



## Geofences

Geofence, or geographical zone, is an area on the map that is important for your tracking purposes. Geofences can be used to control unit activity in these areas or, on the contrary, outside them.

A Geofence can have a shape of a polyline (for example, an avenue or any road), polygon (a city or park or plant) or circle with any radius.

### How to Create Geofence

Here are three steps to create a Geofence.

#### 1. Map Geofence

After you have pressed the new button, a help window appears to provide you with the instructions about drawing Geofences. Choose a Geofence type on the left: line, polygon or circle.

Then map a Geofence. Here are the basic rules for mapping a Geofence:

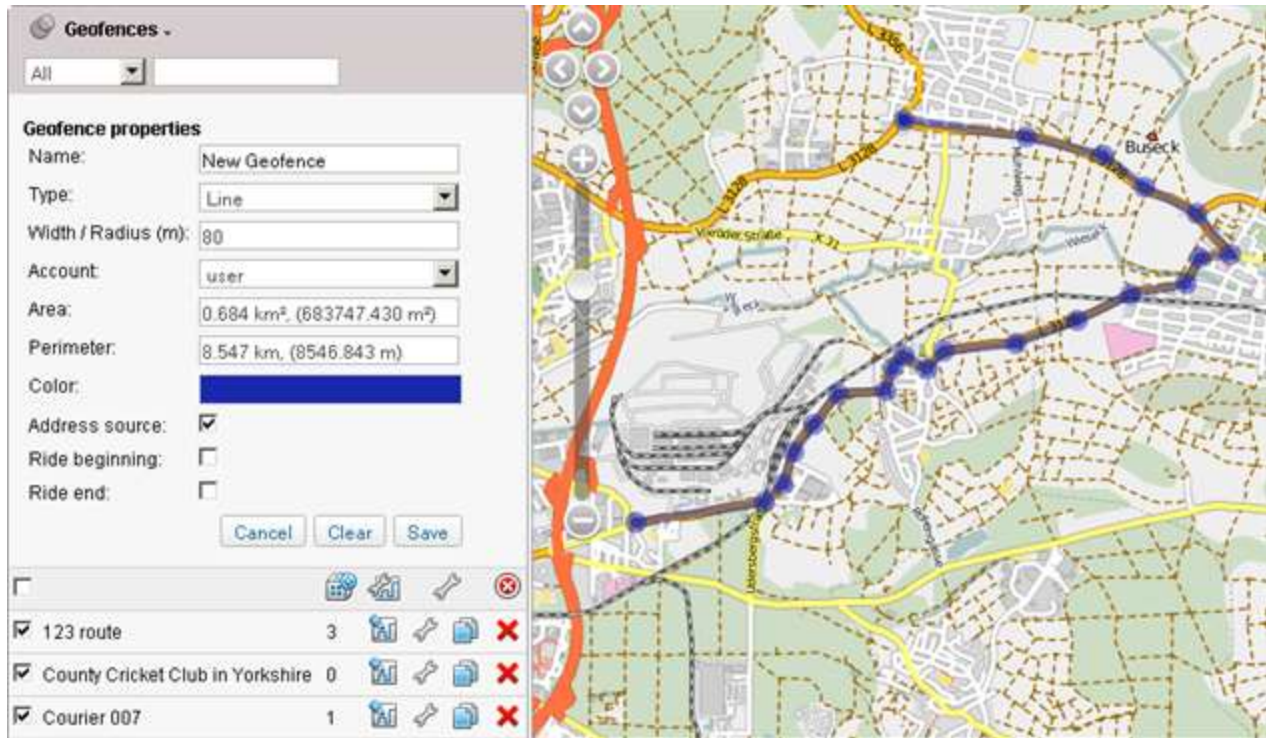
Double-click on any place of the map to put the first point. Then add more points using the same method. Put the points as close or as far from each other as you want.

To insert a point between two other points, double-click on a segment between them.

To move a point to another place, click on it and holding the left mouse button drag to another place on the map. Then release the mouse button.

To delete a point, just double-click on it.

Note that points cannot be deleted if there are only two points - for lines, or three - for polygons.



