Code HW Architecture

In general, both Red Code modules (Web e GIS), foresee two types of role for the users of the system:

- role of administrator, for he who will manage the system and access special functions;
- role of user, for who will use the basic functions of the system.

1.1 Prerequisites for the installation of the Client's side Red Code SW

1.1.1 Red Code GIS module

This module activates advanced graphic functions. We therefore advice the use of a new generation PC with a RAM of at least 512 Mb.

1.1.2 Red Code Web module

This module only requires for its function the use of a web browser such as Firefox vers. 1.5 or higher or Microsoft Explorer vers. 6 or higher.

1.2 Prerequisites for the installation of the Server's side Red Code SW



1.2.1 Geo Data Base Red Code GIS

This module requires the installation of the open source PostGreSql vers. 8.x e PostGIS vers. 1.3.1 products. For detailed information on how to install this product please visit the following website <http://www.postgresql.org> and <http://postgis.refrations.net/>.

1.2.2 Red Code Web Server

For the functioning of the Red Code Web Server you require any one of the Java servlet containers. The system has been tested with the Open Source product Apache TomCat version 5.5 with JDK 1.5. For the installation of this product please refer to the documentation available from the following website <http://tomcat.apache.org/>.





2. Use of the RedCode-Web module

In this chapter we describe the specific features of the Web module. To use the Web module, insert the web browser address ex.: <http://www.dominio/redCode/>. Then replace the **www. Dominio** part, relevant to the installation done by the System Administrator. You must insert the correct address, paying close attention to small and capital letters.

To avoid errors during the installation of the module we recommend creating an icon that will automatically start the browser with the correct URL address of the program.

2.1 Access to SW

The icon of the installed program leads to the following screen that requires user authentication.



Illustration 2- The Initial screen (log-in to SW Web)

To access the SW must enter the user name and password defined by the System Administrator. The language option allows the user to select between Italian and English.

Once the user has been recognized by the system through this first screen, access is granted to the main menu window, as seen in the following image.




Main Menu






Illustration 3- Main Menu of SW GIS

From the main menu, you access all the functions available, depending on the role of the User.

2.1.1 The SW icons


The  icon in the main menu leads to the different functions available in the SW.

These icons    are to activate the following functions:

-  Exit from the main menu
-  Access "Change Password" screen with which it is possible to change the login password
-  Access the "User Management" screen that allows you to assign and see all user roles (function available only to System Administrator).



2.1.2 Change Password




From the main menu, you access this function through the following icon .

The visualized screen is the following:




Illustration 4- Change Password


The following icons    are:

-  Return to the home page;
-  Save your new password;
-  Delete all text written in the fields.

2.1.3 User Management



From the main menu, by clicking on the  icon, it is possible to access the user management screen as shown on the figure below (this function is only available to the System Administrator).



Gestione Utenti



Elementi Trovati: 14


Nome Utente	Ruolo
contri	Modifica
ilaria	Visualizza
dona	Visualizza

Figura 5-Change Password



The icons allow

-  Return to the home page.
-  Add a new user.

The icon  allows the System Administrator to enter the username details, useful to make any changes to the user role and/or the user name.



2.1.4 Component Management

Access to the function from the main menu. The screen is the following.



Components - Search Page

Enter a search criterion:

Code	<input type="text"/>
Component	<input type="text"/>
Name	<input type="text"/>
Location	<input type="text"/>




Illustration 6- Component Management

From this screen you can manage components as follows:

- Search for a component, of which you can modify data if necessary;
- Insert a new component.



2.1.5 Component Search

To search for a component just insert a value in the appropriate field keys: Name, component, code, or location and press the lens icon . It can refine the search by combining one or more values of field keys. The search results will be shown as displayed in the example below.



Components - Search Page

Enter a search criterion:

Code

Component

Name

Location









Items Found: 10




Component	Name	Location
Vigili del Fuoco	Distacc. di Villa d'Agri	
Vigili del Fuoco	Distacc. di Ferrandina	FERRANDINA (MT) 
Vigili del Fuoco	Distaccamento di Lauria	LAURIA (PZ) 
Vigili del Fuoco	Distacc. Stagionale di Maratea	MARATEA (PZ) 
Vigili del Fuoco	Comando prov. di Matera	MATERA (MT) 
Vigili del Fuoco	Distaccamento di Melfi	MELFI (PZ) 

Illustration 7- Component Search

The icon  allows you to enter the details of the component, useful to make any changes to the data of the component. The three icons    below the yellow rectangle allow the user to:






-  Return to the "home" page.
-  Print List resulting from the search
-  Add a new component

2.1.6 Enter Components



Click on the icon  and then complete the fields with particular attention to the compulsory fields, highlighted in yellow, which must be filled to save the card.

In the component table the required fields are: x, y, category of component, name, location and telephone numbers. The "code" field cannot be edited as it is automatically generated when the new component card is saved. The adopted reference system to generate the X and Y coordinates is the WGs-84 with UTM-33 projection, in code EPSG "32633".

**Components - Detail: -**

Component	Human Resources	Equipment	Municipalities of Activities
------------------	-----------------	-----------	------------------------------

Code

X (xxxxxx,xx)

Y (xxxxxx,xx)

Component Type

Name

Location Type

Address

Location

Activities Type

Validity of the Agreement

Representative Surname

Representative Name

Telephone

Fax

Notes

Illustration 8- Enter Components

The icons enable the user to:


- Return to the Home page
- Return to the previous screen
- Save the new component
- Undo the last change.
- Delete the component currently displayed
- Print all the fields of the component displayed



Once the new component is saved, the three icons relative to Human Resource, equipment and to the Municipality of Activities will be activated. These tables are linked to the component, which is why they are only active after the new component is saved. If you wish to add a component you need to click on the respective field choice (Human Resource, Equipment or Municipality of Activities).



Illustration 9- Human Resource, Equipment, Municipality of Activities

Once the screen is up for the requested category, click on the icon  to add a new component. Pay attention to complete all "mandatory" fields, highlighted in yellow.

2.1.7 Enter Human Resource Components

For this card, the required fields are:

Surname-Name- Allocated Municipality-Specialization-Employment



Human Resources - Detail



Surname:

Name:

Date of Birth: (mm/dd/yyyy)

Municipality of Allocation:

Locality of Allocation:

Municipality of Residence:

Specialization:

Work Activities:

Employer:

Telephone:

Role:

Driver's Licence:

Notes:

Illustration 10- Human Resource card





2.1.8 Insert Equipment components

In this tab you can input data of the equipment supplied to each individual Human Resource component. The required fields are marked in yellow: Description- Allocated Municipality.



Equipment - Detail



Description:

Number Plate/ID:

Municipality of Allocation:

Holder Telephone:

Technical Specifications:

Notes:

Illustration 11- Enter Equipment



Municipality of Activities - Detail



Municipality:

Activities:

Illustration 12- Municipality of Activities


2.1.9 Enter Search Human Resource Components


In this tab you can insert the Municipality and Activities in which the Human Resource components operate. Required fields (in yellow) are: Municipality and Activities.





