Manual

DETOUR EDITOR

infoware GmbH

RIEMENSCHNEIDERSTR. 11, DE - 53175 BONN | TEL.:+49 228 / 33 88 99 0

CONTENT

GENERAL DESCRIPTION OF THE APPLICATION

This application serves all types of vehicles which are able to consider special rules for navigation, such as emergency services vehicles or heavy-goods transports.

The main functions of the online Editor Detour are:

- Easy recording of segments on specific road sections such as
  - Constructions sides
  - Road Blocks
- Open one-way streets
- Open pedestrian zones
- Remove Turn-restrictions

As soon as you save these closures or openings on the server, they will be synchronized with the MapTrip Navigation and considered for the route calculation.

Closure: You can close a section of a street for a specific time in one driving direction or the other. For e.g. a section which is closed due to construction site. Or you can also close both driving directions, if this section is not drivable at all.

Opening: You can also open segments for e.g. against one-way streets or pedestrian areas. The routing server will consider this opened segment for its route calculation.

A further important feature is to **remove Turn Restriction** for e.g Turn if the regular turn restriction in a junction allows you only to go straight or turn right. If you disable these, you can also turn left.

A more detailed (technical) explanation: Detour Editor enables the user to draw a segment on a map and assign attributes to it such as closed, opened and the time interval.

The segment will then be translated into a OpenLR address and saved on the server. The server will take all saved segments into consideration when calculating the route online, as well as the connected synchronized systems with MapTrip for local calculations on the mobile device if there is no online connection – just in case.

SYSTEM REQUIREMENTS

You can use the Detour Editor with the following Internet Browsers:

- Microsoft Edge (new)
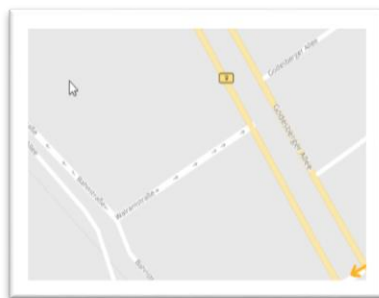- Google Chrome
- Mozilla Firefox

Fig. 1: Display of one-way streets in Google Chrome and Microsoft Edge new

The arrows point in the direction in which the passage of the one-way street is approved. Please note that the arrows of driving direction in one way streets will not be displayed in Mozilla Firefox.

TERMINOLOGY

Segment – a length of road (or two roads that intersect each other) drawn by the user on the map. A segment is defined by what the user has drawn on the map and its metadata (name, kind, date, time, direction). After the metadata is filled in, the segment is permanently drawn on the map alongside with the road signs indicating the direction in which the exception applies.

File – a way of organizing and saving segments. One file is physically saved on the server and can contain one or more segments.

REQUESTING AN ACCOUNT

User accounts are created after purchasing a software package from infoware GmbH. To get your account(s), please contact our sales team at vertrieb@infoware.de and they will be happy to provide all the information you may need.

Most features of the Detour Editor can be tested without the use of an account, by clicking on the "DEMO" button on the login page (fig. 2). The demo page will showcase all the features that don't require an actual account to use – saving and loading function will not be available.
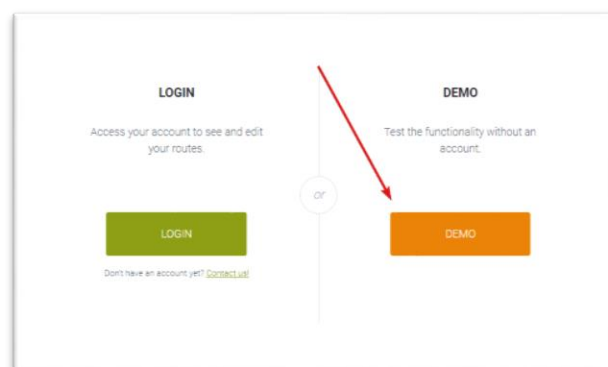

Fig. 2: Access to the Demo page

LOG IN

Your account will consist of three pieces of information: your company name, a username and a password. You will receive this information from infoware.

A company can have any number of user accounts. For example, a company which operates in Bonn and Berlin may choose to have two user accounts, one for each city, with their own specific files. All saved information will be associated to the separate users. You can copy files between accounts by downloading them from an account and uploading them in another. This is explained in more detail below.

CHANGING THE APPLICATION LANGUAGE

The Detour Editor is offered in English and German. The application will try to determine the settings of your system and offer the content in your own language. This means that, if your computer is set to German, the editor will also be available to you in German automatically.

The default language can be changed at any time using the language selector in the header of the application (fig. 1). Once the language is changed, it is saved by the application in your browser (meaning that by using the same browser on the same computer in the future, it will show the language you've manually chosen).

Fig. 3: Changing the language manually

INTERFACE

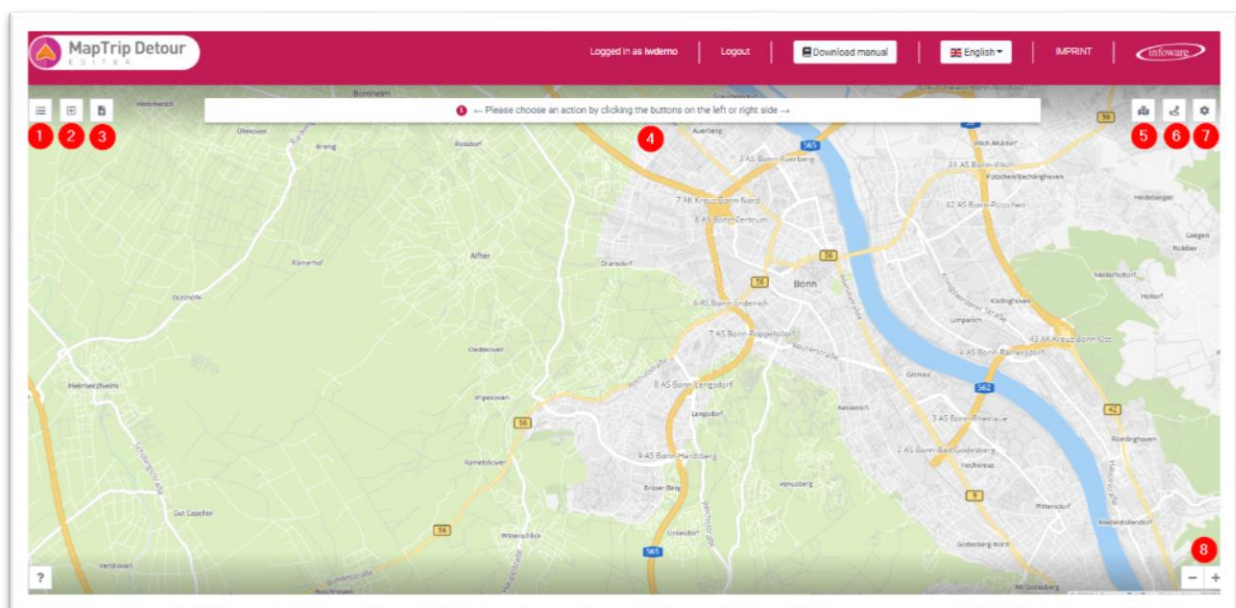After you log in, you will see the main screen of the application.

