MapTrip FollowMe
EDITOR

infoware
Navigation für Profis

Manual

MAPTRIP FOLLOWME

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CONTENT

TERMINOLOGY

Track: A sequence of dots. A track is what the user actually sees on the map. Please note that this is different from a *route* – a *route* is created based on a track (explained below).

Dot: A geographical location, visually represented on the map as a circle or as a pointy marker. A dot can also contain an Event. A set of two or more dots creates a track.

Route: A route on a map, including the navigation instructions. They are created by the server, based on the track. The route consists of the navigation instructions and stop-by-stop instructions for the driver, such as do something on the left, on the right, on either side or just drive along the route.

Save track: Is the action to save a temporary version of the current edited track to the server. Saving a track indicates to save changes yet they will not be published to any device yet.

Publish track: All changes made are hereby published on the end devices. Technically, this action marks the current temporary version as permanent. As soon as the device is synchronised any published track will be visible.

CHANGING THE APPLICATION LANGUAGE

The FollowMe Editor is offered in English, German, French, Dutch, Spanish and Polish. The application will try to determine the settings of your system and offer the content in your own language. If your computer is set to English, the editor will be available in English automatically.

The default language can be changed 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. So the language you've manually chosen will be set automatically the next time you use the same browser on the same computer.

Fig. 1: changing the language manually

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 FollowMe Editor can be tested without being logged into any account. There is a Demo Version available which will showcase all features which don't require an actual account to use – saving and loading function is not available. To use the Demo Version please choose the "DEMO" button on the login page (fig. 2).

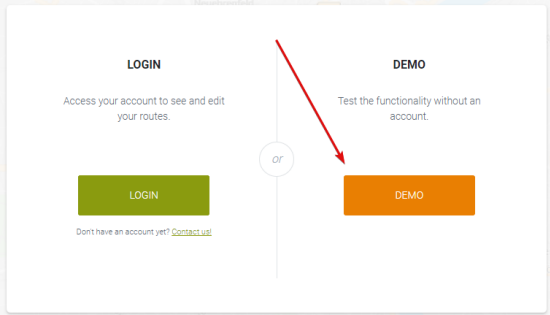


Fig. 2: Accessing the Demo page

LOG IN

Your account consists 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 routes and specific user events. All saved information will be associated to the separate users.

USER INTERFACE

The interface consists of a header (1), a retractable sidebar (2) and the main screen (3):