2.1.10 Search Human Resource Components

From the home page, by clicking on the icon  **Human Resource**, the user can access the Search Page for Human Resources. To search you must insert a value in the key areas: Surname, Specialization, Employment, Allocated Municipality,

Component Type, and Component' s Name, and then press the lens icon . The user can refine the search by combining two or more key field values. The two icons under the yellow box are to return to the home page, and to print the search results that appear in the form of a list. See example in Figure 14 below.



Human Resources - Search Page

Surname	<input type="text"/>
Specialization	<input type="text"/>
Work Activities	<input type="text"/>
Municipality of Allocation	<input type="text"/>
Component Type	<input type="text"/>
Component' s Name	<input type="text"/>



Illustration 13- Search Human Resource Components



Human Resources - Search Page


Surname	<input type="text"/>
Specialization	<input type="text" value="▼"/>
Work Activities	<input type="text" value="▼"/>
Municipality of Allocation	<input type="text" value="▼"/>
Component Type	<input type="text" value="▼"/>
Component' s Name	<input type="text" value="▼"/>



Items Found: 86


Resource	Specialization	Work Activities	Allocation	Organization
BOVINO ANGELO		ARTIGIANI		ARI
Di Mauro Giovanni		ARTIGIANI		ass. naz. Giacche verdi Basilicata
Isoldi Luciano		ARTIGIANI		ass. naz. Giacche verdi Basilicata
Di Mauro Enzo		ARTIGIANI		ass. naz. Giacche verdi Basilicata
Latronico Francesco		ARTIGIANI		ass. naz. Giacche verdi Basilicata


Illustration 14- Search example Human Resource

The icon  allows you to access a specific human resource and make any necessary changes



2.1.11 Search Equipment of the Components

From the main menu, by clicking on the icon  **Equipment**, the user can access the search page for Equipment. To carry out a search, you must fill in the key areas: Type, Allocated Municipality, Component Type,

and Component ' s Name, and then press the icon of the lens .

The user can refine the search by combining two or more key field values. The search

result appears in the form of list. The icon  allows the user to access the details of an Equipment component and make any necessary changes.



Equipment - Search Page

Type	<input type="text"/>
Municipality of Allocation	<input type="text"/>
Component Type	<input type="text"/>
Component ' s Name	<input type="text"/>







Illustration 15- Search Equipment

The two icons below the yellow box are to return to the home page and to print the search results

2.1.12 Search Municipality and Activity details of the Components

From the home page, by clicking on the icon  **Municipality of Activities**, the user can access the Search page for Municipality and Activity details of the Components. To carry out a search fill in the key value fields Activity, Municipality of Activities, Component Type, Component' s Name and then click on the lens icon .

The user can refine the search by combining two or more key value fields.

Search result appear in the form of a list. The icon  allows the user to access the Component's Municipality and Activity details and make any necessary changes.



Municipality of Activities - Search Page

Activities	<input type="text"/>
Municipality of Activities	<input type="text"/>
Component Type	<input type="text"/>
Component' s Name	<input type="text"/>





Illustration 16-Search Municipality of Activities

The icons below the yellow box are respectively to return to the main page and to print the results of the search



2.1.13 Management of Artificial Lakes

From the home page, by clicking on the icon  **Artificial Lake**, the user can access the card to manage Artificial Lake data.



Artificial Lakes - List



Items Found: 18










Name	Locality	Use
INVASO DEL BASENTELLO	SERRA DEL CORVO	
INVASO DEL CAMASTRA		PLURIMO 
INVASO DEL COGLIANDRINO		IDROELETTRICO 
INVASO DEL PANTANO	AGRO DI PIGNOLA	INDUSTRIALE 
INVASO DEL PERTUSILLO		PLURIMO 

Illustration 17- Artificial Lake


By clicking on the icon , the user can access details of a specific artificial lake, in order to make any necessary changes.

The three icons    are for:



-  Return to the home page;
-  Add a new Artificial Lake;
-  Print the list of artificial lakes.

2.1.14 Enter an Artificial Lake

Click on the Icon  to enter a new artificial lake. The only compulsory field is the name of the artificial lake. The graphics code serves to connect the table with the graphics, and is automatically generated once the new artificial lake is saved.



Artificial Lakes - Detail








Name:	<input type="text"/>
Locality:	<input type="text"/>
Graphics Code:	<input type="text"/>
Capacity:	<input type="text"/> Mmc (xxxxxx,xx)
Max Altitude:	<input type="text"/> m amsl (xxxxxx,xx)
Max Adjustment Altitude:	<input type="text"/> m amsl (xxxxxx,xx)
Notes:	<input type="text"/>

Illustration 18-Enter Artificial Lake

The icons  are for:



-  Return to the home page
-  Return to the previous screen
-  Save the new Artificial Lake
-  Undo the last change
-  Delete the Artificial Lake currently displayed

2.1.15 Well Management

From the home page, click on the icon  **Wells** to access the list of wells in the system.



Wells - List






Items Found: 1




Name	Locality	Notes
Pozzo s.Angelo	Matera ss 17	a secco nei periodi estivi

Illustration 19- Data Management Wells

By clicking on the icon  the user can access the details of a specific well and make any necessary changes.



The three icons    are for:

-  Return to the home page
-  Add a new Well
-  Print the list of Wells

2.1.16 Enter wells

The required fields are: name and coordinates X and Y to locate the well.



Wells Detail



Name:

Locality:

X: (xxxxxx,xx)

Y: (xxxxxx,xx)






Altitude: m amsl (xxxxxx,xx)

Scope: mc (xxxxxx,xx)

Notes:


Illustration 20- Data input Wells

The icons  are for:

-  Return to the home page
-  Return to previous screen
-  Save a new well
-  Reset fields
-  Cancel the Well currently displayed on the screen

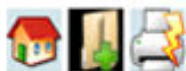


2.1.17 Management of Protected Areas

From the home page click on the icon  **Protected Areas**




Protected Areas - List









Items Found: 19

Name	Type	Notes
Abetina di Laurenzana	riserva naturale	riserva naturale regionale 
Agromonte - Spacciaboschi	riserva naturale statale	
Bosco Pantano di Policoro	riserva naturale	riserva naturale regionale 
Chiese rupestri del Materano	parco regionale	

Illustration 21- Protected Areas

From the list, click on the icon  to access the details of a specific protected area and make any necessary changes.

The three icons    are for:

-  Return to the home page
-  Add a new protected area
-  Print the list of protected areas

2.1.18 Enter Protected Areas

Required fields are: Name, Type. The graphics code area cannot be edited as it is generated automatically by the system at the time a new Protected Area is saved.



Protected Areas - Detail



Name:

Type:

Graphics Code:

Notes:


Illustration 22- Protected Areas

The icons are for:

- Return to the Home page
- Return to previous screen
- Save the new protected area
- Reset fields
- Cancel protected area currently displayed



2.1.19 Management SIC-ZPS Areas (Sites of EU Interest, Special Protected Areas)

From the home page, click on the icon  SIC-ZPS.




SIC/ZPS - List



Items Found: 51

Name	Department Code	Type
Abetina di Laurenzana	IT9210005	SIC
Abetina di Ruoti	IT9210010	SIC
Acquafredda di Maratea	IT9210015	SIC

Illustration 23- SIC-ZPS Areas

From the list, click on the icon  to access details of a specific SIC-ZPS area and make any necessary changes.

