

Objective = manage paths from GPS points

In this tutorial you will learn how to

Create paths with ordered lists of GPS points

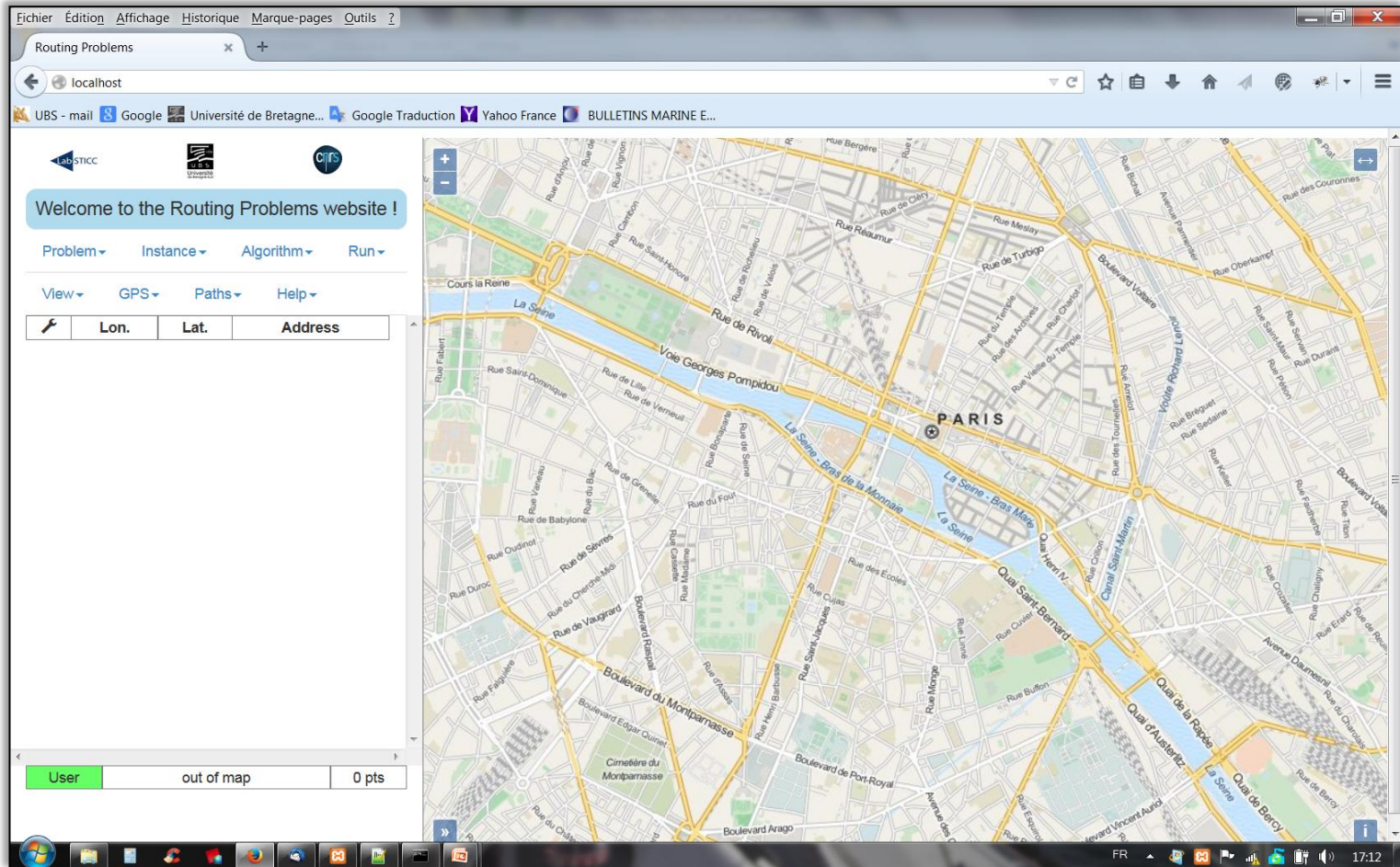


We suppose you are using Firefox, Chrome or IE.

We suppose you have a running, and well-configured, apache server on your PC.



Start a browser with the URL "localhost"



You should see exactly this.



Create a list of 3 points, from an empty map, and save them as the "paris" list.

The screenshot shows the Routing Problems website interface. The browser window displays the URL localhost and various navigation icons. The website header includes the LabSTIC logo and a welcome message. Below the header, there are dropdown menus for Problem, Instance, Algorithm, Run, View, GPS, Paths, and Help. A table lists three points with their coordinates and addresses. The map on the right shows Paris with three green location pins placed at the specified addresses.

	Lon.	Lat.	Address
1	2.3580 E	48.8312 N	199 Boulevard Vincent Auriol, Paris, 75013, Paris, Île-de-France, FR
2	2.3538 E	48.8658 N	254 Rue Saint-Martin, Paris, 75003, Paris, Île-de-France, FR
3	2.3146 E	48.8575 N	Boulevard des Invalides, Paris, 75007, Paris, Île-de-France, FR

User 2.35476 E | 48.85196 N 3 pts
paris

Create a path.

Welcome to the Routing Problems website !

