

# **The KGeography Handbook**

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# The KGeography Handbook

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### **Abstract**

KGeography is a geography learning tool for KDE. Right now it has seven usage modes:

- Browse the maps clicking in a map division to see its name, capital and flag
- The game tells you a map division name and you have to click on it
- The game tells you a capital and you have to guess the division it belongs to
- The game tells you a division and you have to guess its capital
- The game shows you a map division flag and you have to guess its name
- The game tells you a map division name and you have to guess its flag
- The game shows an empty map and you have to place divisions on it one by one

## Chapter 1

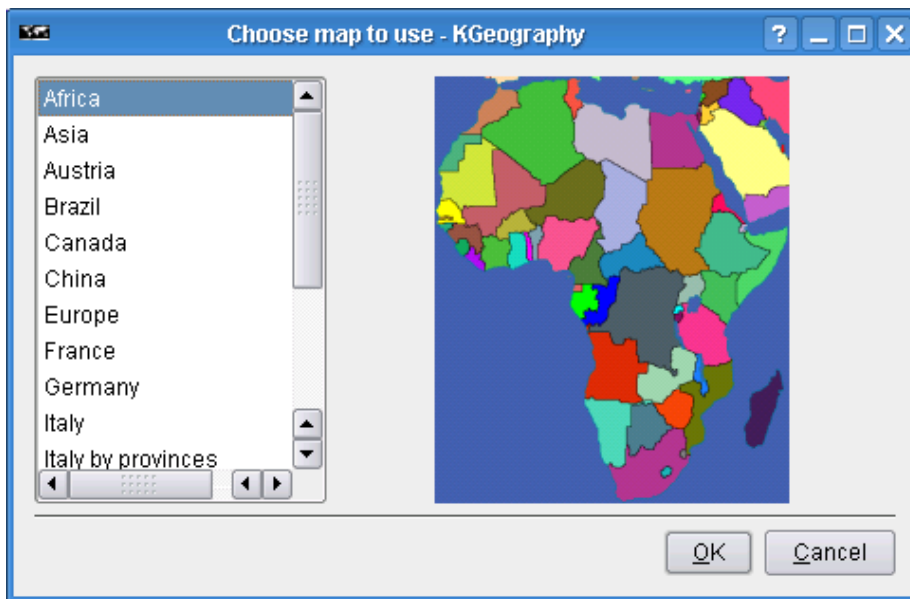
# Introduction

KGeography is a geography learning tool for KDE. It allows you to learn about the political divisions of some countries (divisions, capitals of those divisions and their associated flags if there are some).

## Chapter 2

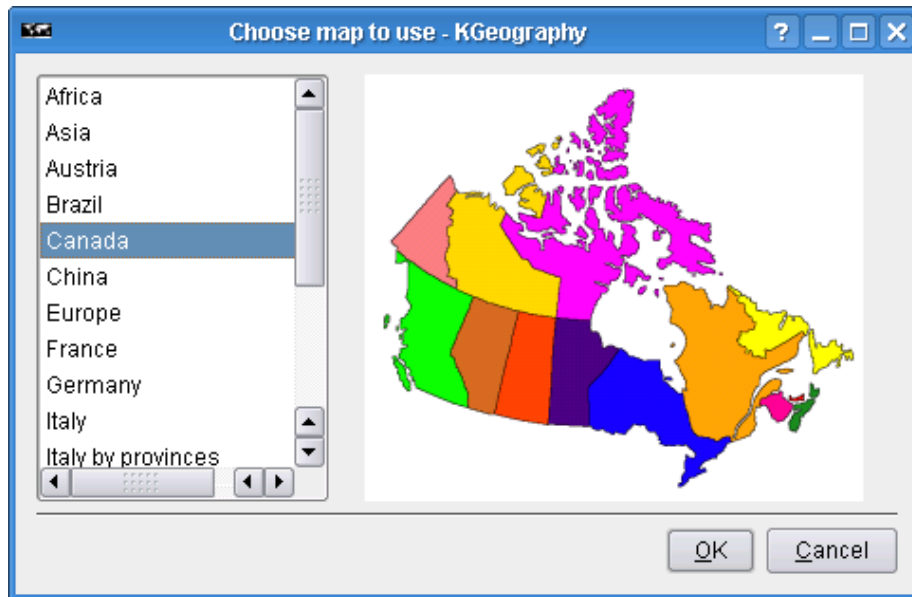
# Quick Start to KGeography

When you run KGeography for the first time, it first asks you to choose a map to start with.