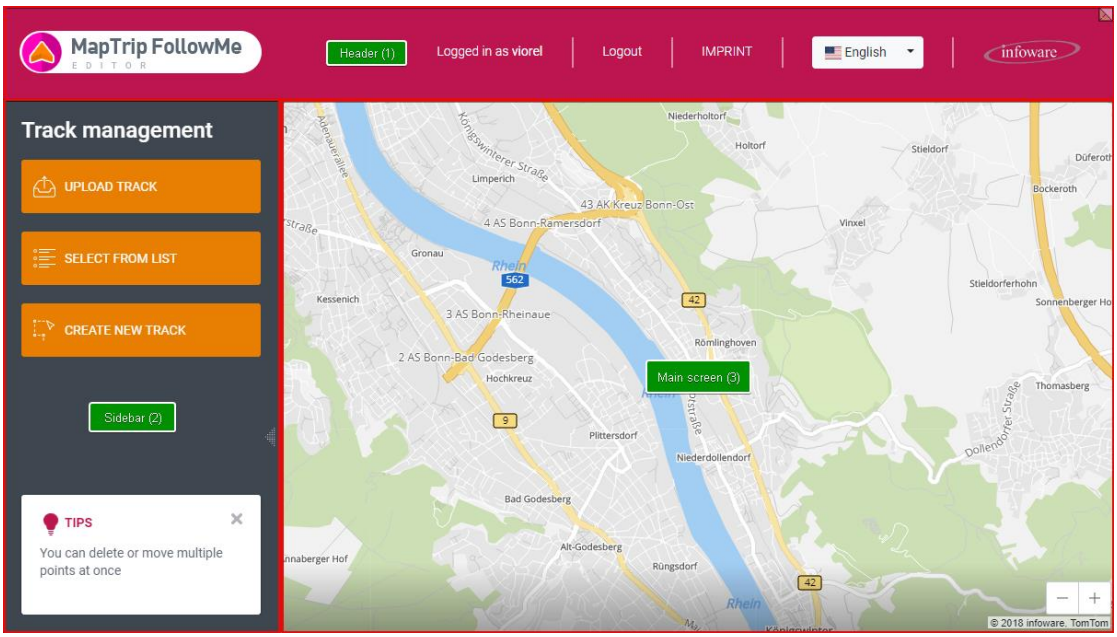


Fig. 3: The editing interface with no track loaded

The header shows general information of the application: what account you used to login, links to logout, the imprint and the language selector.

The sidebar shows you different functions according to your work process:

1. The basic state gives you 3 options to choose a track:
   - Upload a track
   - Create a track from the scratch
   - Edit a track

2. Once a track is loaded the sidebar shows you additional functions such as:
   - Operate and edit default events and user generated events
   - Calculate the resulting route as well as several blending in and blending out options of the track on the map.

You can see a random tip how to use a certain function in the editor on the buttons of the sidebar.

You actually edit a track in the *main screen*, such as adding dots, delete, move them or add any events:

1 = Paste into new track, 2 = load status and remarks, 3 = download track, 4 = Edit track info, 5 = Save the current track state, 6 = Duplicate this track, 7 = Close the current track without saving

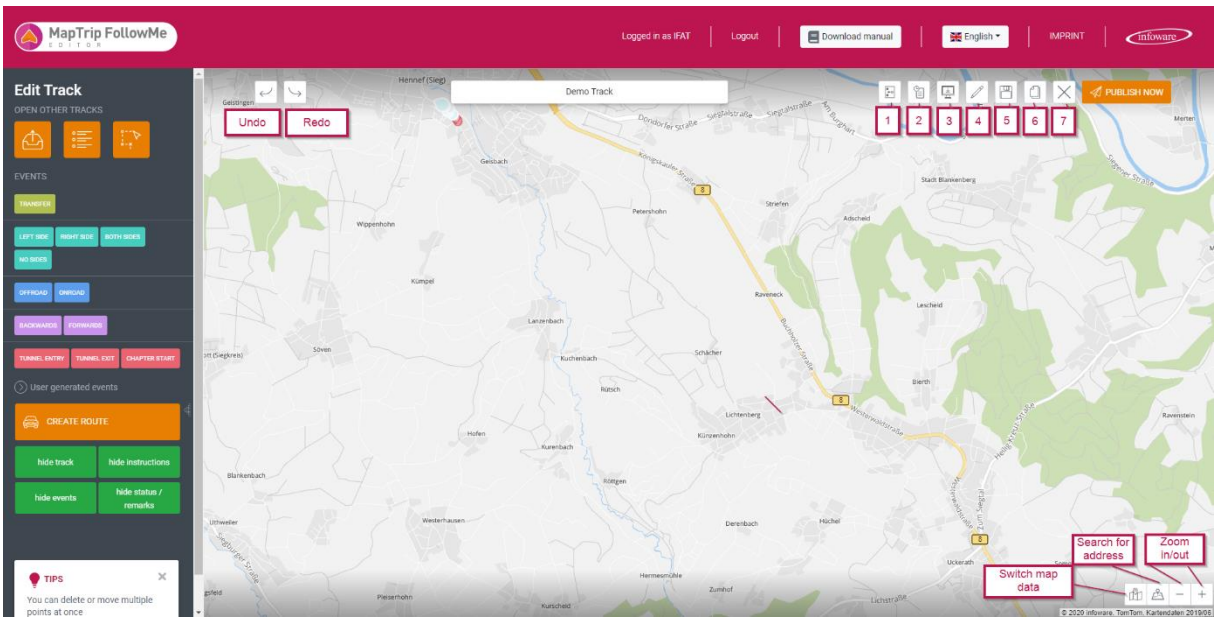


Fig. 4: The editing interface with a track loaded

CREATE A TRACK FROM SCRATCH

The first step to create a track from the scratch is to click on the "Create new track" button on the left sidebar. Clicking this button will open a window prompting you to enter a name and a description for the track. This is known as the *track metadata*. The name you pick should be short and yet describe the track properly. You can use letters and numbers – **yet no punctuation or other special characters**. If you like to add a further explanation, you can use the description field. The name and the description will be shown later in your list of saved tracks.