2.1.20 Enter SIC-ZPS Areas (Sites of EU Interest, Special Protected Areas)

Required fields highlighted in yellow, are: Name, Ministry Code, Type. The graphics code area cannot be edited as it is generated automatically by the system at the time a new SIC-ZPS area is saved.



SIC/ZPS - Detail






Name:	<input type="text"/>
Department Code:	<input type="text"/>
Graphics Code:	<input type="text"/>
Area:	<input type="text"/> ha (xxxxxxx,xx)
Length:	<input type="text"/> Km (xxxxxxx,xx)
Latitude:	<input type="text"/> (xxxxxxx,xxxx)
Longitude:	<input type="text"/> (xxxxxxx,xxxx)
Type	<input type="text"/>
Notes:	<input type="text"/>

Illustration 24- SIC-ZPS Areas


The icons are for:

- Return to the Home page
- Return to previous screen



-  Save a new SIC-ZPS area
-  Reset fields
-  Cancel the SIC-ZPS area currently displayed.

2.1.21 Archive Management

From the home page, click on the icon  **Archives**



Archives Menu



- Protected Areas Types 
- Activities Types 
- Work Activities Types 
- Equipment Types 
- Specialization Types 
- Components Name 

Illustration 25- Archive Management

From this screen it is possible to manage some of the field area categories, as described above. In particular:

- Protected Area Type



- Activity Type;
- Employment Type;
- Equipment Type;
- Specialization Type;
- Component Name.





3. Use of the form RedCode-GIS



In this chapter we describe the specific features of the GIS.



3.1 Access to SW

Click on the icon of the installed program and it leads us to the following screen that requires user authentication.



3.2 The main window of the SW

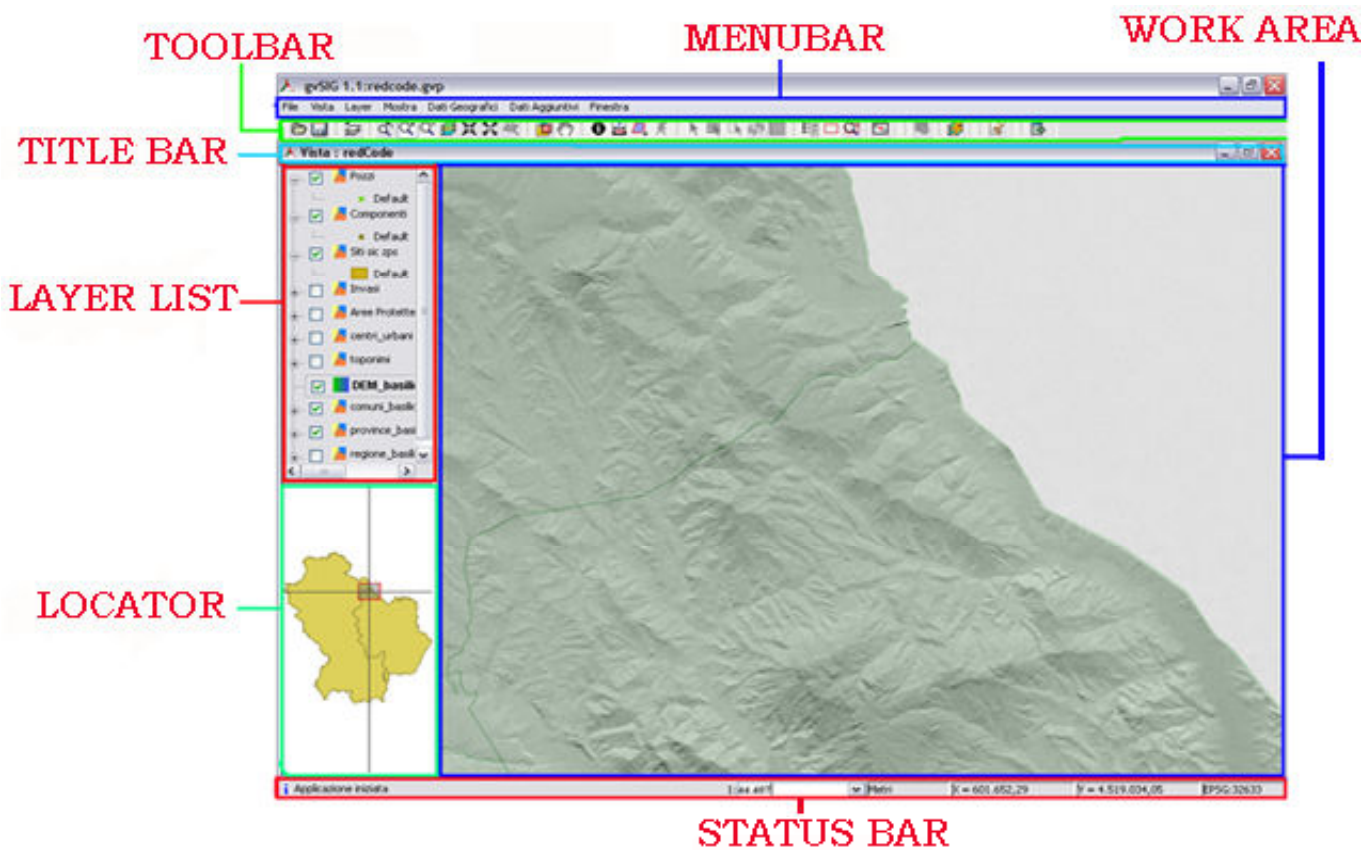


Illustration 26- Main Window

In the window you can observe the following areas:

1. The Title Bar
2. The Menu Bar
3. The Toolbar
4. Work Area
5. Layer List
6. Locator
7. Status Bar



3.2.1 The Title bar

It is located above View. It indicates the name of the current screen.

3.2.2 Bar Menu

Comprises the functions of all the commands of the redcode program grouped in the menus and sub-menus

3.2.3 The Toolbar

Contains the icons of standard commands and it is an easy way to get to them. When the mouse is over the icon a short description of the command function appears on the screen.

3.2.4 Work Area

Visualizes the mapping data of the current screen.

3.2.5 Layer List

Shows the Layer list with the symbols used for the graphic representation

3.2.6 Locator

Identifies the area and the position of the current view in the global context.