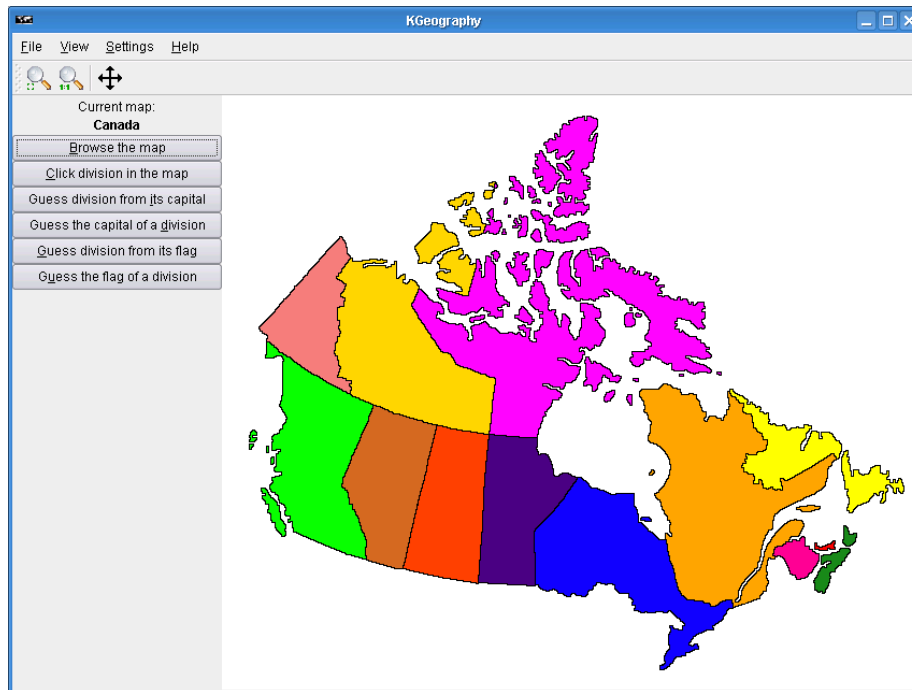


Here we choose Canada

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And KGeography main window appears with the map of Canada:



You can then choose what type of learning or testing you want to do by looking at the menu on the left:

