inViu web routes UI

contents

driven routes table - default display for driver's logbook

actions	trackable	depart. date	departure time	start address	arrival date	arrival time	destination address	driver	duration	distance	total driving distance	ø speed	layover	travel type	purpose
⊕ ✎ ❶ ✖ ⋮	BMW-15	13.03.2014	08:15:27	13088 Berlin,Torstr. 1	13.03.2014	12:27:38	30137 Hannover, Brehmhof 20	Peter Müller	04:12:11	289,40 km	15.890,30 km	69 km/h	10:10:35	private	
⊕ ✎ ❶ ✖ ⋮	BMW-15	14.03.2014	08:05:11	30137 Hannover, Brehmhof 20	14.03.2014	11:59:43	13088 Berlin,Torstr. 1	Peter Müller	03:54:32	293,50 km	16.183,80 km	75 km/h	19:38:33	private	
⊕ ✎ ❶ ✖ ⋮	Audi-2	12.03.2014	12:09:47	88542 Allwangen, Hofstr. 7	12.03.2014	13:37:55	80115 München, Kaiserallee 9	Frank Hofmann	01:28:08	62,10 km	45.700,50 km	42 km/h	18:09:25	business	customer visit
⊕ ✎ ❶ ✖ ⋮	Audi-2	12.03.2014	17:15:02	80115 München, Kaiserallee 9	12.03.2014	18:30:17	88542 Allwangen, Hofstr. 7	Frank Hofmann	01:15:15	64,80 km	45.765,30 km	52 km/h	03:38:07	business	customer visit
⊕ ✎ ❶ ✖ ⋮	Mercedes	12.03.2014	07:13:39	13088 Berlin, Torstr. 1	12.03.2014	08:13:45	01345 Burg, Müllerstr. 29	Lisa Rother	01:00:06	45,60 km	5.678,10 km	45 km/h	16:05:27	business	delivery
⊕ ✎ ❶ ✖ ⋮	Mercedes	12.03.2014	10:18:29	12345 Burg, Müllerstr. 29	12.03.2014	11:22:29	07555 Liebnitz, Bergweg 7	Lisa Rother	01:04:00	48,60 km	5.726,20 km	48 km/h	02:04:44	business	delivery

Search: trackables (11) [select all] [actions]

General

By either selecting trackables and/or date/time period in your filter options or if you select one or more trackables in the trackables table, the driven routes table will be displayed in the associated portlet.
In the default case the colour of each route is identical to the colour of the trackable assigned to that route. But the route colours can be customized by the user.
Routes selected in the routes table portlet will be displayed on the map in the same colour which is assigned to the route in the routes table (= colour of assigned trackable if the user has not selected another colour in the routes table itself). Colour will adapt and vice versa.
The map and the routes table should show the same trackables and date/ time period. Under certain conditions (adapt filter options, see page 6 + 8), using either drop down menu or the remove icon in the trackables' table, you can hide/show/ copy/move selected routes on the map and in the table.

For details on the driven routes table see:

table basic features: inViu web basic ui p. 7 - 12

actions button: divide, undo divide, combine, uncombine, show/ hide speed info, colour, remove, copy to, move to see routes ui page 4

actions column icons: show/ hide speed info, colour, route details, remove, **overflow:** divide, undo division, combine, uncombine, copy to, move to, see routes ui page 6 - 8

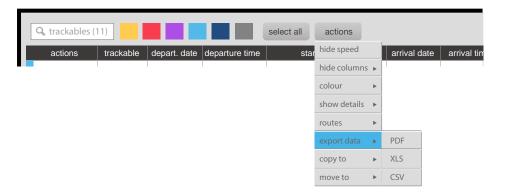**tabbar, status bar, default icons**: inViu web basic uip. 3 - 6,

editing columns: inViu web basic ui p.14 - 24

Default column types

• **actions** = action icons (for details see page ...)
• **trackable** = text (not editable)
• **departure** = date (dd/mm/yyyy) (not editable)
• **departure** = time (hrs/min/sec) (not editable)