After saving the metadata information, you are able to add dots to your track. Therefore, put your mouse pointer on the street you would like to start. Make sure the zoom level is set so you can properly see the street and add the first dot.

The function how to add a dot is enabled by holding the CTRL-key on your keyboard and click on the map where you would like to insert the dot.

A track consists of at least two dots added onto the map. Hold the CTRL-key and add as many dots as necessary to describe your track. We recommend you to insert the dots with a small interface respectively every 30m/ 40 m.

In order to make one-way streets or closures passable for route planning, several dots must be placed on this section of the road. Otherwise, e.g. if there is only one dot placed on a one-way street, the route is calculated taking into account the applicable direction of travel/ closure.

Releasing the CTRL-key will allow you to move the map around by dragging it with your mouse. You can continue adding dots at any time by holding the CTRL-key again. Please see the “Adding dots” section below for a further description of this functionality.

To save the track please klick on the symbol “Save the current track state” in the right upper corner. You will receive a confirmation that the track has been successfully saved.

RECORD A TRACK USING THE MAPTRIP APPLICATION

You can record a track while you drive with our MapTrip application using the FollowMe Record Mode on your mobile device. You can add certain remarks along the way while you are recording the track.

You can export this recorded route as an. nmea file and transfer it to your computer. From here you are able to upload or synchronise it into the FollowMe Editor and do any touch-ups.

UPLOAD A PRERECORDED ROUTE

Click on the “Upload track” button on the left sidebar of the editor to upload a track. This will open a screen that prompts you to: 1) select the file you wish to upload and 2) fill in its metadata.

Click on the (+) plus sign and it will open your browser. Choose the file you would like to upload, enter a new name and choose the destination folder. Confirm to upload the track by click on the “*Upload track*” button.

To upload a track, you have the below options. The contents below are also explained in the upload window:

1. NMEA file: The FollowMe Editor is fully compatible with the exports the MapTrip mobile application offers. To edit a track, you recorded with the application, simply export it from the device you used to record it to your computer and from here upload it in the editor, or synchronize them automatically from the device.

2. GPX file: External recorded track in GPX format can be uploaded into the Editor and will be changed to a. nmea respectively .csv format.

3. KML file: Also files in KML format can be loaded into the Editor and will be converted to a. nmea respectively .csv file.

4. CSV file: The CSV format counts as the internal default format, also because of the low file size. Please find a detailed description of the CSV-format in the attachment.

   If possible export/import the recorded routes as CSV. In case this might not be possible, you can use an online converter to change from any other format to CSV.

   You can edit CSV files in Excel. Please make sure you export them as CSV format and not any other format. Click on "Upload track" to load the track into your editor.

CHOOSE A TRACK FROM YOUR LIST OF TRACKS

The third option to load a track into the editor is to load it from the list of your already saved tracks. Click on the *"Select from list"* button on the left sidebar. This will lead you to a screen with a list of all tracks you have ever saved using the current username.

To load a specific track, click on it in the list and then click on the "*Choose track"* button. This will load the track into the map. The map will be centred so you will have the full track into view.

FOLDER STRUCTUR

You can group tracks inside the FollowMe Editor into folders. In this window, you can also manage the folders with actions like adding a new folder, editing a folder name and deleting a folder.

If no folder structure is created, the default folder is the base.

You can move tracks from one folder to another in two ways:

1. By Drag&Drop.
2. Click on the "Edit track info" button and select the new folder name from the Folder dropdown.

Diese Liste enthält sowohl Ihre veröffentlichten als auch Ihre unveröffentlichten Tracks.

This list contains your published and unpublished tracks.

Tracks that are actually published are accompanied by a green icon in front of the track name: .

To unpublish a track click on this button in the list next to the track's name: . Once you have confirmed to unpublish the green icon in front of the track name will disappear. Once you have synchronized your mobile device the unpublished track will no longer be visible on your device.

EDIT MULTIPLE TRACKS AT ONCE

With the editor you can load and display any number of tracks the same time. If you open a track while another track is open, the new track will be shown alongside the first one. You can use all three ways of adding a track: create it from scratch, upload it or open it from a file – these actions are available in the sidebar.