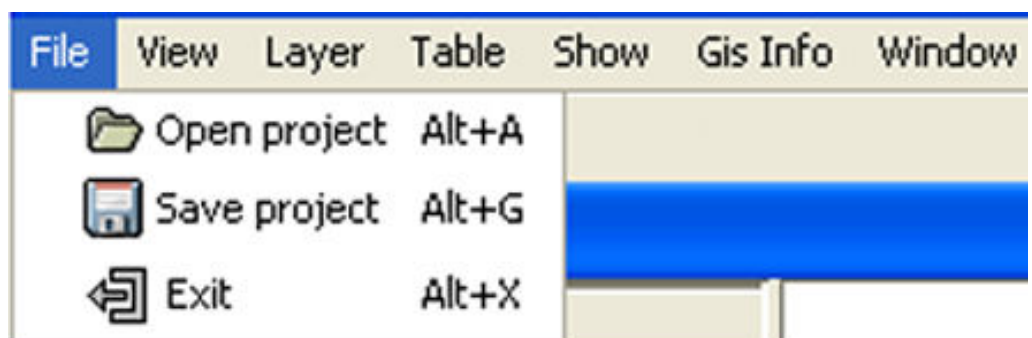
3.2.7 The Status Bar

Indicates the scale, unit of measurement, the distances, the coordinates and the reference system used in the current view



3.3 The Bar Menu

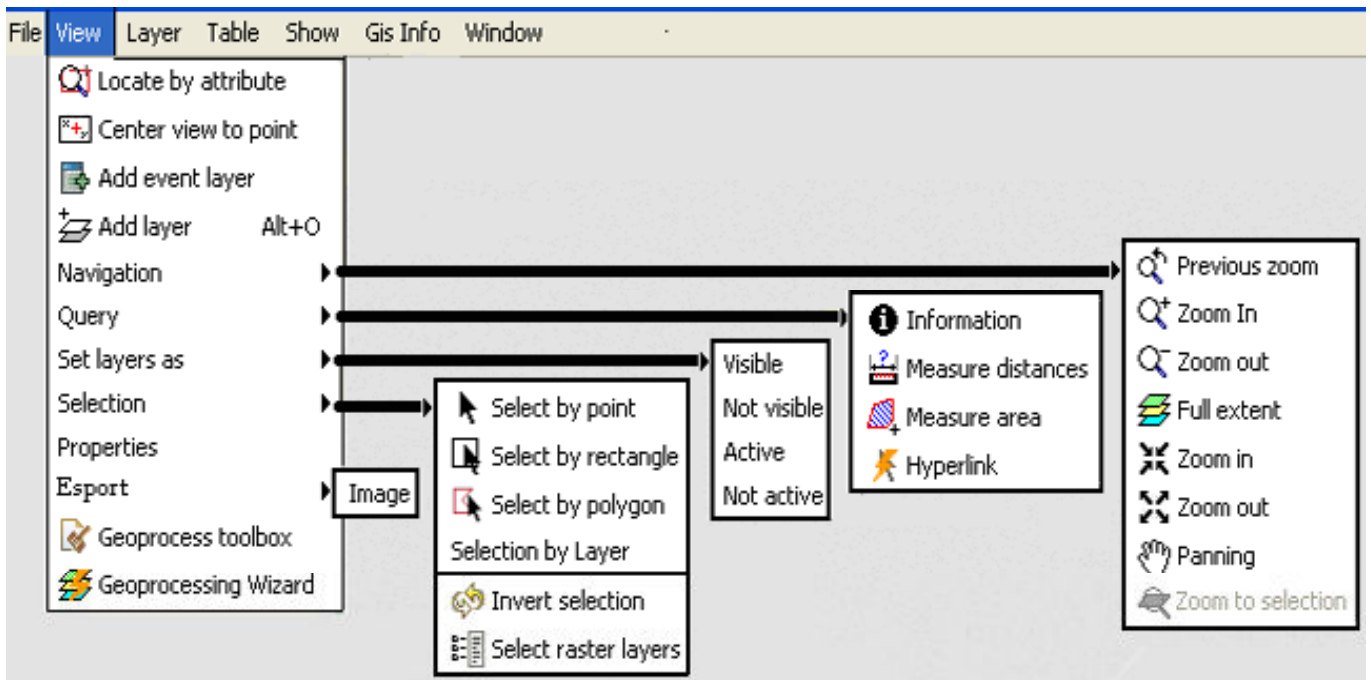
3.3.1 File Menu



In the File menu we can distinguish the following headings:

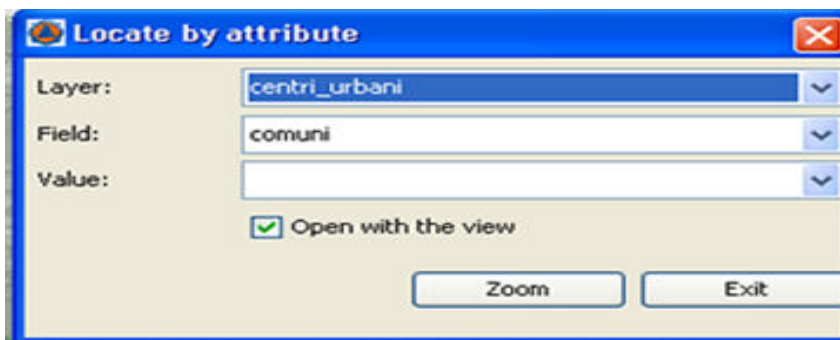
- **Open project:** it opens a project saved before with the extension ". gvp"
- **Save project:** save changes regarding the current project
- **Exit:** leave the current project

3.3.2 View Menu



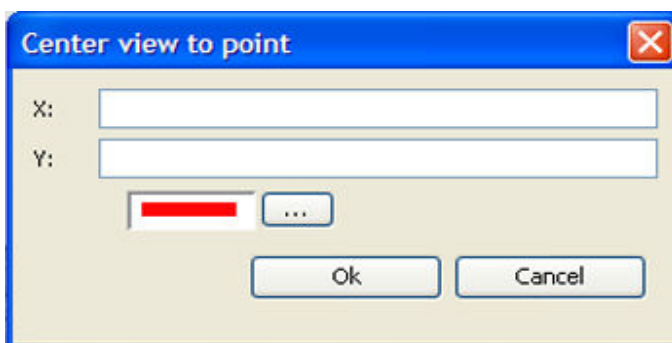
In the view menu the following headings are present:

- **Export:** export the current display area of work, in a common Image File
- **Locates by Attribute:** opens this dialog



Where is it possible to search an object by means of an attribute, setting the layer, the field on which it wants to do the research and finally, the value of the field. With the Zoom button it is also possible to locate identified objects.

Center view to point: Opens the dialogue window as shown in the illustration.

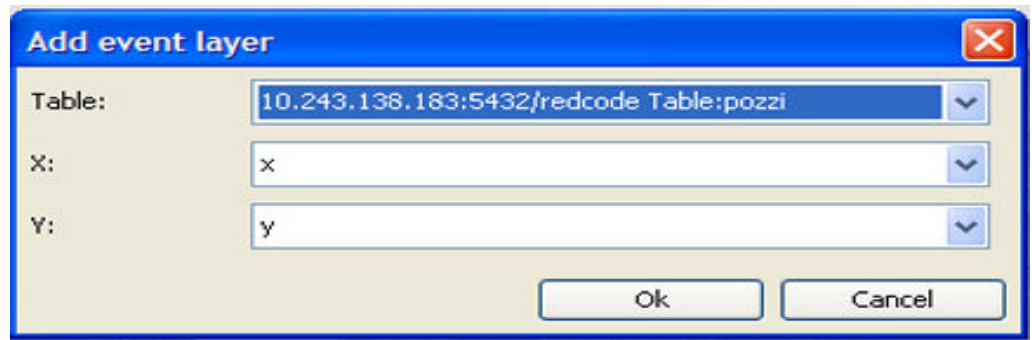


By inserting the X and Y coordinates, the user can view on the screen a specific work area.

Furthermore, it is also possible to mark the work area with a color point by clicking

on this button .