• **start address** = address (not editable)
For start and destination address, it should be possible to draw up a new geofence from it.
If a geofence already exists at this address, it should figure instead of the address in the address column. The same applies to the „destination address" column.
See details of this subject on page 5 and 13 - 16

• **arrival date** = date (dd/mm/yyyy) (not editable)
• **arrival time** = time (hrs/min/sec) (not editable)

• **destination address** = address (not editable)
Please see column type „start address"

• **driver** = text (name or id) (not editable)
Clicking this column, a popup opens where you can select to hide this column in the actual table. The same applies to column types „total driving distance", „average speed", „layover" and „purpose", see details of this subject described on page 5

• **duration** = duration (hrs/min/sec) (not editable)
• **distance** = distance (km) (not editable)

• **total driving distance** = total driving distance (km) (not editable)
Please see colum type „driver"

• **avarage speed** = average speed (km/h) (not editable)
Please see colum type „driver"

• **layover** = duration (between the end of the last route and this route) (not editable)
Please see colum type „driver"

• **travel type** = text (editable)
Clicking in the field, you can create new travel types or change to another already created (details see page 5)

• **purpose** = text (editable)
Purpose of route can be definded here. Also column can be hidden, please see colum type „driver"

driven routes table - actions button

actions	trackable	depart. date	departure time	star		arrival date	arrival ti

Menu items:
- hide speed
- hide columns ▸
- colour ▸
- show details ▸
- routes ▸
- export data ▸ — PDF
- copy to ▸ — XLS
- move to ▸ — CSV

Search field: trackables (11)

Buttons: select all, actions

actions button

By clicking on the actions button a popup menu is shown. It always contains:
  • **toggle** show/hide speed
  • hide/show columns - if user hides columns, export settings should be changed
  • colour
  • show details
  • routes - see below
  • export
  • copy to
  • move to

The routes item is shown with subitems under defined conditions:
  • divide route - if one route is selected
  • undo division - if routes have been selected which are the result of former division
  • combine - if at least two routes in a consecutive time period have been selected
  • uncombine - if routes have been selected which have been formerly combined

The export item is shown with the follwing subitems
  • PDF
  • CSV
  • XLS

Working of menu actions is analogous to working of the action icon, see page 6 - 8.

driven routes table - table functions

add geofence

Please notice that this action can be done either in the routes table or in the routes details table. By clicking into one of the address fields in the routes details table or into a start or destination address field in the routes table, a popup opens, and you can either select to create a new geofence for this waypoint or address or to associate this waypoint/address to an existing geofence.

Creating a new geofence, you can assign it to a driver, trackable, purpose and specify a name, a radius, a shape and a tolerance value.
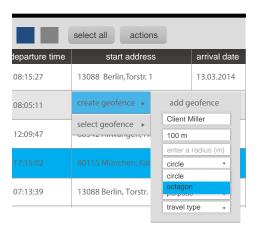
Input fields (name, tolerance) can be entered. Tolerance is indicated in metres. If name or tolerance have not been entered by the user, default name of new geofence is „geofence + number" (consecutive, starting from existing geofences, e.g. „geofence 03") . Default value for tolerance is 50 metres. Assignments to driver, purpose and travel type are optional. The default shape is a circle, but the user can select the option „octagon". In both cases you must specify a value for radius, otherwise the apply button will not be shown.
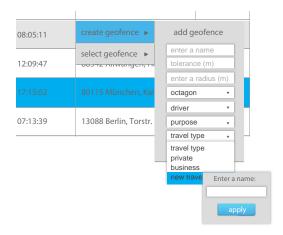
The user can create new assignments. Exemple:

By clicking on „new travel type" a second popup opens, where a name can be entered. If the user clicks the apply button, this travel type will then be assigned to the new geofence and its name will figure in the travel type drop down menu. If the user is clicking outside this popup, it will close and a new travel type will not be applied.

Once all necessary infos for creating a geofence have been entered, the apply button is shown and when clicked the new geofence is added in the datatbase and it will be visible on all open maps and in the tables.