Fig

A quick way to map a Geofence is by using the Routing tool (create lines) or Address tool (create circles).

## 2. Set Geofence Properties

**Name:** a Geofence name that is used while tracking units as well as in reports and notifications.

**Type:** line, polygon or circle. For line you also have to indicate its width, for circle - radius (in meters).

**Account:** this dropdown list is shown if the current user has the access to more than one account.

**Area & Perimeter:** these fields are not editable; they are calculated automatically when mapping a Geofence.

**Address source:** check this box if you want to use a Geofence instead of a usual addresses. In this case, a Geofence name can be used in reports in the location columns. It happens if Geofences as address source option is activated in the report template.

**Ride beginning/end:** these parameters are important for reports on rides. The same Geofence can be simultaneously the end of one ride and the beginning of another, but cannot be the beginning and the end of one ride.

**Color:** choose a color using the palette or enter a color RGB code. This color will be used to display a Geofence on the map and show its name in a unit info tip (if a unit is located in this Geofence). If a color is not set, the default (green) color will be used for the Geofence.

## 3. Save Geofence



When finished, press Save. In case of a mistake, press Clear and try again. To close the create mode without saving results, press Cancel. Created Geofence appears at the end of the list and on the map.

### Manage Geofence

In the work area there is a list of all created Geofences. Put check marks in the left column to choose Geofences to be displayed on the map. Unselect this box to remove Geofences from the map. Geofences can be displayed with captions or not (depending User Settings). If you have ticked too many Geofences or they are very big, it can slow down browser performance. In this case, the option to render Geofences on the server can help (see User Settings => Maps).

Geofences are given in the alphabetical order. When you create a new Geofence, it appears at the end of the list with map checkbox enabled. However, when the list is reloaded, new Geofences take their places according to their names.

Placing a cursor over a Geofence name, in the popup tooltip you will get all the information about a Geofence type, its parameters (ride beginning/end, address source), and the account where a Geofence belongs to (if you have access to more than one account).

For your convenience, there is a filter with several predefined criteria to sort Geofences:

The screenshot shows a 'Geofences' window with a toolbar containing 'New', 'Import/Export', and a filter dropdown set to 'All'. Below the toolbar is a table of geofences. A tooltip is visible over the 'Giessen DE' entry, displaying its details.

Geofence Name	Count	Map Icon	Key Icon	Print Icon	Delete Icon
<input type="checkbox"/>					
<input type="checkbox"/> County Cricket Club in Yorkshire	0				
<input type="checkbox"/> Geofence name	0				
<input type="checkbox"/> Giessen DE	0				
<input type="checkbox"/> Köln	0				
<input type="checkbox"/> Minsk-1	0				
<input type="checkbox"/> Minsk-2	2				
<input type="checkbox"/> New York	0				

Type	Line
Address source	Yes
Ride beginning	No
Ride end	No
Account:	user

**By some property:**

- All Geofences;
- Geofences with control points;
- Geofences without control points;
- Geofences used as address;
- Ride beginning;
- Ride end;
- Ride beginning and End;
- Polygons;
- Lines;
- Circles;
- Geofences used in unfinished routes;
- Geofences used in finished routes.

**By account:**

Here is a list of all accounts available for the current user (if there are more than one). Click on any of them to display Geofences belonging only to this account.

To quickly find a needed Geofence, you can use the dynamic filter above the list. Type a Geofence name or a part of the name and observe the search results.

Here is an explanation of icons and buttons used in the Geofences panel:

**Images / Buttons**

A button to create a route on the basis of a selected Geofence. Available only if you have Routes Control module in your package. Created routes will appear in the Routes panel.



Shows how many units are there within a Geofence at the moment. To see these units, place the cursor over the number. If there are question signs (?) in this cell, it means the option is disabled. To activate it, go to User Settings and check the item Presence in Geofences.



The button to edit Geofence properties (size, shape, name, color, position, etc.).



The button to view a Geofence properties (editing is disabled).



The button to copy a Geofence. You can edit a Geofence and save it under another name.