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Current map:  
**Canada**

Browse the map

Click division in the map

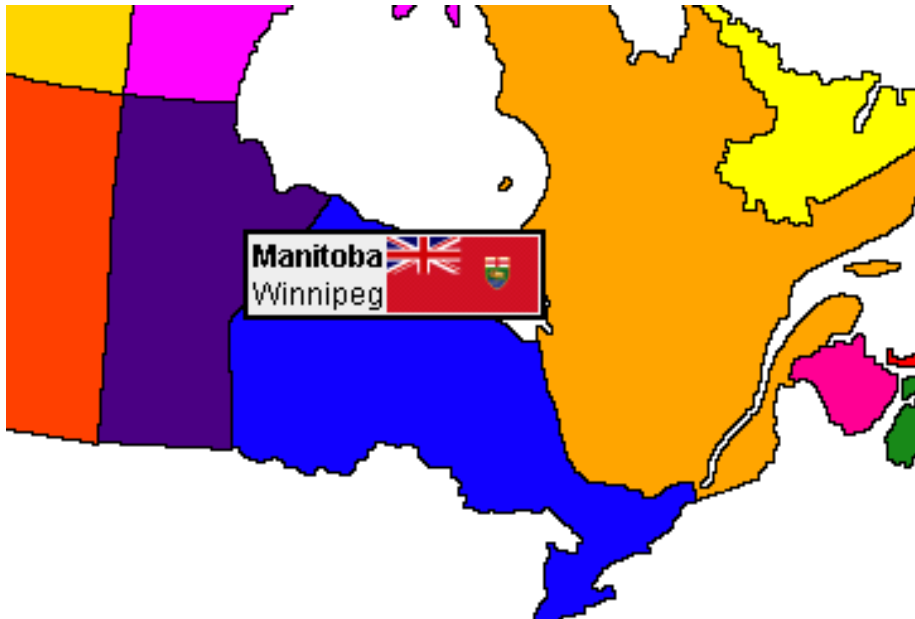
Guess division from its capital

Guess the capital of a division

Guess division from its flag

Guess the flag of a division

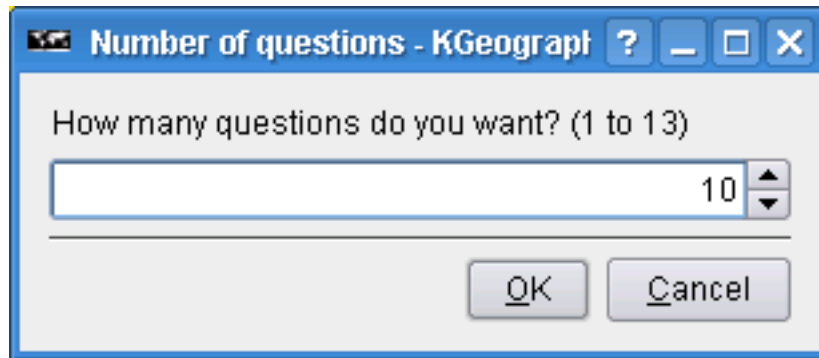
Explore Map: a left mouse button click on an area of the map will display informations about that area:



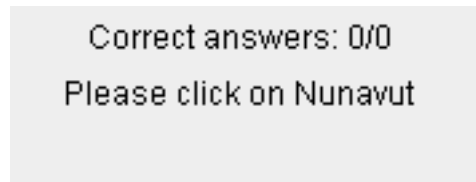
Location of Provinces or Territories: you are first asked how many questions you want



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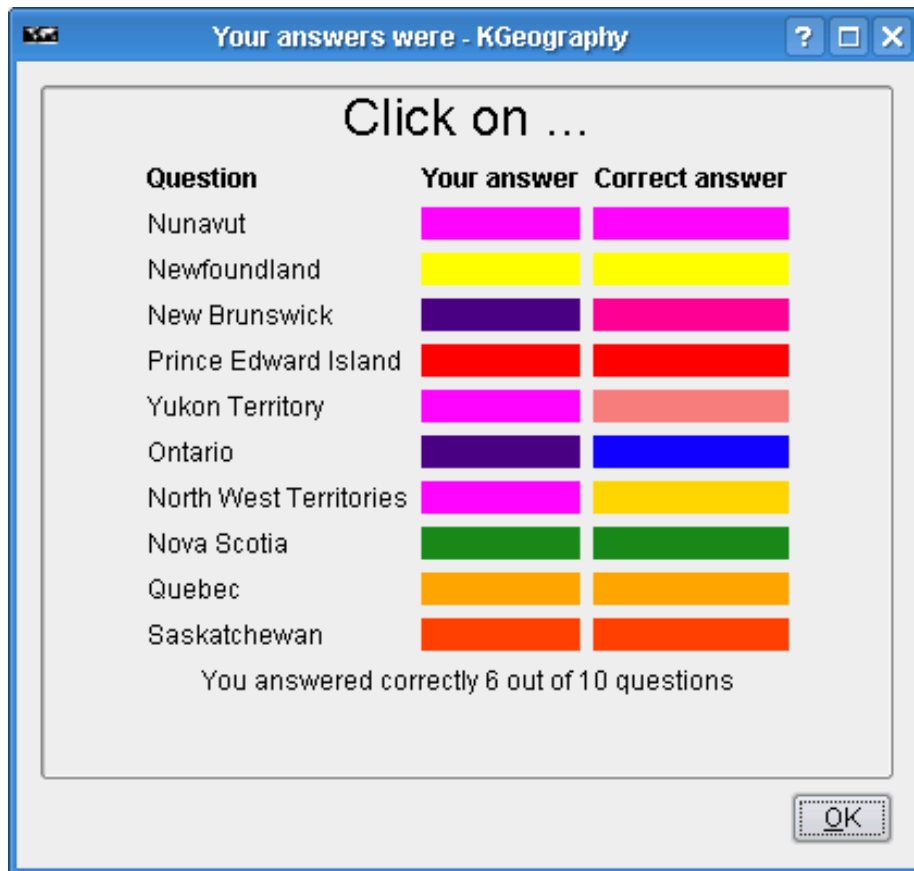