- **Add events Layer:** (function available only to the System Administrator) create a new layer with specific objects, starting from a table included previously in the draft, which contains within the fields the coordinate values. The dialog box that appears allows the user to select the table and the coordinates, as shown in illustration example



- **Add Layer:** (function available only to the System Administrator) create a new layer from an existing file or from a geodatabase table. The file can be both a vector and a raster. This command opens a dialog box that separates the loading of the layer into two different cards. The first to insert a vector or raster file, and the second to load a table from a geodatabase.

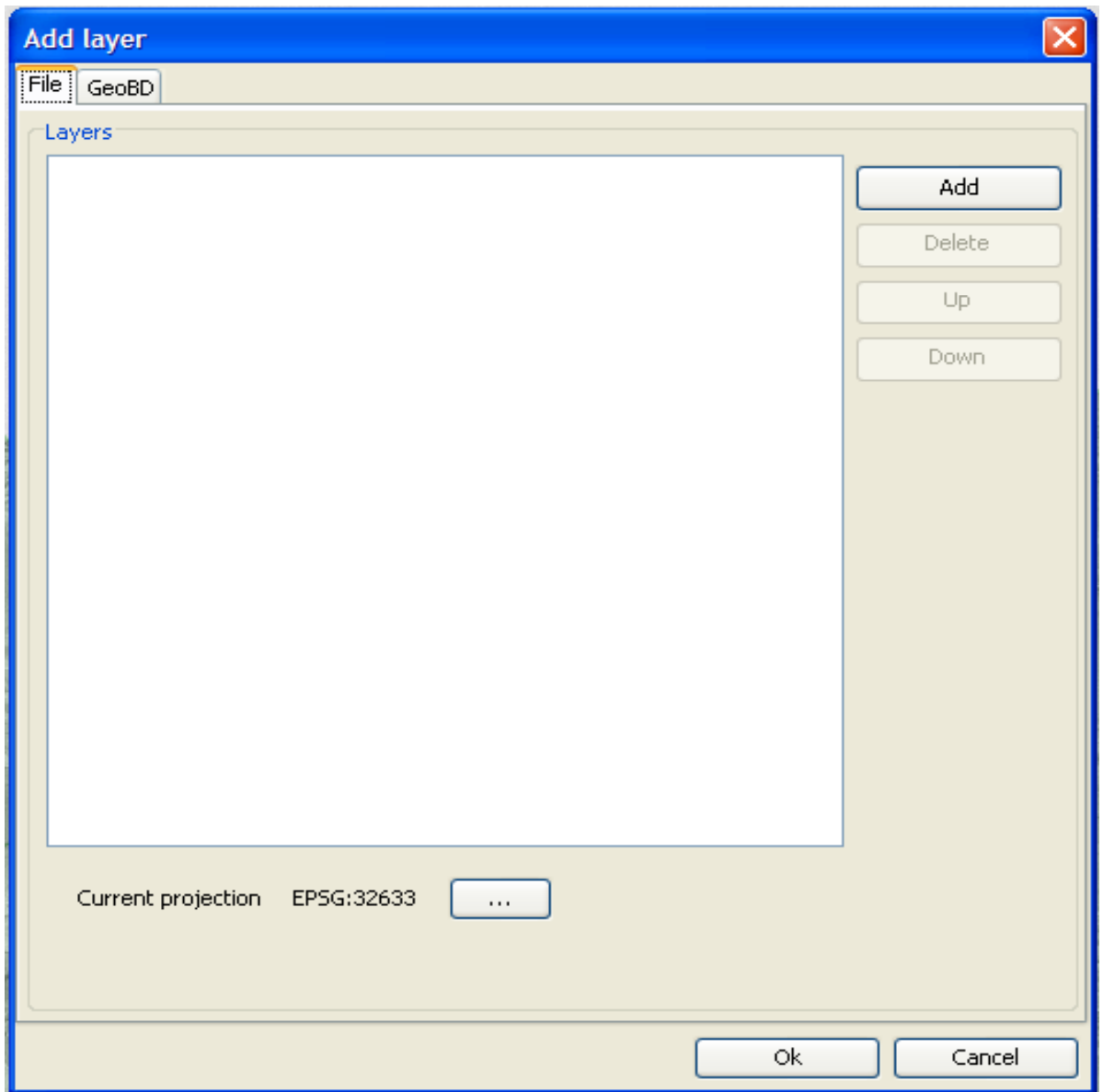


Figura 27-Add layer-File

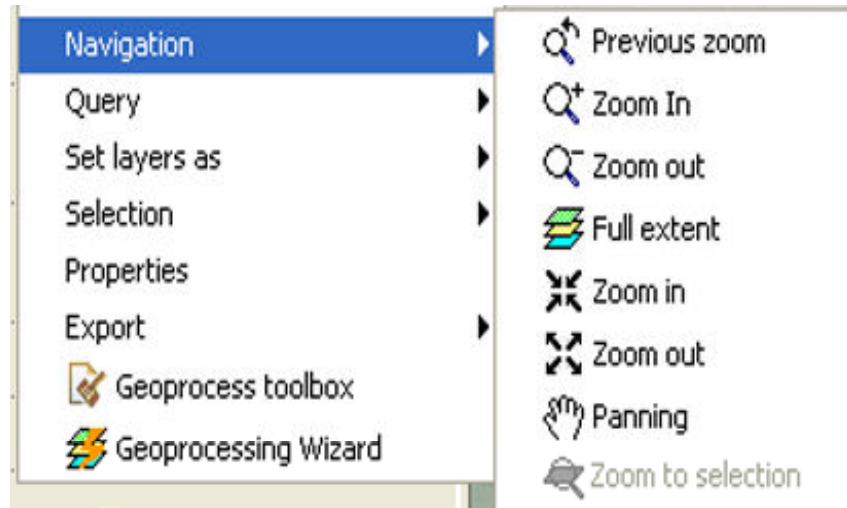


The image shows a software dialog box titled "Add layer". It is divided into several sections:

- Choose connection:** A dropdown menu and a refresh icon.
- Choose table:** An empty list box.
- Table fields:** An empty list box with "All" and "None" buttons below it.
- Specify layer settings:**
 - Layer name: Text input field.
 - ID field: Dropdown menu.
 - Geometry field: Dropdown menu.
 - SQL restriction: Checkbox and text input field.
 - Working area: Checkbox and "Get view" button.
 - Maximum Y, Minimum Y, Maximum X, Minimum X: Four text input fields.
- Buttons:** "Ok" and "Cancel" buttons at the bottom right.