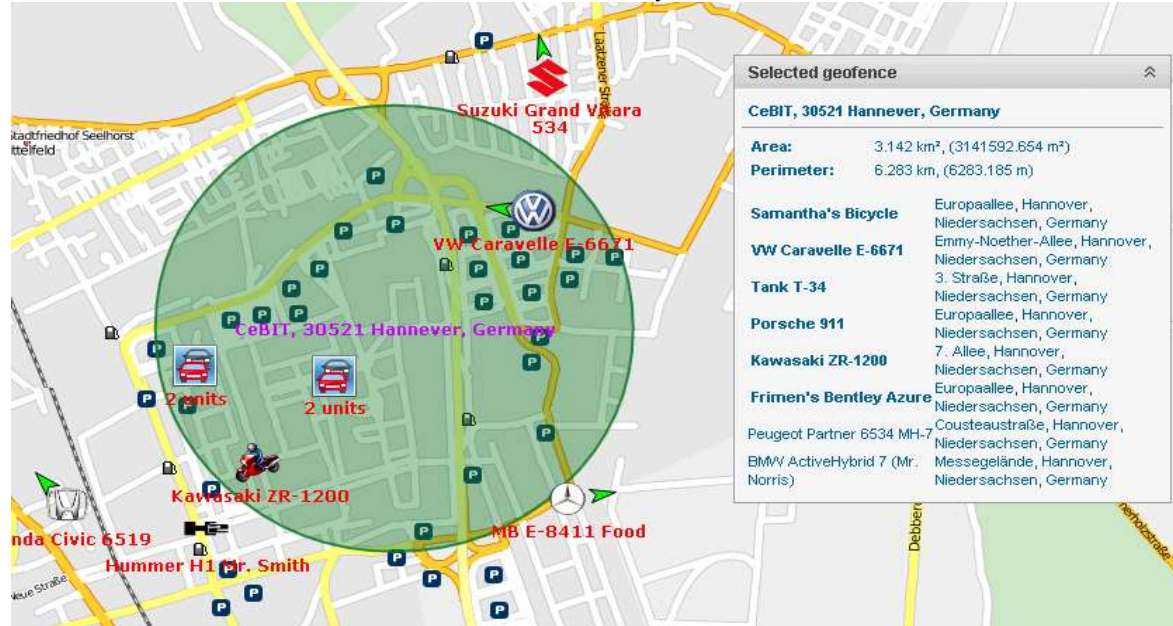


Press this button to delete a Geofence. To delete several Geofences at once, check them in the first column of the table and press the delete button at the top of the list. If the button is dimmed, it means you have not enough access rights to the account which the Geofence belongs to.

## Geofence Usage

While Tracking Online Geofences can be displayed on the map and mark some area of interest and simplify visual reception of the map. If a Geofence is displayed on the map and the mouse cursor is placed over it, you can press <ctrl> to see its name, area, perimeter, and the list of units located in this Geofence at the moment with addresses where they are. Perimeter for a line is its length (line thickness is not taken into account).

ⓘ If Geofences are rendered on the server, only Geofence name is available in the tooltip.



If a unit is situated in a Geofence, this fact can be shown in unit info tip. For this, check the option *Presence in Geofences* in User Settings. In Notifications

You can be notified by e-mail, SMS, online or by other means when your unit leaves a Geofence or enters in a Geofence. It is possible also to set speed limitations and sensor range for unit during its presence in a Geofence. Besides, on an entrance to a Geofence or an exit from it, an action can be performed automatically: send a message to driver, block the engine, change user access to this unit, and many others. See Notifications in Reports

Geofences can be used in reports as addresses (in the Location column), if *Geofences as address source* is checked.

Geofences can be used in many tabled reports, for example:

- **Geofences:** visits to Geofences (all entries and exits to/from selected Geofence(s) are given together with visit duration, distance travelled within the Geofence, average and maximum speed, etc.).
- **Non-visited Geofences:** Geofences which were ignored (non-visited) during a period of time or on certain days.



FleeTrak™



- **Rides and Unfinished Rides:** rides from one Geofence to another (convenient to control how a cargo is transported in several trips).  
Geofences can be also used to filter intervals in reports.  
When a report is generated, Geofences can be rendered on the map.