Fig. 4: Application screen when no file is loaded

The initial screen you'll see shows a map and a set of action buttons. When you load the application the first time, your browser might ask for your location, so it can zoom the map closer to you. Your location is not saved and is used only to center the map. If you don't allow the browser to know your location, the map center will default to a street in Bonn, Germany.

The buttons are also labeled inside the application and you can find out what each does by hovering over it. Below you can find an overview of each of them. The actions are explained in detail (including screenshots) in the below chapters.

Starting from the upper left corner of *Fig. 4*, the buttons in the first screen without a loaded file are:

1. *Your files* – by clicking this button, a window listing all your closure files is shown on the screen. In this window, you can select different actions for each file.
2. *Create a file* – shows a window asking for the name of the new file you want to create.
3. *Upload file* – shows a upload form which you can use to upload files previously exported by the Editor.
4. This is an *information bar*. It´s content changes throughout the application to suggest steps you might want to take, such as, in this example, clicking a button to trigger an action.

5. *Search for an address* – opens a window in which you can type in manually an address. Upon the address has been successfuly geocoded, the map will zoom to it.
6. *Create a route* – opens a window in which you can write a start and destination address. Upon successful geocoding of both addresses, a route will be shown on the map.
7. *Settings* – Here you can enable or disable the Emergency routing and define the applied radius in meter.
8. *Zoom in/Zoom out* – by clicking these two buttons, you can control the zoom level of the map (hint: the zoom level can also be controlled using the scroll wheel of your mouse).

You will be led to a more detailed screen shown in *Fig. 5* once a file is loaded using the previous screen.

You can select different actions to edit the file:
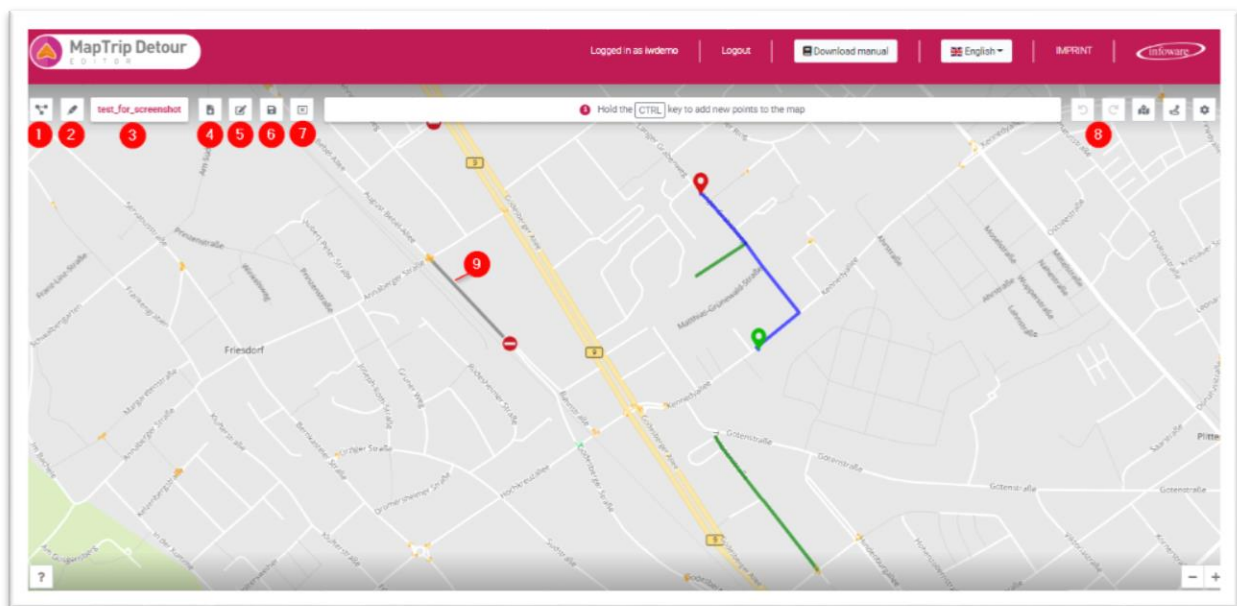
Fig. 5: Application screen once a file is loaded

From left to right, the buttons in *Fig. 5* represent:

1. *List segments* – shows a window listing all the segments in the current file. You can choose an action for each segment, including zoom to the segment on the map.
2. *Draw segment* – initiates the *Draw Segment* action. This is one of the two triggers for the action. The *Draw Action* is explained in more detail below.
3. The *name* of the currently loaded file.
4. *Download* – clicking the button will prompt the browser to download the currently opened closure file in a .json format.
5. *Edit File info* – opens a window that allows the user to edit the metadata of the current opened file. You can change the date, time and direction. Please note that the name can currently only be changed during the active session.
6. *Save All* – opens a window asking whether you want to publish all changes you have made and save them. After confirmation, they will be saved on the server and available for the registered devices.
7. *Close this session without saving* – closes the current screen and takes you back to the previous screen, where you can select another file to edit.
8. *Undo/Redo* – when you do changes inside a file, some history is saved so you can easily revert them by the click of a button.
9. Example: representation of a *segment* on the map. Segments are drawn on the map and user can hover over each and right click of the individual segments and choose the desired action to execute.

SAVE CHANGES

NOTE: ANY CHANGE YOU DO WILL BE SAVED LOCALLY AND NOT ON THE SERVER.

YOU HAVE TO SPECIFICALLY SAVE THE CHANGES YOU'VE DONE TO THE SERVER.

CHANGES CAN BE: CREATE A NEW SEGMENT, EDIT A SEGMENT OR DELETE A SEGMENT.

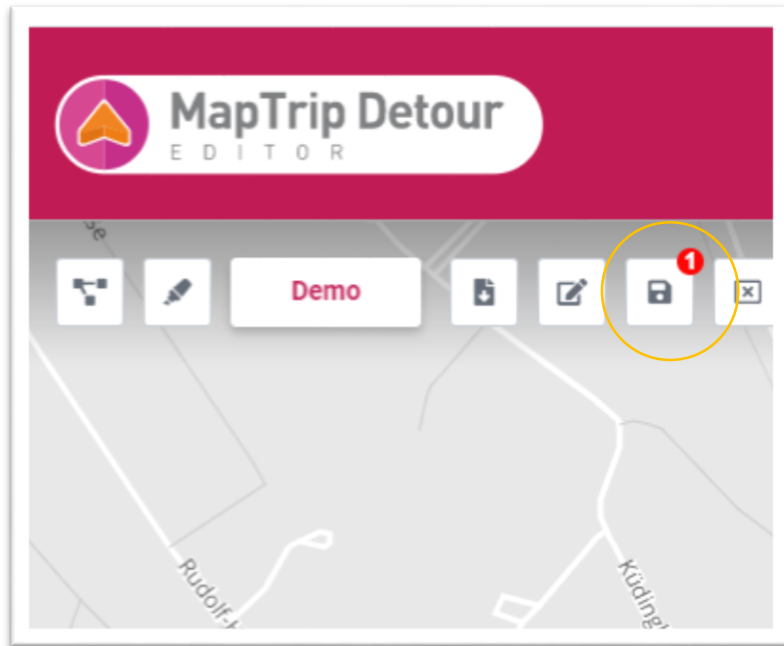*AS SOON AS YOU HAVE ANY UNSAVED CHANGES A LITTLE COUNTING NUMBER DO APPEAR AT THE "SAVE ALL" BUTTON.*

Fig. 6: Save all - changes which are not saved on the server yet

YOU CAN SAVE ALL CHANGES AT ONCE BY CLICKING THE "SAVE ALL" (6) BUTTON.