Figura 28-Add Layer-GeoDB

- **Navigation:** the navigation menu has this sub-menu:



With the following commands:

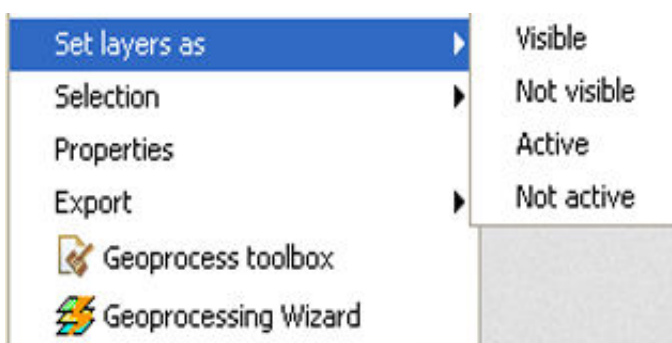
- ❖ **Previous Zoom:** to return to previous display
 - ❖ **Zoom In:** allows you to zoom in on the current display with two different methods:
 - 1) firstly, by clicking on a specific point of the display, the image will be magnified by a predefined default zoom, centring on the point clicked.
 - 2) secondly, by clicking and dragging in such a way to draw a rectangle in the work area. The area inside of the rectangle will be zoomed into.
 - ❖ **Zoom Out:** reduces the current view displayed centring on the point clicked.
 - ❖ **Full Extent:** View all items in the work area.
 - ❖ **Zoom In:** magnifies the current view while maintaining the Center point
 - ❖ **Zoom Out:** decreases the current view while maintaining the Center point
 - ❖ **Panning:** activates the panning instrument
 - ❖ **Zoom to Selection:** view the selected objects
- **Query:** the Query menu has this submenu:



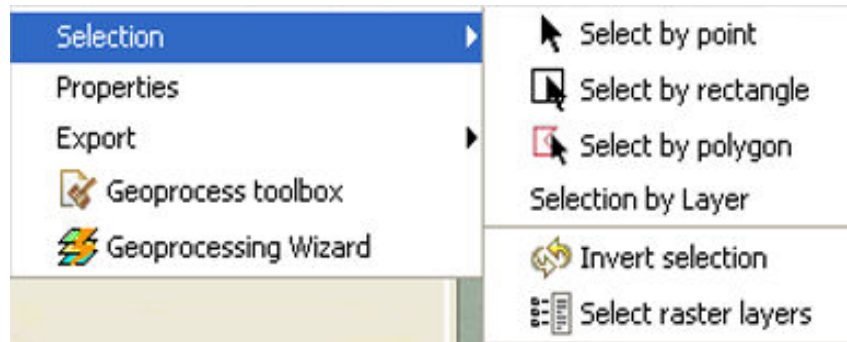
With the following commands:

- ❖ **Information:** returns to visualize all information relating to a subject chart, belonging to the previously selected layer
- ❖ **Measure Distances:** measures the distance between two or more points, the partial distance is displayed on the status bar with the text DIST:.... The total with the text TOTAL:...
- ❖ **Measure Area:** measures the area and the perimeter of a polygon tracked using the mouse. The result is displayed on the status bar with the text TO:... per area and P:.... For perimeter
- ❖ **Hyperlink:** connects a text file, an image or an HTML file to a graphic object, through a field of the attribute table that contains the path and the name.

- **Set Layers as ...:** Has this submenu



- ❖ **Visible:** visualizes all the layers of the project
 - ❖ **Not Visible:** hides all the layers of the project
 - ❖ **Active:** enables all project layers
 - ❖ **Not-Active:** disables all project layers
- **Selection:** the selection menu contains this submenu



- ❖ **Select by Point:** allows you to select one or more objects belonging to a chosen layer, by clicking with the mouse. By pressing the Ctrl-key you can add or remove items from current selection.
 - ❖ **Select by Rectangle:** allows you to select objects of the current layer activated by drawing a rectangle with the mouse.
 - ❖ **Select by Polygon:** allows you to select the objects of the current layer activated, by drawing a polygon with the mouse.
 - ❖ **Selection by Layer:** allows you to select objects of the current layer by specifying other selection criteria. For example, objects that are ... equal to, different from, touch, cross with, intersect with, overlap with, are equal, and contain or are contained by a previously selected object.
 - ❖ **Invert selection:** select all items excluded by the previous selection
 - ❖ **Select Raster Layer:** identifies among the layers present in the list that which corresponds to the raster selected in the work area.
-
- **Properties:** it opens this dialogue window



View properties

Name: redCode

Creation date: 31/08/07 18.06

Owner:

Map units: Meters

Measuring units: Meters

Current projection EPSG:32633

Comments:

Background color:

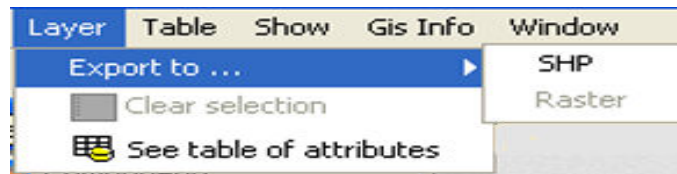
Ok Cancel

Where it is possible to see the name of the project, the date of creation, the comments, and it is possible to change the unit of measure and / or the background color.

- **Geoprocess toolbox:** (function only available to the System Administrator) This command will merge two SHP into a single SHP with a single DB connected.
- **Geoprocessing wizard:** (function only available to the System Administrator) Opens the Command described previously, but with a guide to help you in the merge process.

3.3.3 Layer Menu

The layer menu contains the following headings:



- **Export to...:** opens this submenu



- ❖ **SHP:** export the current view into an SHP file
- ❖ **Raster:** Export current view into a Raster file
- **Clear selection:** Cancel the previous selection
- **See table of attributes:** opens the table of attributes of the chosen layer

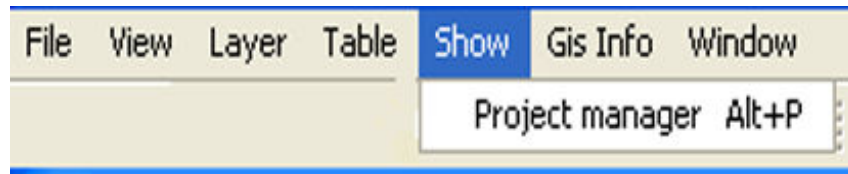
3.3.4 Table menu

The Menu Table contains one voice: Filter



- **Filter:** it opens a dialog box, where it is possible to select objects through the attributes present in the table of the chosen layer

3.3.5 View Menu



- **Project Manager:** Shows the project manager

3.3.6 Gis Info Menu

(function available only to System Administrator)

Through this menu we can import shape and / or raster updates into our server.