For further information and how to create a new geofence on the map, see page 13 - 16.

hide columns

By clicking in one field of the following columns, a popup opens and you can select to hide column by clicking on the item.
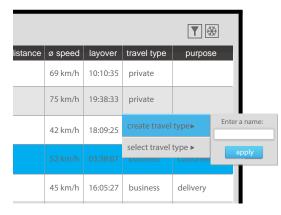
If this option is selected by the user, the table export/report settings have to be adapted and vice versa:

- total distance
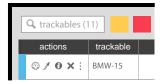- average speed
- layover
- purpose

define travel type

By clicking into the travel type field, the user can change, define or create a new travel type. Creating a new travel type, more details please see the create geofence action above.

show speed on map

By default, the speed icon is inactive. When the speed icon is activated by clicking, on the map selected routes will be coloured according to the speed of the trackable at the related time.

In the default case the following colour settings are implemented:

- 5-50 km/ h #46b4e7
- 50-100 km/ h #083e80
- 100-150 km/ h #f71228
- 150-200 km/ h #ffbf27

The user can change the speed colour settings in general settings > portlet contents > routes.

Click on the route and deactivate the speed info icon to see the route in its normal colour again. Also you can activate/deactivate the speed info icon in the actions column of the driven routes table.

colour route(s)

The coulour icon allows to colour selected route with a different colour than selected for the trackable.

Mousing over the colour icon a popup with colour swatches opens under it (for colours see basic UI page 7).

Clicking in one of them, all selected routes are coloured, as described in Basic UI page 7.
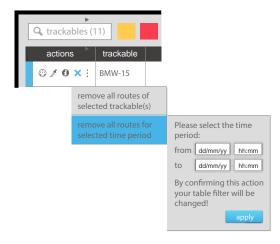
remove route(s)

The remove icon allows the user to remove routes from the table under certain conditions. Clicking on it, you can see a popup alerting that by doing this filter options and export data for the table will be changed as well and asking, whether you would like either

- ro remove all routes concerning the selected trackable(s)

or

- to remove all routes in a consecutive time lap, therefore you will have to specify the period of time.

The user can validate the action by clicking on the apply button. By this the filter for the table and the data export will be changed.

remove all routes of selected trackable(s)

remove all routes for selected time period

Please select the time period:

from   dd/mm/yy   hh:mm
to   dd/mm/yy   hh:mm

By confirming this action your table filter will be changed!

apply

show route details

By default, the route details icon is inactive. Clicking on it, it will be activated and the route details table will be displayed in the portlet which has been defined for this use

If the user closes the route details table in the other portlet, the icon return to its inactive state. Also, the user can close the route details table by re-clicking on the icon in the routes table.

Mousing over this icon being inactive you can see a popup with the title „see route details in another table".

Mousing over this icon being active the title „Close the route details table" will be shown. Route details table see page 9.
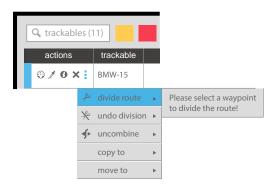
divide route

This icon will be visible in the overflow menu if one only route has been selected. It allows the user to cut the chosen route in two parts.

Clicking on this icon, a popup opens asking either to click on a waypoint on the map or, if opened, to select a waypoint in the route details table.

Doing so, the route will be cut in two and appear seperately in the routes table, in the route details table and on the map.

actions	trackable
	BMW-15

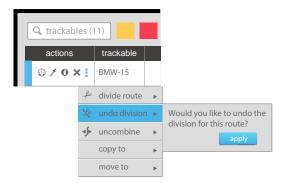| divide route ▸ | Please select a waypoint to divide the route! |
undo division ▸	
uncombine ▸	
copy to ▸	
move to ▸	

undo division

This icon will be visible in the overflow menu if one of the selected routes has been cut before.

Clicking it, a popup alerts the user that all selected routes having been cut before will be joined together again. A button allows the user to confirm the action.