OR YOU CAN SAVE A CHANGE FOR A SINGLE SEGMENT BY OPEN THE "YOUR SEGMENTS" LIST AND CLICK ON THE „SAVE" BUTTON – SYMBOL (GREEN DISCETTE).
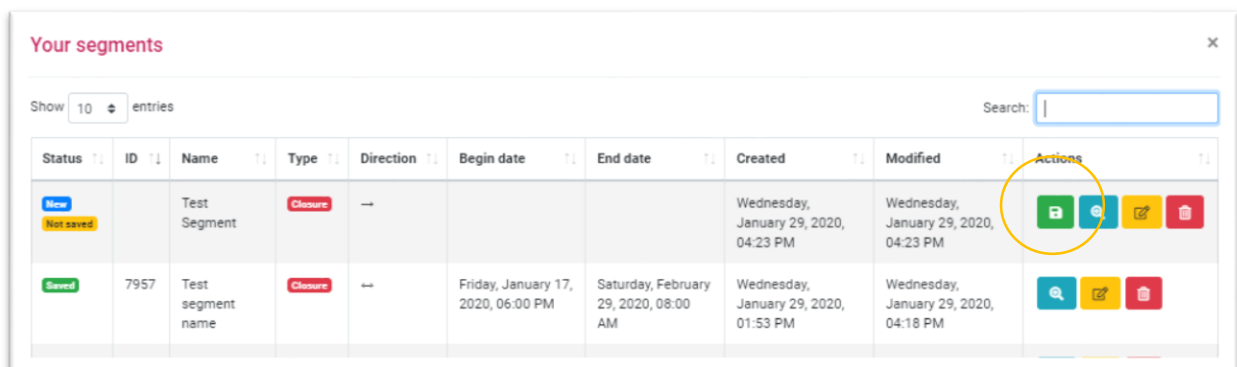
.   *Fig. 7: Save changes for a single segment in the segment list*

LIST FILES
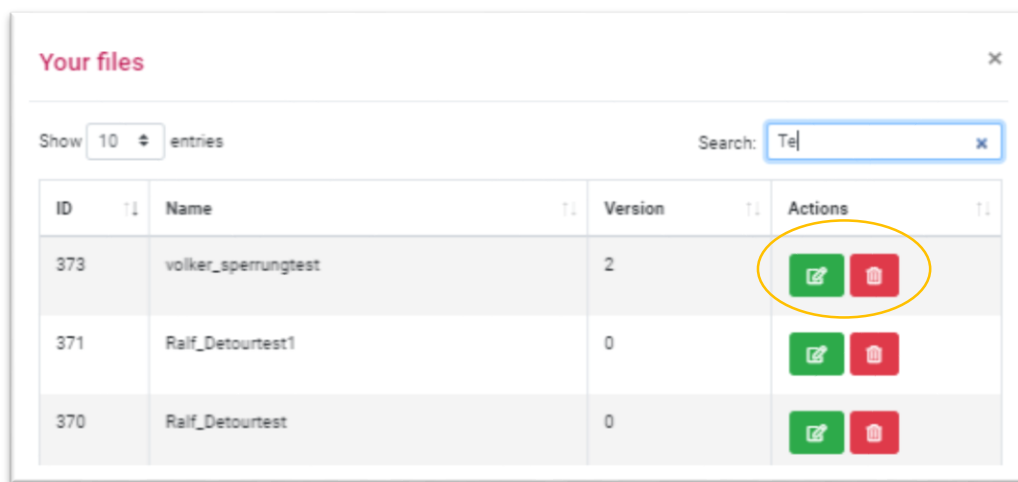
You can see a list of all of your files by click the appropriate button in the first screen of the application. Clicking this button will open a window listing the files in a tabular form.

The table displays your files and allows you to filter by:

- "Show entries": Pick the number of files you would like see on the screen in the field. If the total number of files exceeds the desired number, the table data will be split into pages.
- *"Search": you can search* for a specific name in the list.

The default order is newer files first. You can easily change the order ascending or descending by clicking in the column headers you want to assort by.

You can also select which action you want to execute for a file. You can "*Load a file"* in the editor or "*Delete* a file".
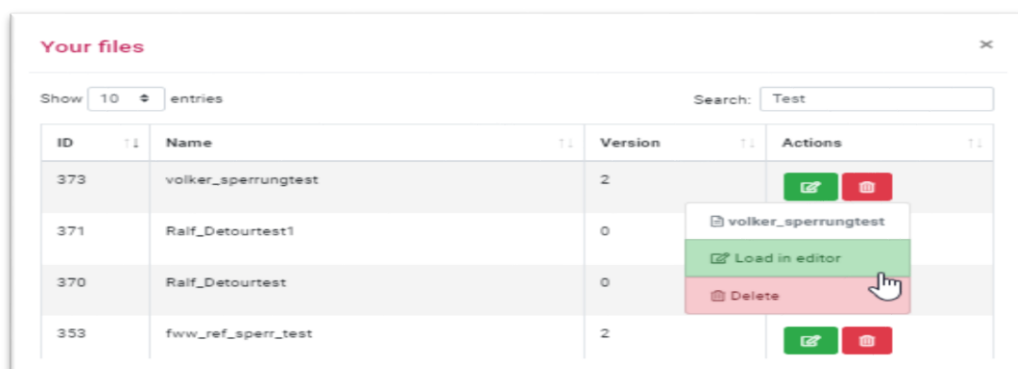
Fig. 8: Your file list

LOAD A FILE

To load a file*:* you can either double click on the file in the table (at any position in the files row), click on the symbol "green pencil" or by right click on the file and select "*Load in editor"* from the context menu, as shown in the below image:

Fig. 9: Context menu for a file

DELETE A FILE

To delete a file, you need to right click on the file and select "*Delete"* in the context menu (*Fig. 9* above). A confirmation window will appear asking you if you really want to delete the file. If you confirm the action, the file will be deleted permanently from the server. This action is not reversible.