Then you are asked to click on a specific province:



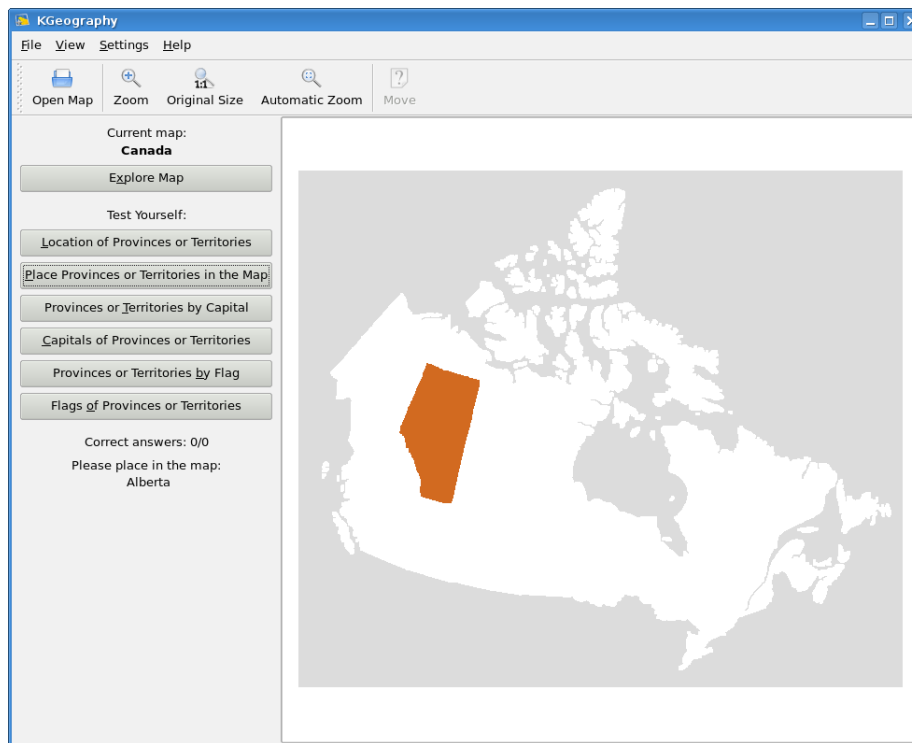
When you finish all the questions, a result dialog is shown with your correct and uncorrect answers:

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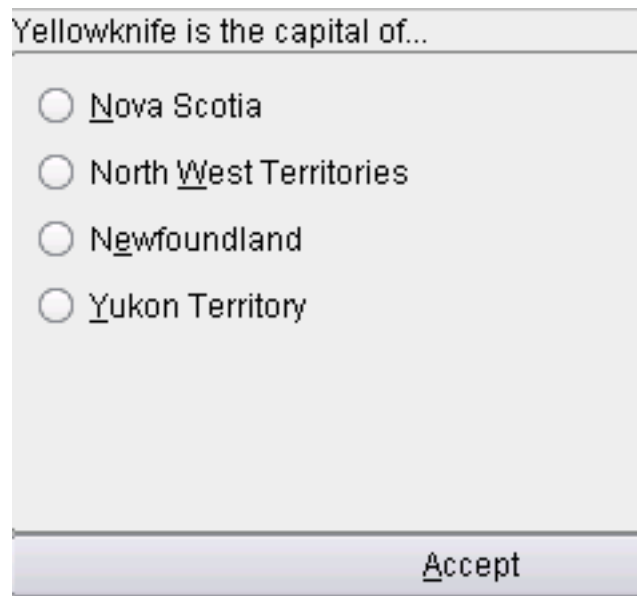