Then, the two parts will appear as one only route on the map, on the routes table and, if open, in the route details table.

actions	trackable
	BMW-15

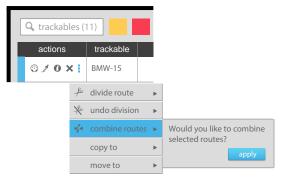| divide route ▸ | |
undo division ▸	Would you like to undo the division for this route?
uncombine ▸	apply
copy to ▸	
move to ▸	

combine routes

This icon will be visible in the overflow menu if at least two routes of the same trackable and in a consecutive time lap have been selected.

Then, a popup asks the user if he wants to combine the selected routes. Clicking on the apply button confirms the action.

By consequence, the selected routes are displayed as one on the map and in the tables.

actions	trackable
	BMW-15

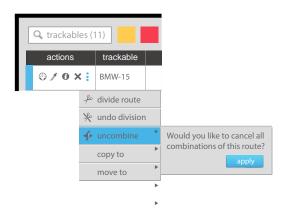| divide route ▸ | |
undo division ▸	
combine routes ▸	Would you like to combine selected routes?
copy to ▸	apply
move to ▸	

uncombine route

This icon will be shown in the overflow menu if one of the selected routes is a combination (see combine routes icon page 7) of several routes.
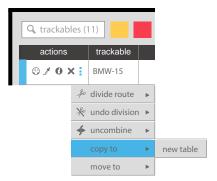
Activating the icon, a popup opens alerting the user, that by confirming all combinations within selected routes will be undone. Clicking on the apply button confirms the action.

Then, the selected routes are displayed as before combining them, on map and tables.

copy route(s)

Mousing over the „copy to" item, you can copy the selected route(s) to a new table. This subject has to realised as described in inViu web basic UI, page 9A to 9C.

move route(s) - selected trackables or time period

The „move to" another table action can be done under certain conditions. Mousing over the item, you can see a popup suggesting to move either
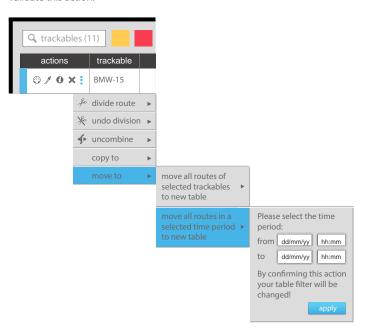
- all routes concerning the selected trackable(s)

or

- all routes in a consecutive time period, therefore you will have to specify the period of time.

The user is alerted that by validating the action the filter options for this table and the export data will be changed.

The user has to click on the apply button to validate this action.

trackables (11)		
actions	trackable	
⚙ ⌕ ❶ ✕ ⋮	BMW-15	

- divide route ▸
- undo division ▸
- **uncombine** ▸
- copy to ▸
- move to ▸

Would you like to cancel all combinations of this route?

apply

trackables (11)		
actions	trackable	
⚙ ⌕ ❶ ✕ ⋮	BMW-15	

- divide route ▸
- undo division ▸
- uncombine ▸
- **copy to** ▸ new table
- move to ▸

trackables (11)		
actions	trackable	
⚙ ⌕ ❶ ✕ ⋮	BMW-15	

- divide route ▸
- undo division ▸
- uncombine ▸
- copy to ▸
- **move to** ▸

move all routes of selected trackables to new table ▸

move all routes in a selected time period to new table ▸

Please select the time period:

from [dd/mm/yy] [hh:mm]

to [dd/mm/yy] [hh:mm]

By confirming this action your table filter will be changed!