CREATE A NEW FILE

To create a new file, you need to click on the appropriate button "Create a file" in the left, upper corner in the first screen of the application. Clicking this button will open a new window prompting you to insert a name:
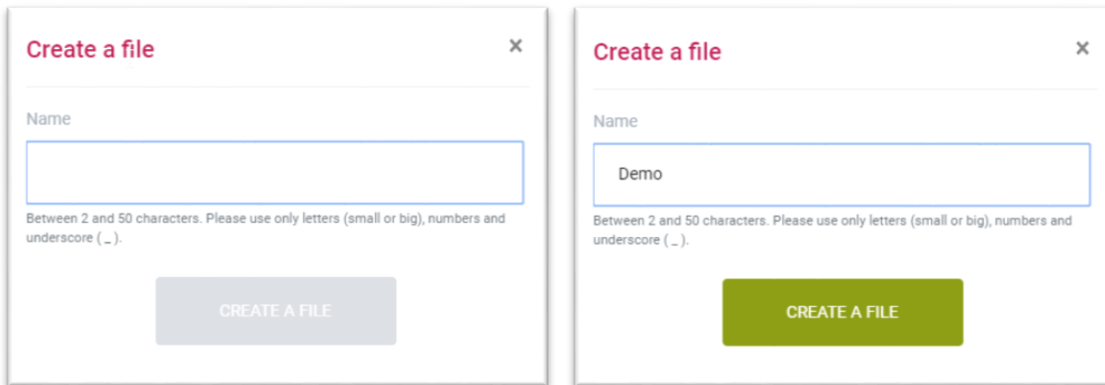

Fig. 10: Create a new file form

The name should be between 2 and 50 characters. You can use small and big letters, numbers and underscore (_). Please do **not** use umlaut or special characters.

As soon as you have entered a name you can proceed to click on the button "Create a file".

UPLOAD A FILE

Clicking the "*Upload file*" button in the editor will open a form to upload a file. You can upload a file when it **was previously exported by the Editor**. The Editor has its own format to export and import files. The files are saved as JSON, but the contents are serialized in the Editor's own format.
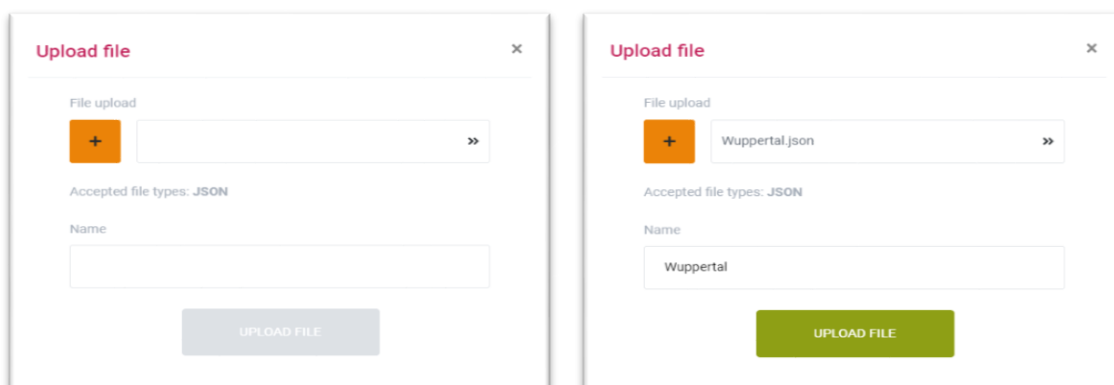
Fig. 11: Upload a file

As for the "*Create a file*" window, the upload window will not allow you to upload the file unless all the information has been filled in properly. To choose a file to upload, you need to press on the orange "+" button. This will open your browser and you can choose the file you would like to upload. The "name" field will be filled with the current file name. A file name can only be saved once.

SEARCH FOR AN ADDRESS

If you would like to search for a specific address, you can press the appropriate button on the right hand side.

This will open a window prompting you to type in manually the address.

This is a "freehand"-type and you can write the address in any way you need. Our Geocoding server will receive your address and parse it so it can be translated into coordinates.

Of course, the more concrete the address is filled in including for e.g. the postal code and the city it will guarantee more accurate results.

If the results are ambiguous, you will be asked to select the address you were searching for from a list of multiple results:
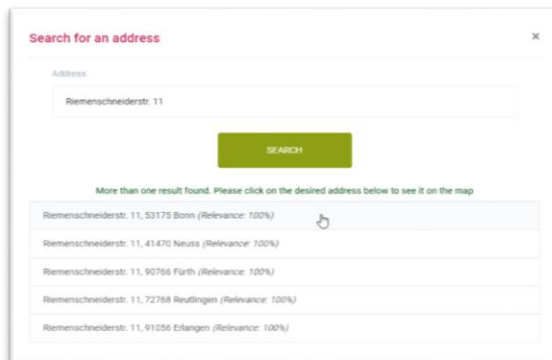
Fig. 12: The result list of an ambiguous address search

If you click on a result the map will be center to that location.

CREATE A ROUTE BETWEEN TWO POINTS

 With the function "Create a route" you are able to preview a route.

The route calculation will consider any open files and its saved segments. So you can see how a segment will influence the route calculation.

If there is no file open the route will be created regularly.

You have two different options to create a route:

First one is to click on the button "*create a route*" on the right, upper corner. A window opens and you can insert your start and destination address manually. If one or both addresses were geocoded ambiguously, you will be promoted again to pick the intended result.
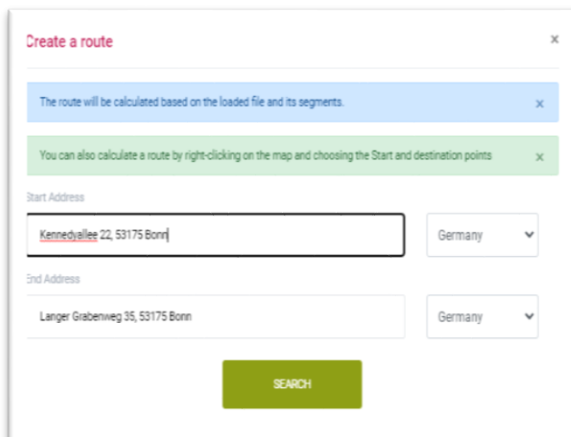
Fig. 13: Create a route form

Once both addresses are correctly identified it will prompt the Editor to draw the route on the map and zoom to it.

If a segment is not included in the route planning, check whether it is not saved on the server. If this is the case, a small number appears on the "Save all" button.

The second option is to right click onto the map where you would like to start or end your route and a context menu window appears:
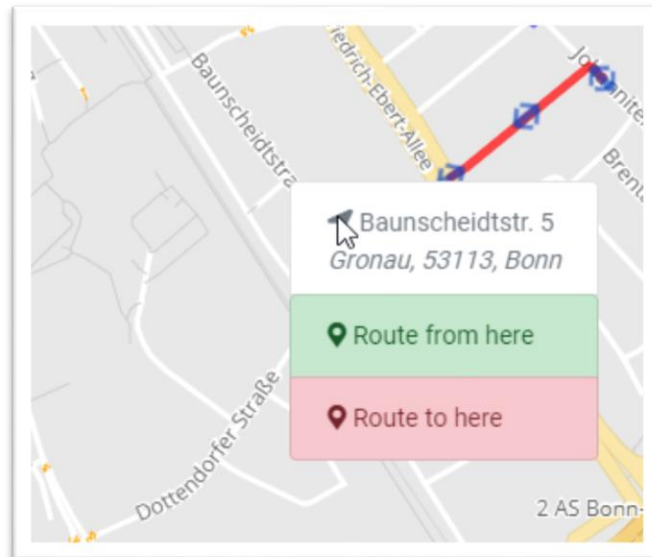
Fig. 14: Context menu to create a route by right click onto the map

You can choose if it´s supposed to be your start point "*Route from here*" - or your destination point "*Route to here*". Start point appears as green marker, the end point as a red marker on the map.

You can change this current route anytime by right click onto the map and set a new "*Route from here*" or "*Route to here*" point.