- If you click on shape import, the following dialogue window appears

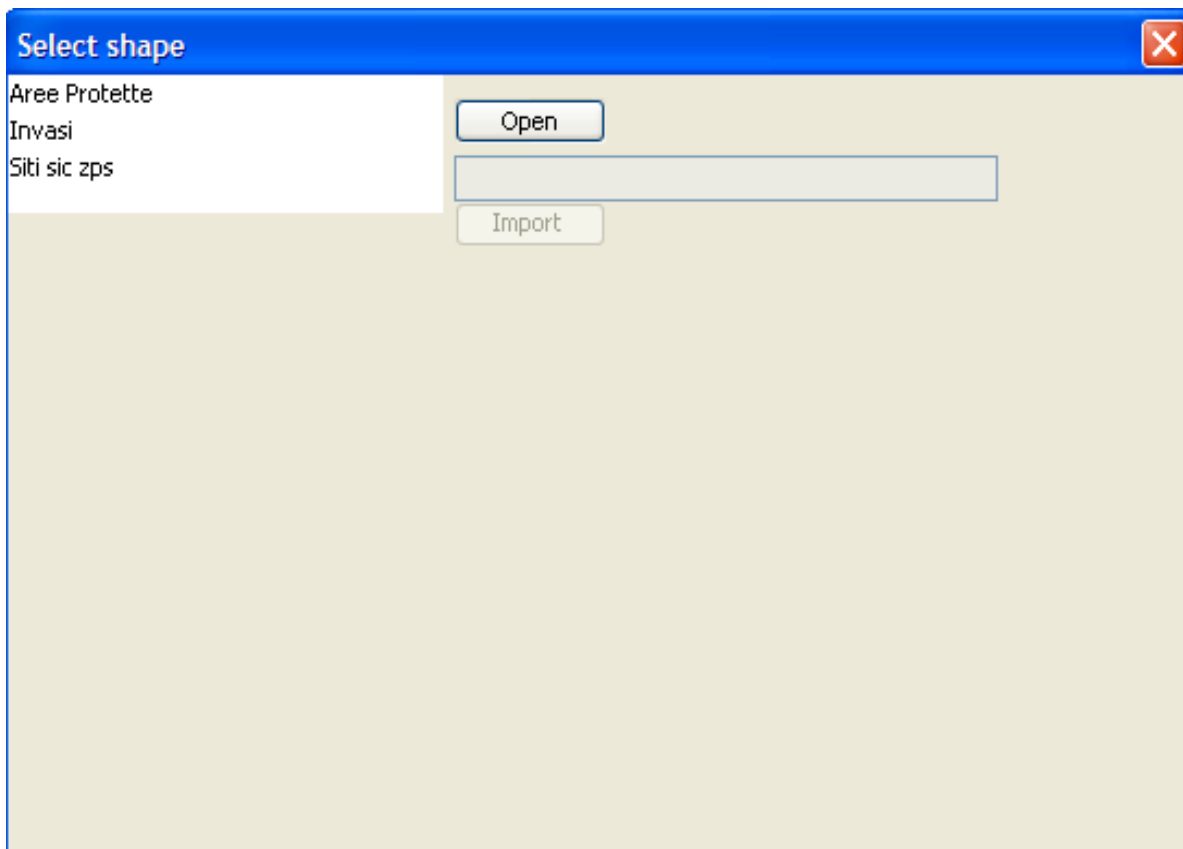
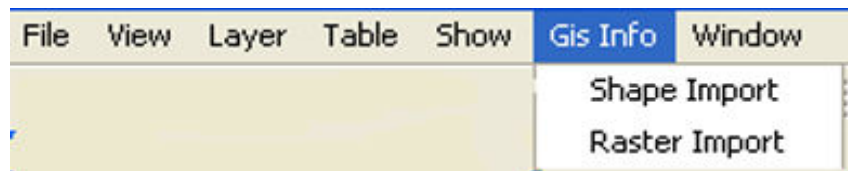
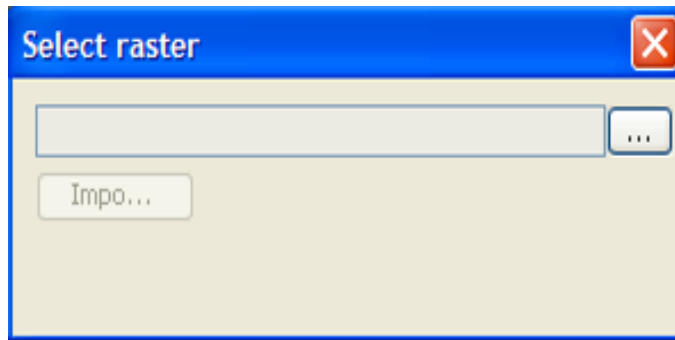


Figure 30- Select Shape



Here it is possible to load onto the server the update shape relating to the three layers: Protected Areas, Artificial Lakes, and SIC-SPAS Areas. The shape of the update is the result of the combination of the old shape and the new updated shape. The new shape is obtained by clicking on the geoprocess command.

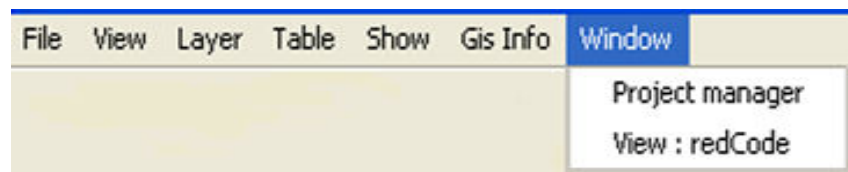
- If you click on import raster, the following dialogue window is visualized:
(function available only to the System Administrator)



This command enables to update the server with the new raster TIF-Format of the CNR, saving the old copy in the folder "History". Clicking on the dots... you select the raster, and then clicking on Impo... the system automatically imports and updates the CNR.tif layer onto the server.

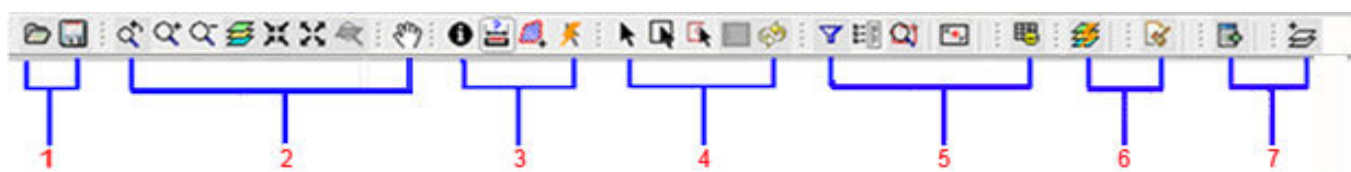
3.3.6 Window Menu

In the Window Menu the heading of all currently open windows is visualized as shown in the following illustration.

















3.4 The Toolbar

For simplicity, the icons of the toolbar have been grouped into 7 categories, as shown in the following image :



CATEGORY N°1: OPENING AND SAVING A PROJECT	
	Open Project: allows you to open a previously saved project with the extension “.gvp”
	Save Project: save changes regarding the current project
CATEGORY N°2: NAVIGATION	
	Previous zoom: Goes back to the previous zoom used
	Zoom in: Enlarges a particular area of the image displayed, centring on the point clicked
	Zoom out: Reduces a particular area of the image displayed, centring on the point clicked
	Full extent: Full zoom of the total area to include all the layers present in the work area
	Zoom In: Zooms In the current image from the center of the area
	Zoom Out: Zooms Out the current image from the center of the area
	Zoom to Selection: Full zoom of the total area to show all selected elements
	Pan: This allows you to change the view area. Click and hold down the left button of your mouse and then drag the mouse in the direction you require. The viewing area will move with your mouse.
CATEGORY N°3: QUESTIONS	
	Information: Restores all the selected element’s attributes in a dialogue window. Make sure the layer of the element you wish to identify is activated.
	Measure Area: This tool works in much the same way as “Measure distances”. Click on the point that represents the first polygon vertex that defines the area to be measured. Move the mouse and click on each new vertex until you reach the last one, then double click so that the application knows there are no more. The calculation for the measured area appears on the bottom right of the screen.