apply

route details table - default display for driver's logbook

General

Route details table will open in the predefined portlet by clicking on the route details icon of selected route in the routes table. Above the table, the follwing informations will be displayed:
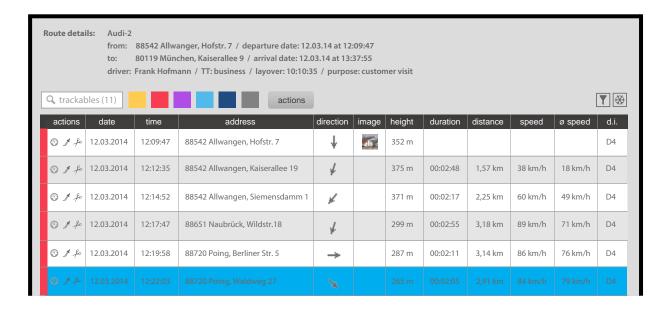
- name of trackable, start address, start date and time, destination address, arrival date and time, driver, traval type, layover and purpose

Details are not editable. They will be displayed in intervals of time or distance as user has defined them in the GPS settings of the trackable.

Clicking on on a row = waypoint, a popup opens which allows to create a new geofence around this waypoint, for further information see page 13 - 16.

On the map, intervals are shown as waypoints. If the user clicks on one row in the table, the associated waypoint on the map will be marked.

Route details: Audi-2
from: 88542 Allwanger, Hofstr. 7 / departure date: 12.03.14 at 12:09:47
to: 80119 München, Kaiserallee 9 / arrival date: 12.03.14 at 13:37:55
driver: Frank Hofmann / TT: business / layover: 10:10:35 / purpose: customer visit

🔍 trackables (11)   [actions]

actions	date	time	address	direction	image	height	duration	distance	speed	ø speed	d.i.
🌐 ⚡ 🔧	12.03.2014	12:09:47	88542 Allwangen, Hofstr. 7	↓	🖼	352 m					D4
🌐 ⚡ 🔧	12.03.2014	12:12:35	88542 Allwangen, Kaiserallee 19	↙		375 m	00:02:48	1,57 km	38 km/h	18 km/h	D4
🌐 ⚡ 🔧	12.03.2014	12:14:52	88542 Allwangen, Siemensdamm 1	↙		371 m	00:02:17	2,25 km	60 km/h	49 km/h	D4
🌐 ⚡ 🔧	12.03.2014	12:17:47	88651 Naubrück, Wildstr.18	↓		299 m	00:02:55	3,18 km	89 km/h	71 km/h	D4
🌐 ⚡ 🔧	12.03.2014	12:19:58	88720 Poing, Berliner Str. 5	→		287 m	00:02:11	3,14 km	86 km/h	76 km/h	D4
🌐 ⚡ 🔧	12.03.2014	12:22:03	88720 Poing, Waldweg 27	↘		265 m	00:02:05	2,91 km	84 km/h	79 km/h	D4

Default column types

• actions = speed info, colour, divide

Speed info on map is inactive by default, if it has not been activated for the particular route in the routes table before. Clicking on the speed icon in one row will activate speed display for the whole route on the map. Please see routes ui page 6.

Clicking on the divide icon in one of the rows cuts the route in two routes at this waypoint. Then, the tabbar will be shown and the second (following) route details will be displayed in an own tab in the same portlet. More about tab bar see inViu basic ui p. 3

route 1 x	route 2 x	+

Further working of these icons, see routes ui page 6 - 8.

• date = date (dd/mm/yyyy)
• time = time (hrs/min/sec)
• address = address

• image = image 15 x 15 px
If route images have been uploaded, clickable cropped icons should be displayed in this column. Column size adapts to the number of images available (6 images maximum). Clicking on the image icon, a lightbox opens, allowing the user to view the enlarged images.

image
🖼 🖼 🖼 🖼 🖼 🖼

• direction = image
16 directions should be provided as direction arrows (analogous to inViu pro): N, NNE, NE, NEE, E, EES, SE, SSE, S, SSW, SW, SWW, W, NWW, NW, NNW
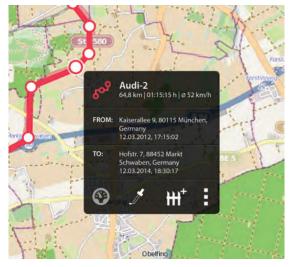
• height = height (m)

Height will be displayed, if height data are available, depending on user's GPS data.