DELETE A ROUTE

To delete a route, all you have to do is right-click anywhere on the blue route line. A context menu opens. Select "Delete route".
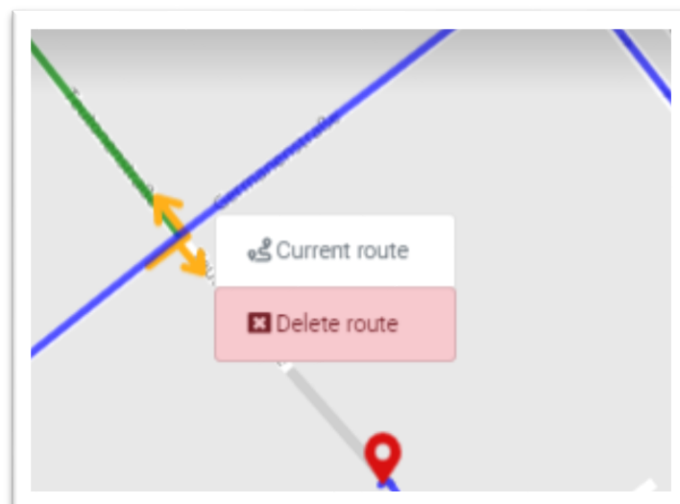
Fig. 15: Delete a route
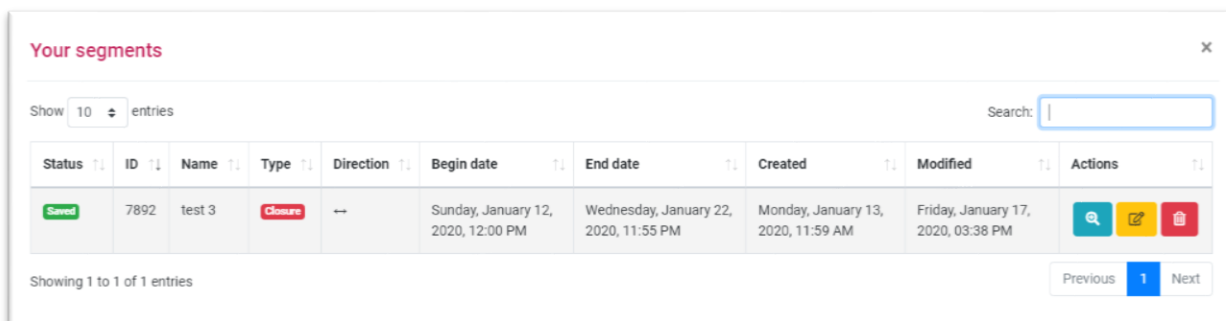
Once a file is loaded, you can see a list of all your saved segments by clicking on the appropriate button on the left side of the application. This will open a window showing the segments and their attributes in a tabular form. This window uses the exact format as the file list. You can perform all the action described in the *List Files* section – limiting results, searching and ordering.

The default order for segments is unsaved segments are shown first. Saved segments are ordered from Newest to Oldest.

The order can be resorted by clicking in the header of the corresponding column.

Fig. 16: The list of segments

Double click on a segment will zoom to it on the map.

Right click on a segment will open a context menu which displays a list of actions depending on the status of the segment:
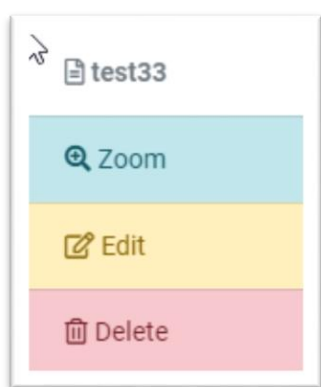
| *Menu for a saved segment* | *Menu for an edited segment* | *Menu for a deleted segment which has been saved* |
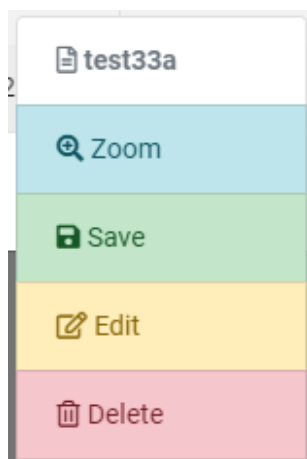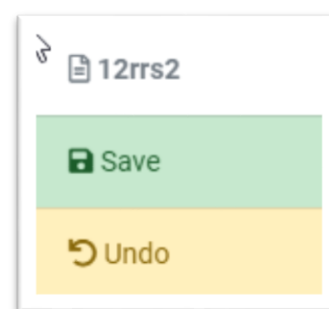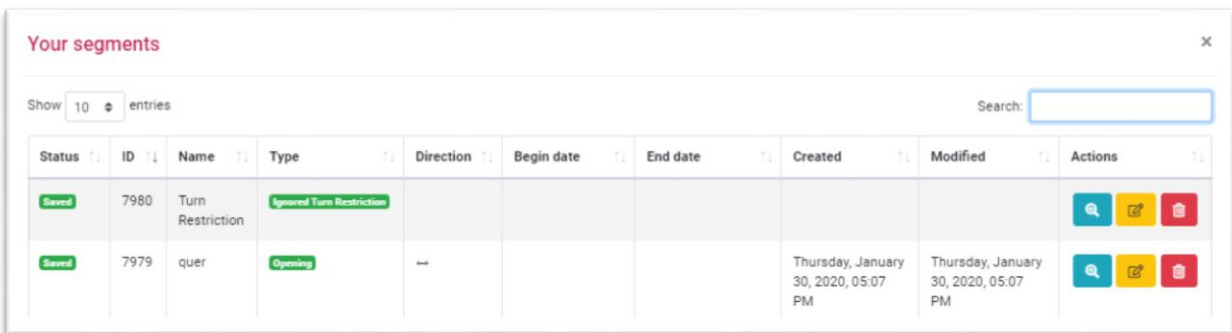
By clicking on the buttons above, the following actions will occur:

1. *Zoom*: the list of segments will be closed automatically and the map zooms on the selected segment. The zoom level is automatically chosen to showcase the whole segment.

2. *Edit*: Opening a window in which you can edit all the information of the segment. You can change the name, date, time and direction This is a local action and it needs to be saved in a separate step with "Save all".

3. *Delete*: Marks the segment for deletion and hides it from the map.
-   If this segment has not been saved yet you will be asked to confirm that you want to delete. If you confirm this action is irreversible.
-   If the segment has been already saved you can delete it yet this action is local. You would need to save this change to the server so the segment is actually deleted.
-   Or you can choose "Undo" if you would like to reactivate this segment.

4. *Save*: for a segment that has been newly added, edited or deleted, this button will issue a Save request to the server. This is different from the "Save All" action in the sense that it only applies for the selected segment.
    "Save All" iterates through all the segments that need saving and does a request for each.

5. *Undo*: this button appears only for deleted segments and it undoes the deletion action.

Any segments which are not saved to the server are marked accordingly in the segments list column Status:

Fig. 17: The list of segments for a file

ADD A NEW SEGMENT

Adding a segment consists the following steps:

1. Draw the segment on the map
2. Choose the Segment Type: Closure or Opening
3. Fill in the details such as the name
4. Start date and start time
5. End date and end time
6. Direction to close: Positive, negative or both

There are two ways to draw a segment:

1. By click on the *"Draw segment"* button. If you click on the button, you will see a red circle under your mouse pointer when you hover over the map. By clicking on the map, you can add points. When you have added all the points for the segment you want to create, you need to press the ENTER key to trigger the next step.