Place Provinces or Territories in the Map: the cursor takes the shape of a province and you have to place it in the map:

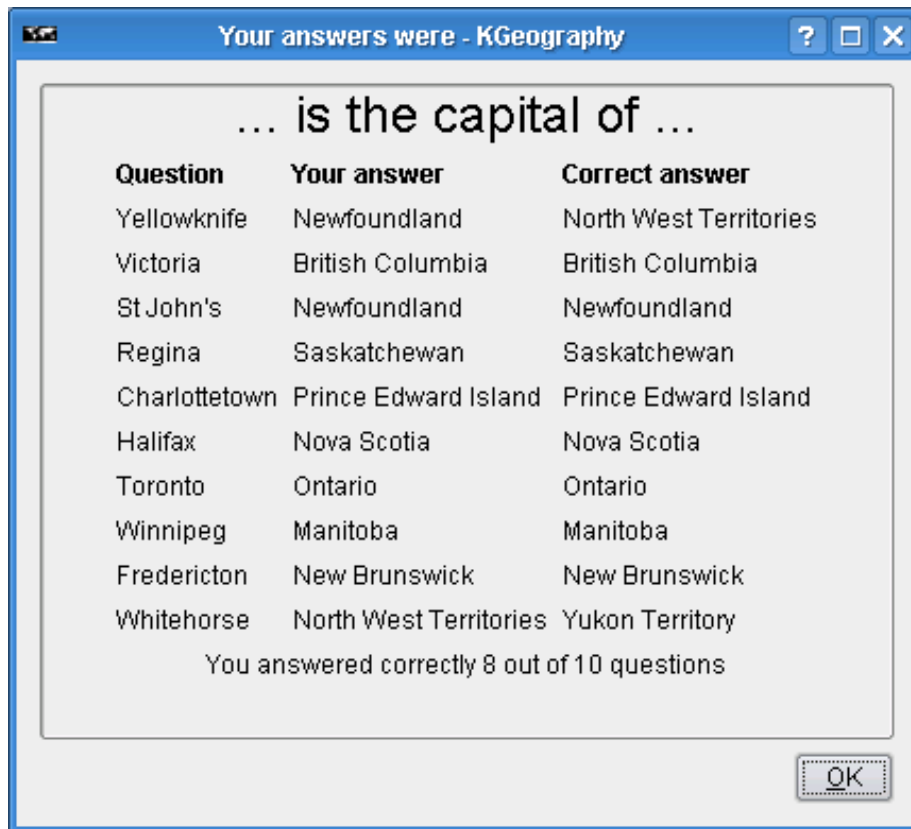
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Provinces or Territories by Capital: you are asked to find the name of a province among a choice of 4 given its capital:




And the results are displayed when the test is finished:



Capitals of Provinces or Territories: you have a capital and four province names and you must choose the correct one. As before, at the end a result dialog is shown.

Provinces or Territories by Flag: a flag is shown and you must find the province it belongs to.



The image shows the flag of Prince Edward Island. It features a red and white saltire (St. Andrew's cross) on a white background. In the center of the saltire is a green landscape with three trees: two smaller trees on the left and a larger tree with red fruit on the right. Above the saltire is a red horizontal band containing a yellow lion passant guardant.

This flag belongs to:





- Quebec
- Prince Edward Island
- North West Territories
- Nunavut

Accept

Flags of Provinces or Territories: a province name is given and you must find the correct flag among four.

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The flag of New Brunswick is...