• duration = duration (hrs/min/sec)
• distance = distance (km)
• speed = speed (km/h)
• avarage speed = average speed (km/h)

• digital input = text
As furnished by the trackable

driven routes on map - default display and functions

Mousing over a waypoint

When mousing over a waypoint, a white popup open beside displaying the following informations concerning exactly this waypoint:

- name of the trackable
- date
- time
- address or GPS data
- direction
- height above sea level
- speed

Please implement this item in the way, that popup informations can be copied by the user.

Clicking the route

Clicking on the route opens a black popup. At its top, the route symbol is shown in the colour that the user has selected for this route.
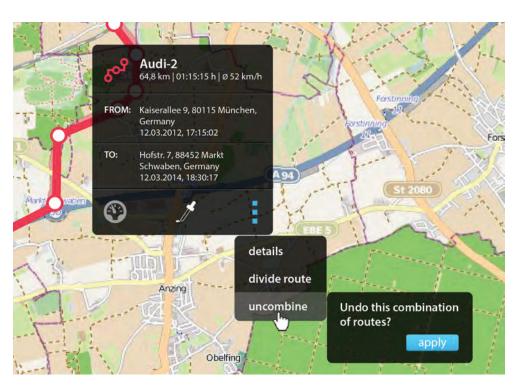
Beside, the name of trackable, total distance, total duration and average speed of route are displayed. Beneath, you can see start address, start date and start time and destination address, arrival date and arrival time. At the bottom of the popup, the speed icon, colour icon and overflow icon are shown (see next page).

If the user has clicked a particular waypoint, the add geofence icon is added to the other icons. For further informations see page ...

Please implement this item in the way, that popup informations (text) can be selected and copied by the user.

driven routes on map - popup icon functions

speed icon

By clicking on the speed icon, speed display is activated. For more details see page 6.

colour icon

Mousing over the colour icon, colour matches are displayed in a black popup below. Clicking one of the colour matches, the route is coloured in this colour. By consequence, colour of this route has to be adapted in the routes table, too.

menu overflow icon

Mousing over the overflow icon opens a popup with a menu. Partially, its content depends former actions by the user:

details - If the route details table is not open in its own portlet, user can open it by clicking on „details". This will open the route details table as described on page 9. If the route details table is already open, this item will not be displayed.

combine - this item will be displayed if the clicked route is sharing one waypoint (+/- 50 m) with another route shown on the map and these two routes are follwing in time. By clicking on the combine item, routes which can be combined to the first change to a 65% opacity. The „common" waypoint has to be for the first route its arrival address, for the secong its start address (or vice versa). In case of 2 routes possible to combine with the selected (before and after the selected route), user can select only one or both to combine with the first by shift + click. Routes which have been selected will then be shown as an integral part of the first route, still in 65% opacity (for diplay please see next page „undivide item"). A popup „Combine selected routes" with the apply button will be shown. If the action is confirmed, the selection will be displayed as one only route. Please notice, that display of the routes table and, if open, the details table has to adapt. The same action is possible in the routes table, see page 7.

uncombine - this item will figure in the list, if the clicked route has been combined earlier. Clicking this item, user will see the 2 last combined routes in 65% opacity with own start and arrival points. This action can always be only one (the last combination) step back, which means that if the initially selected route is the result of multiple combination, only the last one will be undone by clicking the apply button. Then, two seperate routes will be displayed in 100% opacity with own start and arrival points. Clicking on one of them, a popup open with the changed route details., from which the user can select to undo an earlier combination if ther were one. Please notice that by confirming the action, the routes table and, if open, the routes details table adapts to these changes. The same action is possible in the routes table, see page 8.