2. By holding the CTRL key. As in the above case, when you hold the CTRL key, a little red circle will appear
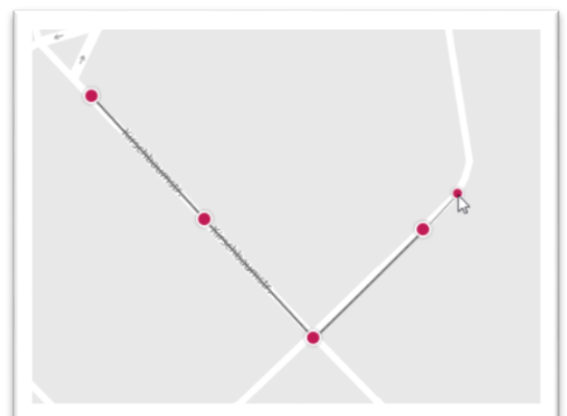
under your mouse pointer. You have to keep holding CTRL until you have added all the points you needed for your segment.
Releasing the key will automatically trigger the next step.

A new window will appear asking for details of the segment. You need to enter a name at least.

First you choose the Segment type: Closure or Opening

Fig. 18: Create a segment information window

For a Segment-Type "Closure" you would need to define some more specific details.

You can define your Begin date and End date as well as the Start time and End time this segment should be valid.

You can choose the date and time in the table. The date that is shown in the table will be changed to match the user's language, but the system will save the information into a standardized format.

Fig. 19: Choose the date and time for your segment

In the next step you need to define the direction this closure is open for routing.

Positive: The street is drivable in the direction towards the stop sign. The opposite direction is closed. A route will consider the direction against the stop sign for its calculation. So it is drivable into the direction of the yellow arrow but not in the opposite.

Fig. 20: Closure positive

Negative: The position of the stop sign did change. It is now drivable in the opposite direction and a route will be calculated considering this segment is drivable into the direction of the yellow arrow towards the stop sign.

Fig.21: Closure negative

Both: The stop signs appear in both directions which means the segment is not drivable in both directions. It will not be considered at all for route calculation and a route will be calculated avoiding this segment.

Fig. 22: Closure in both directions

To conclude please click on the "Create new segment" button.

Fig. 23: Confirmation Create new segment

As soon as you have saved your change to the server (see page 6) the new segment will be considered for route calculation.

For a segment of the type "Opening" you only need to fill in the name. It is automatically unlocked in both directions so you won't need to choose a direction.

This segment will be valid as soon as it is saved to the server so you won`t need to choose a date or time.

It will be valid until you delete this segment.

Fig. 24: Segment type: Opening

To conclude click on the "Create new segment" button and save this change on the server (s.p. 6)

Fig. 25: Confirmation Create new segment

EXPIRED SEGMENT

If a segment is expired and not valid anymore it will appear in grey. Once you delete the segment it will disappear.
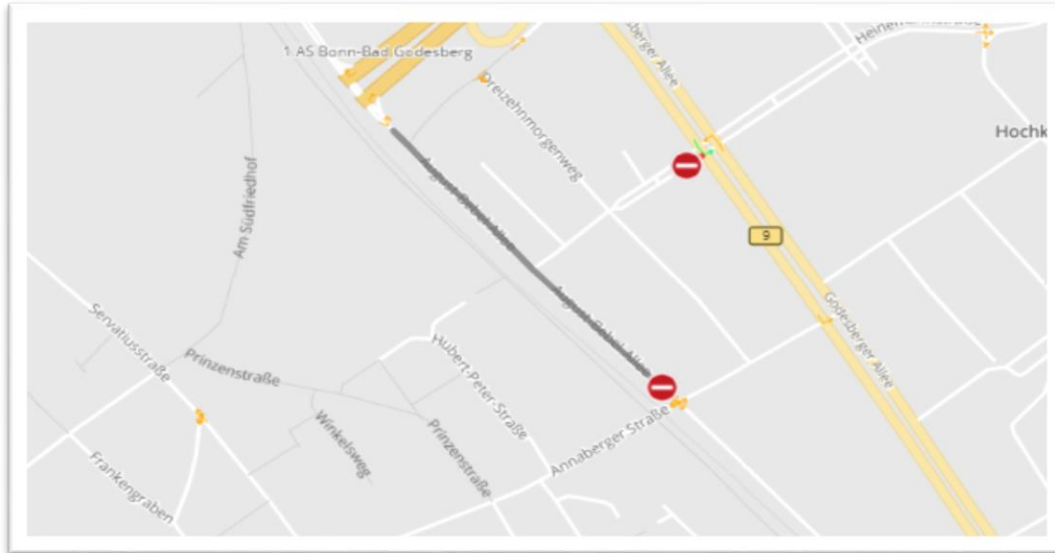
Fig. 26: Expired segment

EDIT A SEGMENT

You have two different possibilities to edit a segment.

You can hover over a segment on the map and by right click on them a context menu will pop up:
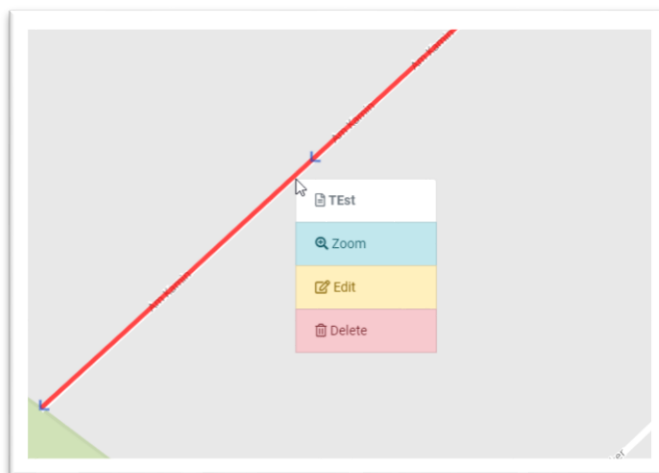

Fig. 27: Context menu to edit a segment

Click on "Edit" and a new window "Edit Segment" will appear.

Or you can open the list "Your segments" and choose the edit symbol (yellow pencil).

Fig. 28: Choose action "Edit" in your segment list.

The "Edit segment" window will open automatically.

Fig. 29: Edit a segment form

You can change the name, date, time and direction of the segment. Once you have done all necessary changes klick on the green "Save segment" button and save your change to the server.

As soon as you have loaded a file into the Detour Editor all documented turn-off restrictions appear in your loaded map section.

