Arabesque

Gflowiz project team

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Contents

Chapter 1

About Arabesque

Arabesque is a web application for thematic mapping of flow and networks datasets. Built in javascript and HTML 5, it provides a full toolset to filter you data and simplify it in order to make clearer and understandable maps.

This document aims to present the application and its fonctionnalities using the provided datasets.

The documentation is segmented in several parts:

- Main page
- Main functionnalities
- Import a dataset

Please find the application at this address : arabesque.ifsttar.fr and more information on the project here : geoflowiz.hypotheses.org.

Please report any issue on GitHub. This is a Free and OpenSource project, feel free to help us make it better.

Chapter 2

About the Gflowiz project

Arabesque is part of the Gflowiz research project on flow maps in the geoweb.

Chapter 3

Main page

The main page welcomes you and provides several informations about the application and a couple ways to enter it.

It is a page that you can scroll down. It is segmented in several parts:

- Welcome page
- Documentation and demos
- Gallery
- General informations on the Gflowiz project
- Detailed informations on the Arabesque application

3.1 Welcome page

1. Arabesque logo : click on it to return to the main page
2. Gallery button : to go directly to the gallery
3. Guide button : go to the guide
4. Project : visit the project website
5. New map : creating a new map with you own dataset
6. Load saved map : reload a map you created before
7. Scroll down to access more informations

3.2 Documentation and demos

1. You can come to this documentation by clicking on the link
2. Arabesque comes with 2 preloaded maps on several subjects:

- London Bike Traffic

Figure 3.1: Welcome page

- Swiss Migration

3.3   Gallery

A caroussel display several screenshots of maps realized with Arabesque.

3.4   General informations

The main page provides general information on :

1. the application (funding and contributors)
2. the Gflowiz project that Arabesque is part of.

3.5   Detailed informations

Finally you can find detailled informations about the application :

Figure 3.2: Demos

Figure 3.3: Gallery

Figure 3.4: General informations

Figure 3.5: Detailed informations

- Software libraries
- Source datasets
- Licence
- Link to the source code
- Contact us policy

Chapter 4

Functionnalities

4.1 Launching an example

In order to test the differents functionnalities provided by Arabesque, we will use the Swiss communting demo. Please find it in the Demo section and click on the `Explore` button (1).

You might be greeted by a warning message. This is normal, if Arabesque find nodes without links or links without nodes, it will remove them. It is based on a join on nodes IDs.

1. Click on `Ok`.

4.2 Panels

Arabesque is divided in 3 panels:

1. Layer management panel
2. Map panel
3. Data handling panel

The side panels (layer and data) can be hidden by clicking on the arrows on the

side.

Figure 4.1: Launching Swiss communting example

Figure 4.2: Cleaning the dataset

Figure 4.3: Arabesques panels

4.2.1 Layer management panel

The layer panel contains several buttons and tools to handle the layers.

1. Home button to get back to Welcome page
2. Projection : click to deploy the projection tool
3. Title : dialog box to change map title
4. Add layers: toolbox to add layers
5. Layers : area where you can manipulate the layer

Let's see those how they work.

4.2.1.1 Projection tool

By default, entry data and project are into WGS84 (EPSG:4326), which is a Geographic Coordinnate system. If it is great for dataset on a global scale, for more local ones, it might be interesting to use *projected coordinate system*. Arabesque provides a series of preset projection but you can also provide an EPSG code and the application will look for its definition on the website epsg.io.

1. Click on the *Projection* button to deploy the toolbox
2. You can choose a projection from the list of provided ones
3. Or you can enter an EPSG code to get the definition from the web.

4.2.1.1.1 Use a predefined projection

Figure 4.4: Arabesques panels

Figure 4.5: Projection toolbox

Figure 4.6: Projection toolbox

Figure 4.7: Projection change

1. Click on the button to deploy the drop-down list
2. Choose the projection you want
3. Click on *Change* to change the map projection to the new one

4.2.2   Map panel

4.2.3   Data handling panel

Chapter 5

Import a dataset

In this part, we will show you how to import a dataset into the application.