driven routes on map - popup icon functions
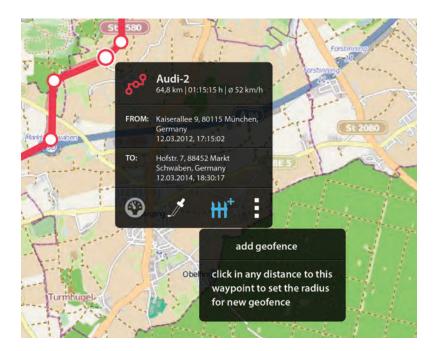

overflow icon

divide route - this item will always be displayed. Clicking on it, the user will see a popup inviting him to select a waypoint to apply the divison (shift + click). By doing this, the divided route will be displayed as two routes with own start and end point (arrows) for each. Consequently, display in the routes table, and if open, in the details table changes the same way. For further actions and functions, please see page 7.

undivide - this item will be displayed if the selected route is part of an earlier divided route with divided part(s) displayed on the map. Clicking this menu item, the divided parts are changing opacity (65%) and a popup invites the user to select **one part** to undivide (shift + click). Once the user has done the selection, the two parts are displayed as one route and in the same colour but the earlier „divided part" still in 65% opacity. Action has to be confirmed by clicking the apply button. After, the two parts will displayed as one route, on the map and in the routes table. If the routes details table of initially selected route or the undivided part were open, its display will adapt. Undivide action can only be done for adjacent (in a time and geografical manner) routes „parts" displayed on the map. If the originally selected route were the result of multiple division, in a first time 2 possibilities (for example, a first „part" before and a second „part" after the clicked route) could be shown. If the user wants to join the two, he would have to do it in two times, which means to repeat the action. This action is analogous to function described in the routes table actions, see page 7.

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driven routes on map - create geofence

add geofence from a waypoint

By selecting the add geofence icon, it becomes blue and a popup dialog opens inviting the user to determine the radius of new geofence by clicking in any distance from this waypoint.

Drawing the geofence will be finished by using the enter key.

Default geofence will be a circle..

select the radius

When user is clicking or drags outside the waypoint, the popup dialog is hidden. While keeping the mouse down, the radius of the possible geofence is dynamically traced in #5854E7 colour with 85% opacity and a „+" symbol at its outer end, and the circle in #5854E7 with opacity 60%. When the user releases the mouse (does the click), trace and „+" symbol are hidden.

driven routes on map - create geofence

select the geofence radius - increase/decrase geofence size

Until the enter key has not been used, you can continue to draw the circle, by clicking anywhere around the waypoint. Circle and radius trace will adapt dynamically.

driven routes on map - create geofence - popup

Finished geofence drawing

After using the enter key, a dialog popup opens:

In the form, you have to enter a name and a value for tolerance in m. If the user does not enter any definition, default name is the"x" number of already created geofences (when there are nine already, the new one will be named „geofence 10") and the default tolerance is set to 50 m.

Optionally, the user can assign a driver, a purpose and a travel type to the geofence and create new purpose and travel type in the same way as he can do it the routes table. For further informations and how this is working, please see page 5.
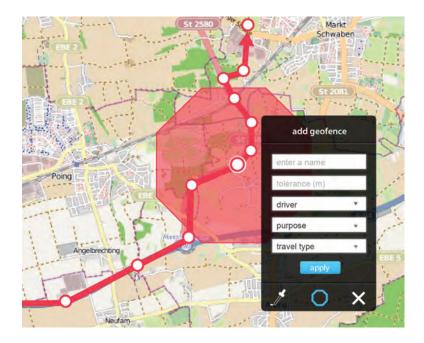
At the bottom of the popup, the colour icon, the octagon icon and the delete icon are displayed.

The geofence is created when the user has clicked on the apply button. It has to be added to the user's geofence database and to be displayed (unselected) in geofence table and on geofence map, if opened in a portlet.