They are symbolized by yellow arrows. Pointing in the direction of the valid restriction for e.g. as below – do not turn left.
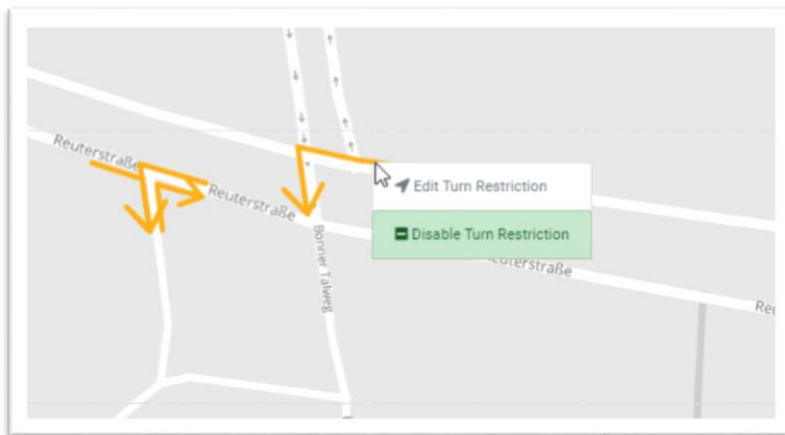

Fig. 30: Disable a Turn Restriction

To disable a Turn Restriction choose it by placing your mouse pointer on it. It will now appear in dark blue.

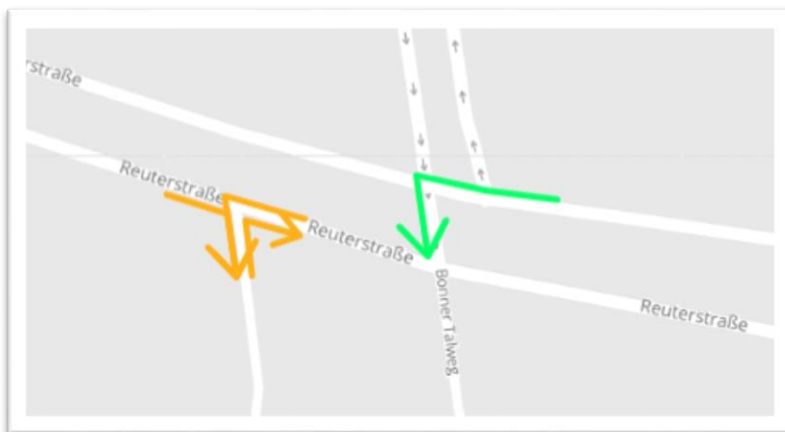By Right click on it a context menu opens. Choose „Disable Turn Restriction ".

Fig. 31: Disabled Turn Restriction

Disabled Turn Restriction do appear in light green.

Save this change to the server.

Please find below an example to illustrate how routing will be affected if you disable a Turn Restriction.

The Route calculation did consider the valid Turn-Restriction from our sample above – „Do not turn left ". The route will be calculated until the next possibility to turn left three junctions from your destination away.
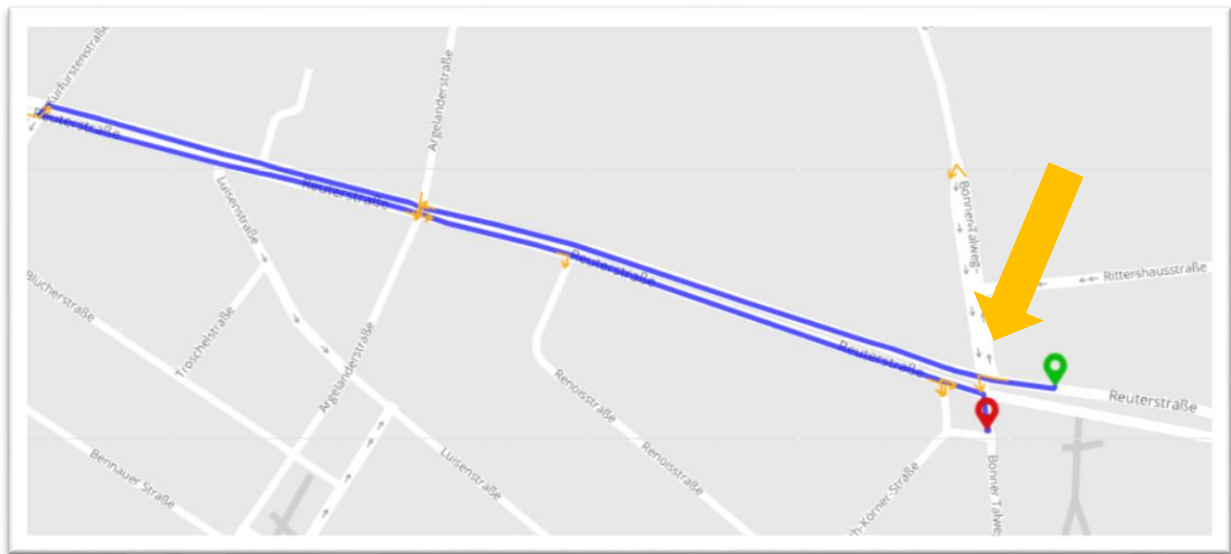
Fig. 32: Route considering the valid Turn Restriction

In comparison if you disable the same Turn Restriction it will be ignored for routing. So in this case a route will be calculated allowing you to turn left at this junction.

The route will now be calculated using this nearest possibility to turn left which is the enabled Turn Restriction.
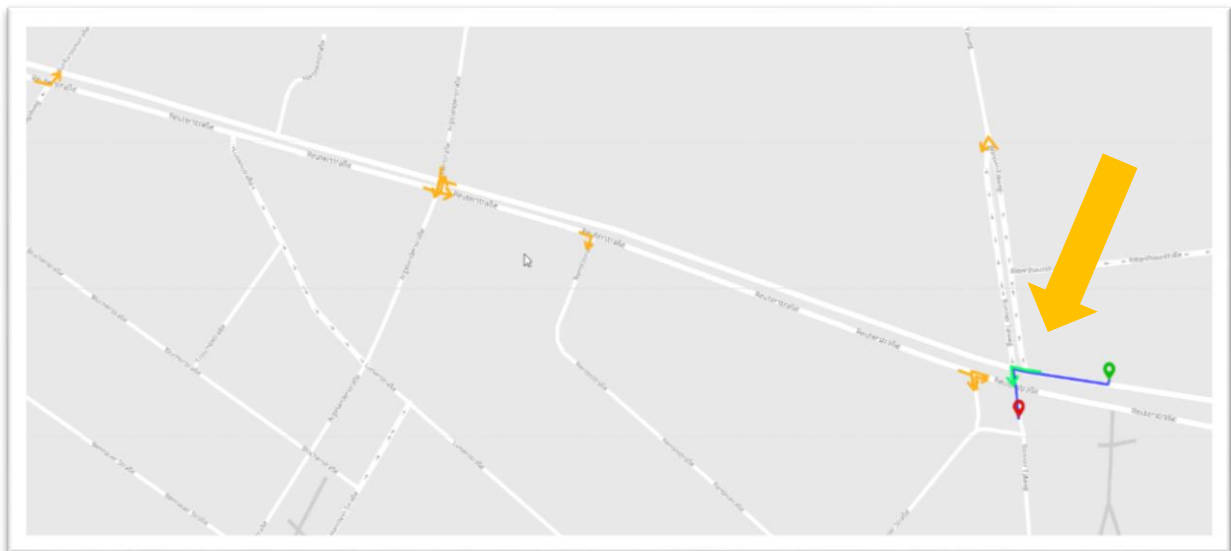

Fig. 33: Compare disabled Turn-Restriction

The deactivation is valid until you will enable it again and save it to the server.