	Measure Distance: measures the distance between two points
	HyperLink: connects to a subject chart, a text file, an image or an HTML file
CATEGORY N°4: SELECTION	
	Select by Point: allows you to select one or more items in the work area by clicking on them with the mouse. With the Ctrl key you can add items to current selection.
	Select by Rectangle: allows you to select the items in the work area inside of a selection rectangle
	Clear Selection: Cancels previous selection
	Invert Selection: Selects the items excluded from the previous selection
CATEGORY N°5: TOOLS	
	Filter: it opens a dialog box, where it is possible to select objects through the attributes present in the table of a chosen layer.
	Select Raster Layers: identifies the layers present in the list that correspond to the raster chosen in the work area
	Locate by Attribute: view the search window by attributes
	Center View to Point: change the center of the view to a point established by the user, of which the coordinates are known
	See table of attributes: Opens the table of the attributes of the chosen layer
CATEGORY N°6: GEOPROCESS	
	Geoprocess Toolbox: Open the dialogue window of the processes manager
	Geoprocessing Wizard: start a geoprocessing wizard
CATEGORY N°7: INSERTING LAYER	
	Add events layer: create a new layer starting from a table included previously which contains the coordinates attribute fields.



	Add layer: show a dialog box to add a layer to the current view.
--	---



4.0 Print map

To print the work area view, go to the project management view menu, and then click on map. At this point two printing formats will appear, predefined a3 and a4. Choose one of these with a double-click. A Print Preview will appear on the screen to show the work area. To print, go to the Print Menu and select Print.





4. Installation of the RedCode SW

The instructions in this section are addressed to the System Administrator.

4.1 Installation of the RedCode Geoserver

Installation of PostgreSQL 8.x. The file is not provided with the Installation CD and can be downloaded from the official site: <http://www.postgresql.org>.

Installation of PostGIS 1.2 or higher (compatible with the version of PostgreSQL installed). This file is not provided with the Installation CD and can be downloaded from the official site: <http://postgis.refractory.net/>.

Create database. (ex. redcode)

Run the script supplied with the Installation CD
Installation\RedCodeWEB_Server\GeoDB\redCode.sql

Create a shared folder and copy the contents of the installation folder:
Installation\RedCodeGIS_Client\RedCode_Project\EN.

File access authorizations are read only for all users, except for the System Administrator.

4.2 Installation of the RedCode Web Server

Installation of Apache Tomcat 5.x. It can be downloaded from the official site: <http://tomcat.apache.org/>.

Copy the pg74.215.jdbc3.jar file contents in the Installation CD folder
Installation\RedCodeWEB_Server\Java_Application to the Tomcat installation
common/lib.

Install the WAR file supplied with the Installation CD (or the one available in the Tomcat manager, or by copying the said file into the webapps folder).

Modify the database connection URL in the db connection pool configuration associated to the application just installed (this can be done from the Apache Tomcat administration interface which must be installed separately) which must be linked to the RedCode Geoserver.

Connect to the site <http://webserverredcode/redCode/>

Access the application with User name: radmin Password: protciv

4.3 Installation of the Client's side RedCode GIS

The software can be installed in two modalities: User and System Administrator. Please refer to the installation programs present in the Installation CD in the folders:
Installation\RedCodeGIS_Client\EN\UserVersion

Installation\RedCodeGIS_Client\EN\AdministratorVersione





The installation program will require a folder in which to install the software.

Once the installation is complete, create a network drive linked to the shared folder in the RedCode GeoServer ([4.2](#)) and to which you must assign the letter R.





5. Warning

In this section of the manual we detail some indications that must be followed in order to guarantee the correct functioning of the software. These indications are for the System Administrator of the SW program.

5.1 Some layer names in the Client's GIS

The System Administrator is the only user enabled to change and integrate new layers into the RedCode project. Some import functions in the program require that the names of the following layers NEVER be changed:

- Protected Areas;
- Artificial Lakes;
- SIC ZPS areas.

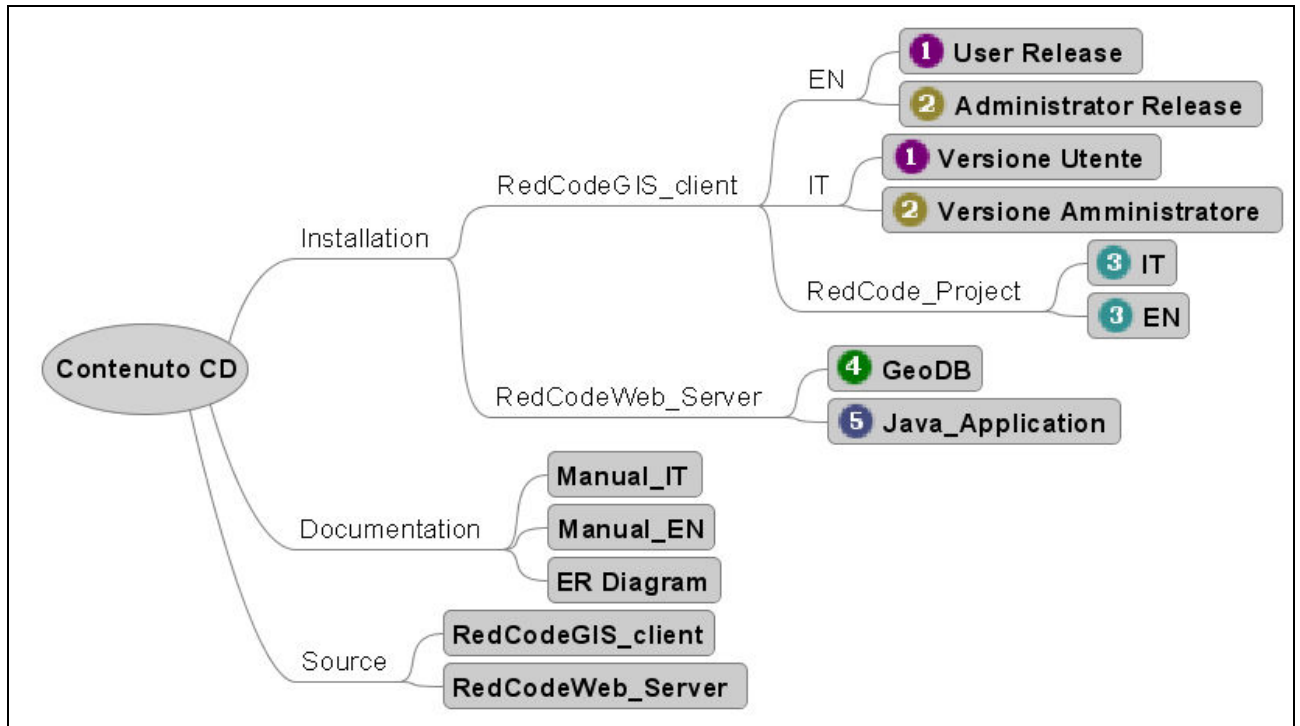
5.2 Geoserver Limitations

RedCode SW is programmed to run with **only one Geodatabase**.

"FIRE SAFETY" IS BUILT ON GEOTOOLS, POSTGRESQL, POSTGIS, APACHE TOMCAT, GVSIG, JAVA AND OTHER OPEN SOURCE SOFTWARE. THE PROGRAM IS OPEN SOURCE SOFTWARE AND IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



6. Contents of installation CD





7. ER Diagram