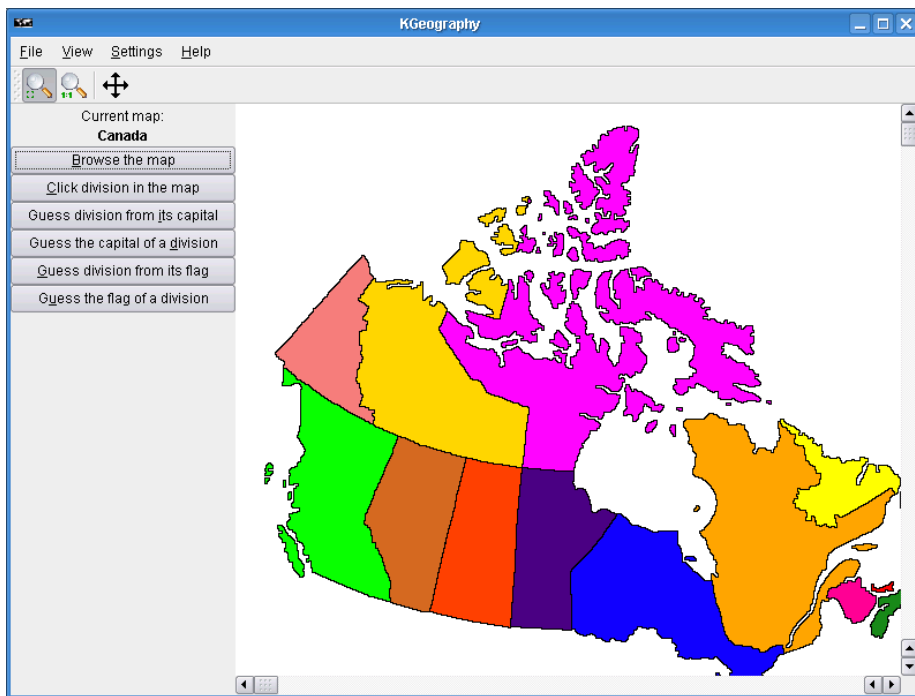
- 
- 
- 
- 

Accept

## Chapter 3

# Using KGeography

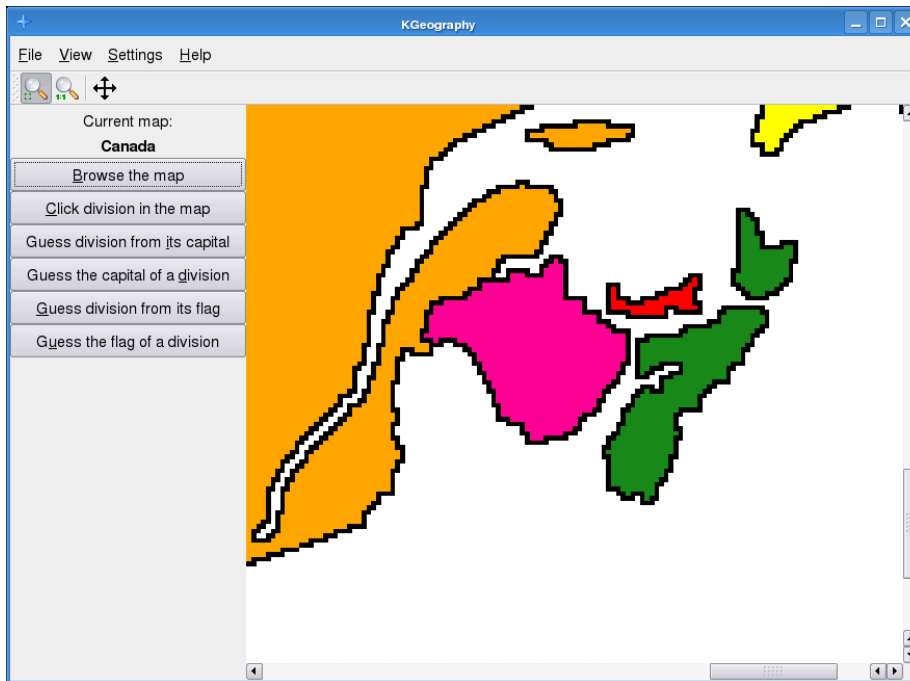
KGeography displays informations about some countries and tests you about those informations.