ENABLE TURN RESTRICTION

You can undo the deactivation any time. Do a right click on the disabled (light green) Turn Restriction.

Choose „Enable Turn Restriction"in the context menu.

It will now appear in yellow again.

As soon as you have saved your action to the server it will be valid for the route calculation again.
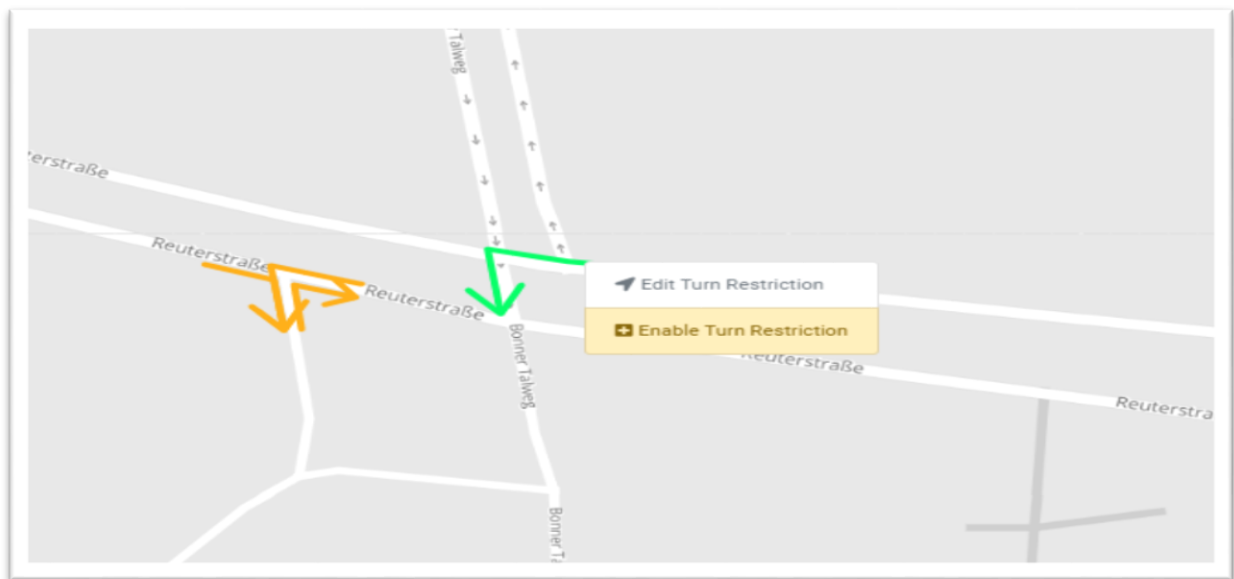
Fig. 34: Enable a Turn Restriction

ACTIVATE EMERGENCY ROUTING

The emergency routing disables automatically all restrictions such as turn restrictions, one-ways streets or closures in the defined Radius around the destination as soon as a route is calculated. Excluded are tunnels and roads with structurally separated roadway.

It can be activated if you click on the symbol "Settings" in the right upper corner.
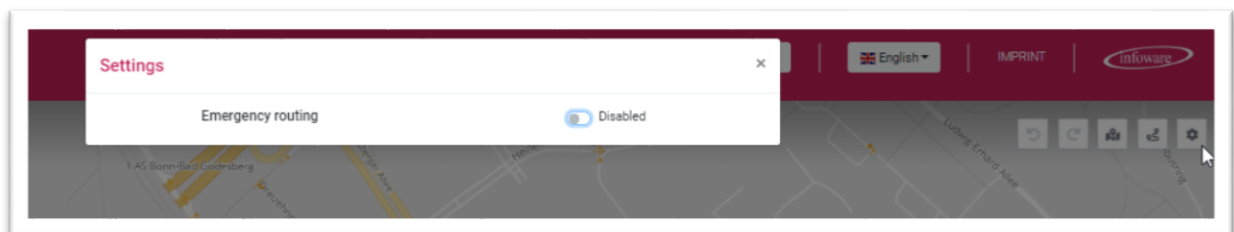
Switch over the Button for Enable/Disable:

Fig. 35: Enable or disable the emergency routing

Choose the Radius (in meter) in which the Emergency routing shall be used around the destination:
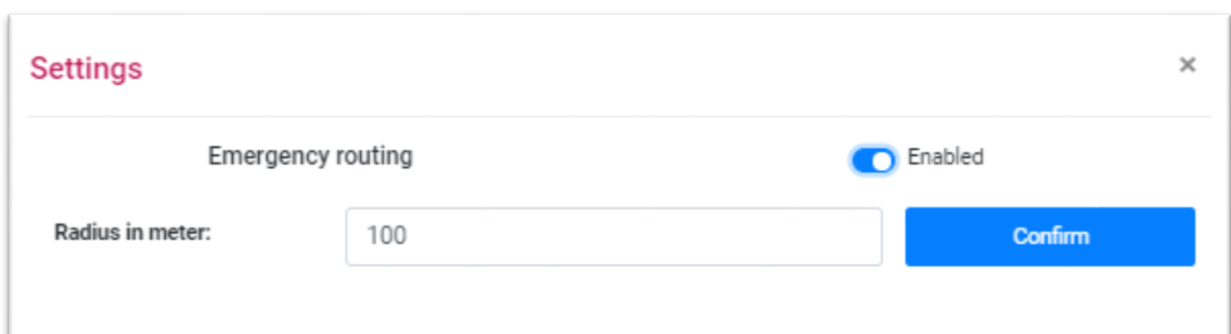

Figure 36: Choose the Emergency Routing Radius

The area in which the emergency routing will be applied will appear in a blue circle around the destination point.
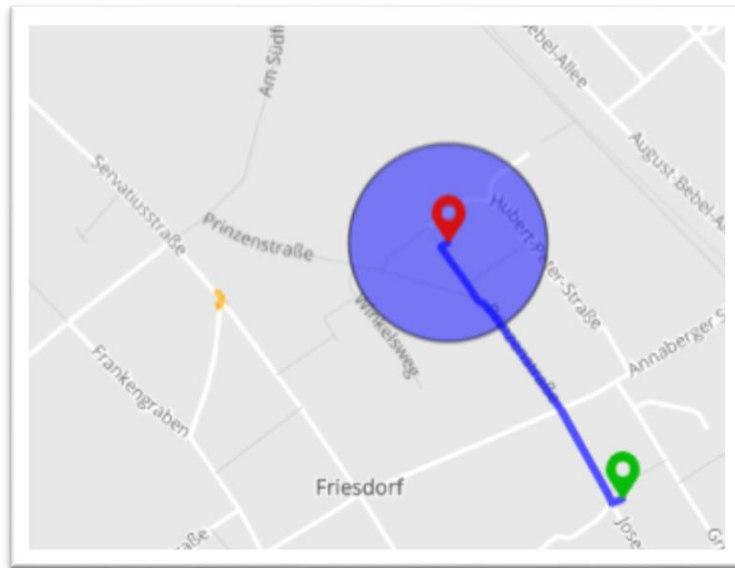

Fig. 37: Emergency Routing displayed on the map

Bonn, status July 2020