Selecting a colour

Mousing over the colour icon, the popup with colour swatches is shown beneath. User can select a colour for the new geofence by clicking on a colour swatch. Then, the geofence colour is adapting on the map and in the geofence table (if opened in a portlet) and the choice is saved in the database.

driven routes on map - create geofence - popup

select octagonal shape

By clicking on the octagon icon you can replace the circle shape by an octagonal shape. The octagonal icon is replaced by the circle icon.
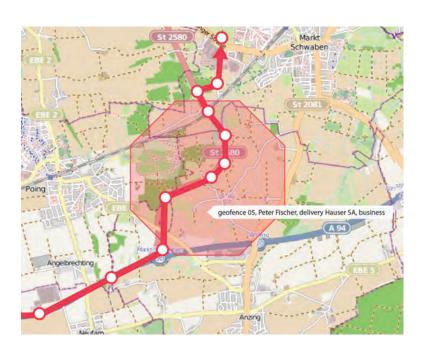
delete shape/geofence

If the user wishes to delete the shape (not added yet) or geofence (added geofence), he can do this by clicking on the delete icon. Clicking the delete icon, opens a dialog popup asking the user if he wishes to delete this shape/geofence and to confirm his choice by clicking on the apply button.
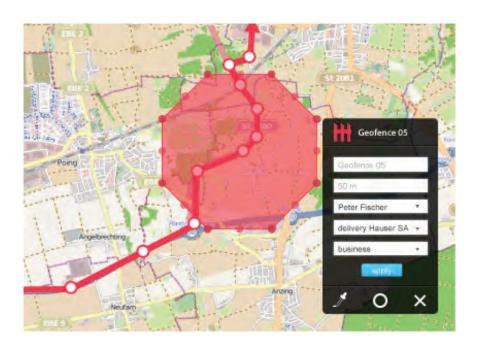
created geofence

When the geofence has been created, the geofence is displayed with 25% opacity on the routes map and, if opened, on the geofence map and in the geofence table.
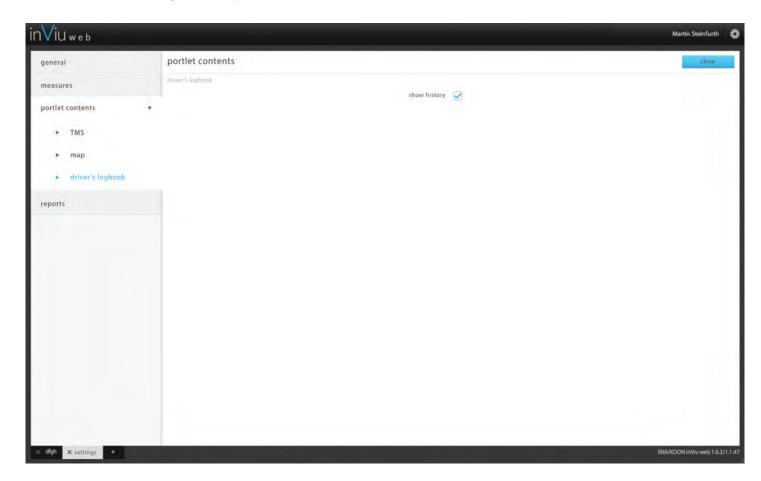
Mousing over the geofence, you can see a white popup displaying the geofence details.

Clicking into the geofence opens a popup with the geofence name displayed at the top, where you can change name, tolerance, driver, purpose and travel type as well as colour and shape. You can also delete the geofence. Being selected, the geofence is displayed with 60% opacity and anchor points. The number of achor points should be equal to 16, for octagonal shape 8 positionned at the corners at another 8 at the half way between two corners. For the circle shape display of anchor points is all 22,5 degrees. By dragging the anchor points the user can customize the shape. By clicking the apply button, changes will be saved.

driven routes - driver's logbook setup

Settings for driver's logbook

In the setup, user can check „show history". This option will be selected by the user if he wants revision security for logbook allowing him to present it to the tax office.

In this case

1. the data of history (modifications of logbook content) has to be stored for a long period
2. the history is displayed (not editable) beneath each row, if modifications on this row have been done.
3. In the same way, all data export to PDF, CSV or XLS does include history information. The UI design for logbook PDF document will come later.

History display in table

History is displayed beneath each route, when modifications have been operated, beginning with the most recent change. It contains the following informations:

- Date / Time / Modification: changed from ... to, added, deleted

History is displayed over 2 rows, if history is longer, please implement a scroll bar at the left side the history bloc.