### 3.1 More KGeography features

Another feature of KGeography is the possibility of zoom on a map.

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You can click the Zoom and then draw a rectangle to zoom in a part of the map. While in zoom mode, you can press right mouse button to go back to the original map size (the Original Size action has the same effect). Use the scroll bars to move around the zoomed map or use the Move action that will allow you to drag the map using left mouse button. The Automatic Zoom feature will make the map as big as possible.



## Chapter 4

# How to make maps

A map in KGeography is made by two files, one is the image of the map and the other one is its description.

### 4.1 Helper tool

You can find [here](#) a tool (made by Yann Verley) which helped him with the map of France. To find out its usage, simply execute it and read the help message. It basically creates the `.kgm` file from a plain text file and creates a file with the colors it has assigned to each division, so you can fill the map according to them.

There is another tool `colorchecker.py` written by Albert Astals Cid. You need PyQt4 to run this. Just run this with the `.kgm` filename as argument (you also need the `.png` file of the map in the same folder). This will tell you if any pixel on the map has a different color which is not defined in the `.kgm` (description) file.

### 4.2 Description file

The description file is needed and its file extension is `.kgm`. It should begin with `<map>` and end with `</map>`.

Inside of those tags there should be:

- `<mapFile>` and `</mapFile>`: the name of the file (without any path) containing the map image, e.g. `'europe.png'`.
- `<name>` and `</name>`: the name of map, e.g. `'Europe'`.

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- `<divisionsName>` and `</divisionsName>`: the general name of divisions in this map, that is, Provinces, States, Countries, etc.
- A `<division>` and `</division>` for each division in the map.

Each division has these tags:

- `<name>` and `</name>`: the name of the division, e.g. 'Albania'.
- `<capital>` and `</capital>`: the name of the capital of the division, e.g. 'Tirana'.
- `<ignore>` and `</ignore>`: can be set to `yes`, `allowClickMode`, `allowClickFlagMode` and `no`. If this tag is set to `yes` then the division will be ignored when asking for divisions in that map. It is then as if this division does not exist in KGeography quiz modes. If this tag is set to `allowClickMode` then KGeography will ask for the division in the Location of ... mode but not in other quiz modes. If this tag is set to `allowClickFlagMode` then KGeography will ask for the division in the Location of ... mode and in the flag related quizzes but not in other quiz modes. Setting this tag to `no` means the division will appear in all modes (browse and quizzes). This tag is optional and when there is no `<ignore>` tag that means as it is set to `no`. For example 'Algeria' has this tag set to `yes` in the 'Europe' map which means that 'Algeria' will not be part of any quiz in the 'Europe' map.
- `<flag>` and `</flag>`: the file (without any path) containing the flag of the division, e.g. 'albania.png'. This tag is optional. Not needed for the divisions whose `<ignore>` tag is set to `yes`.
- `<color>` and `</color>`: the color the division has in the map.
- `<>falseCapital>` and `</falseCapital>`: There can be any number of false-Capital pairs, they are used to provide a list of false answers to the capital question instead of choosing the false answers amongst the other divisions capitals.

The color is defined using three tags:

- `<red>` and `</red>`: red component of the color. Valid values are between 0 and 255.
- `<green>` and `</green>`: green component of the color. Valid values are between 0 and 255.
- `<blue>` and `</blue>`: blue component of the color. Valid values are between 0 and 255.

### TIP

It is convenient to create 2 or 3 false divisions like 'Water', 'Frontier' and 'Coast' and set them with the `<ignore>` tag set to `yes`. Don't forget not to set color for any 'Frontier' 0,0,0 in RGB. Please make it something like 1,1,1 so that a border outline comes while placing any division on the map.

**IMPORTANT**

All names (capitals and divisions) must be in English.

### 4.3 Map file

The map file is quite simple but laborious to create. It has to be in PNG format. You can find some maps to transform at [Cia Reference Maps](#). If no map fits your needs you can download the [political world map](#), take a screenshot of it and work from it. Each division in the map should have one and only one color. To achieve this you can use image processing programs like The Gimp and Kolourpaint.