Problem ▾ Instance ▾ Algorithm ▾ Run ▾

View ▾ GPS ▾ Paths ▾ Help ▾

	Lon.	Lat.	
1 ▾	2.3580 E	48.8312 N	Path from the ordered list
2 ▾	2.3538 E	48.8658 N	Path from start/stop
			Delete path
			Compute distance/time matrix
3 ▾	2.3146 E	48.8575 N	Boulevard des Invalides, Paris, 75007, Paris, Île-de-France, FR

User out of map 3 pts
paris

To create a path from the ordered list of GPS points, click on the "Path from the ordered list" button.

Look at the path.

The screenshot shows a web browser window titled "Routing Problems" at the URL "localhost". The browser's address bar and tabs are visible. The page content includes a navigation menu with "Problem", "Instance", "Algorithm", and "Run" options, and a "View" section with "GPS", "Paths", and "Help" options. A table lists three points with their coordinates and addresses. A map of Paris displays a blue route connecting these three points. A red arrow points from the text box to the map.

	Lon.	Lat.	Address
1	2.3580 E	48.8312 N	199 Boulevard Vincent Auriol, Paris, 75013, Paris, île-de- France, FR
2	2.3538 E	48.8658 N	254 Rue Saint-Martin, Paris, 75003, Paris, île-de-France, FR
3	2.3146 E	48.8575 N	Boulevard des Invalides, Paris, 75007, Paris, île-de-France, FR

The map shows a blue route starting at point 1, going to point 2, then to point 3, and returning to point 1. A red arrow points from the text box to the map.

User out of map 3 pts
paris

The map from point 1, to point 3, through point 2 is displayed in blue.



Clear the path.

Welcome to the Routing Problems website !

Problem ▾ Instance ▾ Algorithm ▾ Run ▾

View ▾ GPS ▾ Paths ▾ Help ▾

🔧	Lon.	Lat.	
1 ▾	2.3146 E	48.8575 N	Path from the ordered list Path from start/stop Delete path Compute distance/time matrix
2 ▾	2.3538 E	48.8655 N	
3 ▾	2.3580 E	48.8312 N	199 Boulevard Vincent Auriol, Paris, 75013, Paris, Île-de- France, FR

User out of map 3 pts

paris

Click on the "Delete path" button.

Look at the map without the path.

Welcome to the Routing Problems website !

Problem ▾ Instance ▾ Algorithm ▾ Run ▾

View ▾ GPS ▾ Paths ▾ Help ▾

	Lon.	Lat.	Address
1 ▾	2.3146 E	48.8575 N	Boulevard des Invalides, Paris, 75007, Paris, Île-de-France, FR
2 ▾	2.3538 E	48.8658 N	254 Rue Saint-Martin, Paris, 75003, Paris, Île-de-France, FR
3 ▾	2.3580 E	48.8312 N	199 Boulevard Vincent Auriol, Paris, 75013, Paris, Île-de- France, FR

User out of map 3 pts

paris

The blue path vanished.



Option: create a path between two points only.

Welcome to the Routing Problems website !

Problem ▾ Instance ▾ Algorithm ▾ Run ▾

View ▾ GPS ▾ Paths ▾ Help ▾

🔧	Lon.	Lat.	Address
1 ▾	2.3146 E	48.8575 N	Boulevard des Invalides, Paris, 75007, Paris, Île-de-France, FR

Toggle start point

Toggle stop point

Up

Down

Delete

Center the map on this point

Update address

Reverse geolocate

User out of map 3 pts

paris

Toggle point 1 as the "start" point.

Option: create a path between two points only.

Welcome to the Routing Problems website !

Problem ▾ Instance ▾ Algorithm ▾ Run ▾

View ▾ GPS ▾ Paths ▾ Help ▾

🔧	Lon.	Lat.	Address
1	2.3146 E	48.8575 N	Boulevard des Invalides, Paris, 75007, Paris, Île-de-France, FR
2	2.3538 E	48.8658 N	254 Rue Saint-Martin, Paris, 75003, Paris, Île-de-France, FR
3	2.3580 E	48.8312 N	199 Boulevard Vincent Auriol, Paris, 75013, Paris, Île-de-France, FR

Toggle start point

Toggle stop point

Up

Down

Delete

Center the map on this point

Use data address

User out of map 3 pts

paris

Toggle point 3 as the "stop" point.

Option: create a path between two points only.

The screenshot shows the 'Routing Problems' website interface. The main map displays Paris, France, with a red pin at the starting point and a green pin at the destination. The control panel on the left includes a table of paths and a dropdown menu.

	Lon.	Lat.	
1	2.3146 E	48.8575 N	Path from the ordered list
2	2.3538 E	48.8655 N	Path from start/stop
3	2.3580 E	48.8312 N	Delete path
			Compute distance/time matrix
			199 Boulevard Vincent Auriol, Paris, 75013, Paris, Île-de-France, FR

Click on the "Path from start/stop" button.



Option: create a path between two points only.

Welcome to the Routing Problems website !

Problem ▾ Instance ▾ Algorithm ▾ Run ▾

View ▾ GPS ▾ Paths ▾ Help ▾

🔧	Lon.	Lat.	Address
1	2.3146 E	48.8575 N	Boulevard des Invalides, Paris, 75007, Paris, Île-de-France, FR
2	2.3538 E	48.8658 N	254 Rue Saint-Martin, Paris, 75003, Paris, Île-de-France, FR
3	2.3580 E	48.8312 N	199 Boulevard Vincent Auriol, Paris, 75013, Paris, Île-de-France, FR

Path between point 1 and 3 only.

User out of map 3 pts
paris



Conclusion



Congratulations !

You are able to create paths from GPS points.