### 4.4 Flags

If you have used the `<flag>` tag you should provide the flag files. They have to be in PNG format and better if they are 300x200 pixels and you provide a SVG file for it. To obtain SVG flags of almost all countries in the world and some other divisions, you can consult the [Sodipodi flags collection](#).

### 4.5 How to test

Before sending your map to Albert [tsdgeos@terra.es](mailto:tsdgeos@terra.es), you should test it to see it has no errors. To achieve that, you have to do the following:

- Put the map description and map image file in `$KDEDIR/share/apps/kgeography/`
- Put the flag PNG files (if any) in `$KDEDIR/share/apps/kgeography/flags/`

Once that has been done you should be able of opening your map from inside KGeography.

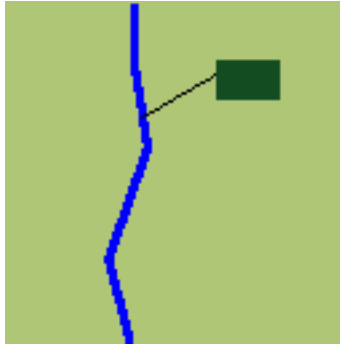
If you don't know which is your `$KDEDIR`, type `kde-config --prefix` in a shell.

**TIP**

Use the `colorchecker.py` tool from the helper tools to check if any extra color left on the map which is not defined on the `.kgm` file.

## 4.6 Non political maps

Is it possible to do non-political maps? Yes, it is!



Of course, the division concept can be extended to a river or a mountain. During the creation of the map, you should keep in mind that most times the river or mountain will be too small that you should provide an additional clicking area. In this example the river would have the maroon area and color <20,76,34> as its identifier.

## Chapter 5

# Command Reference

### 5.1 The main KGeography window

#### 5.1.1 The File Menu

**File** → **Open Map...** (Ctrl+O) Open the choose map dialog

**File** → **Quit** (Ctrl+Q) Quits KGeography

#### 5.1.2 The View Menu

**View** → **Zoom** Goes in zoom mode

**View** → **Original Size** Sets the map back to its original size

**View** → **Automatic Zoom** Sets the map to automatic zoom using as much space as possible

**View** → **Move** Moves the current map

#### 5.1.3 The Settings Menu

**Settings** → **Show Toolbar** Show/Hide the KGeography toolbar.

**Settings** → **Configure Shortcuts...** Configure key shortcuts for KGeography.

**Settings** → **Configure Toolbars...** Configure the KGeography toolbar.

### 5.1.4 The Help Menu

**Help** → **KGeography Handbook (F1)** Invokes the KDE Help system starting at the KGeography help pages. (this document).

**Help** → **What's This? (Shift+F1)** Changes the mouse cursor to a combination arrow and question mark. Clicking on items within KGeography will open a help window (if one exists for the particular item) explaining the item's function.

**Help** → **Report Bug...** Opens the Bug report dialog where you can report a bug or request a 'wishlist' feature.

**Help** → **About KGeography** This will display version and author information.

**Help** → **About KDE** This displays the KDE version and other basic information.

## Chapter 6

# Credits and License

KGeography

Program copyright 2004-2008 Albert Astals Cid [tsdgeos@terra.es](mailto:tsdgeos@terra.es)

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Kushal Das [kushaldas@gmail.com](mailto:kushaldas@gmail.com)

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# Appendix A

## Installation

### A.1 How to obtain KGeography

KGeography is part of the KDE project <http://www.kde.org/> .

KGeography can be found in the kdedu package on <ftp://ftp.kde.org/pub/kde/> , the main FTP site of the KDE project.

### A.2 Compilation and Installation

In order to compile and install KGeography on your system, type the following in the base directory of the KGeography distribution:

```
% ./configure
% make
% make install
```

Since KGeography uses **autoconf** and **automake** you should have no trouble compiling it. Should you run into problems please report them to the KDE mailing lists.