If more than one track is loaded in the Editor, a "Open tracks" panel appears on the screen:

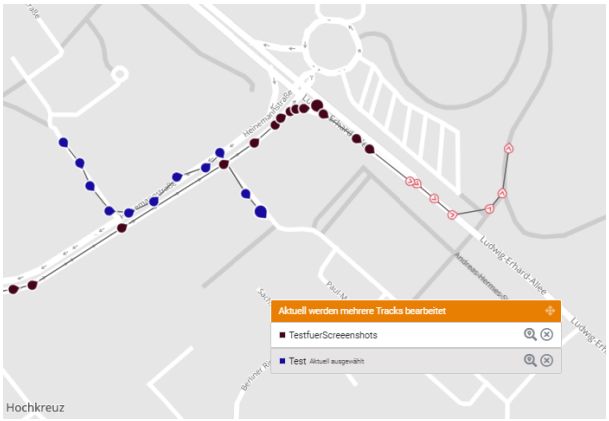


Fig. 5: Edit multiple tracks with different colours

By clicking can zoom directly to a track. The (x) button is to close one track.

To distinguish tracks on the map, they each receive their own random colour. You can see which colour is used for which track in the Open Tracks window (Currently editing multiple tracks) in front of the track name and the tracks themselves are drawn in this colour on the map also.

Tracks can only be edited individually. So you need to selected the track you would like to edit in the "Currently editing multiple tracks" screen. Tracks can also be selected by clicking on a dot of this track on the map.

DELETE A TRACK

To delete one of your existing tracks, you need to call up your list of tracks. You can do this by clicking on the *"Select from list"* button on the left sidebar if there is no track loaded into the editor yet. This will show the list of all your tracks and each of them will have a small "Delete" symbol next to them. The "Delete" symbol is represented by an icon of a trashcan. Clicking on the symbol will prompt a screen in which you can either confirm or cancel the deletion of the track.

ADD DOTS

There are two ways to add dots to the map:

1. The first and quickest way is to press and hold the CTRL-key and click on the map with your mouse pointer where you would like to add the dot. You can add as many dots as you want like this. Releasing the CTRL-key allows you to take control again over the map to move it. Pressing the CTRL-key again re-enables you to add further dots on the map.
2. The second way is by placing your mouse pointer where you would like to add a dot and do a right click on the map. A context menu will appear and you would need to choose the "Insert" button:

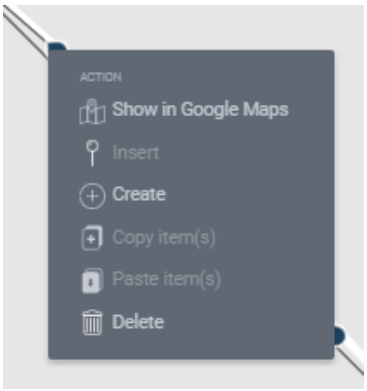


Fig. 6: Context menu opening by right click on the map

It is important to know, that each point will be added right *after* the current selected dot into the driving direction.

New dot after the last dot of a sequence: Select the last dot of a sequence by clicking on it. Press the CTRL-key and click on the map where you want to insert the new point.

Alternatively select the last point of a track, place your mouse pointer on the map where to insert the new dot, do a right click and choose *"Insert*" in the Context menu.

New dot in the middle of a sequence (track): The new dot will be added between the selected dot and the next one in the driving direction of the route.

Select the dot after which one you want to add the new dot. Press the CTLR-key and click on the position you want to add the new dot.

Alternatively place your mouse pointer between the selected dot and the following dot. Do a right click on the map and choose "*Insert"* in the Context menu.

SELECT DOTS

Once a track is loaded in the editor and there is at least one dot added on the map, you can click on dot(s) to select them. Once a dot is selected you are able to move it or delete it (see below).

Selected dots do appear slightly enlarged in comparison to non-selected dots.

It is possible to select more than one dot at one time. You can do this by holding the SHIFT-key pressed on your keyboard and simultaneously click on each dot. Once several points are selected you can (mass) move or delete them.

DELETE DOTS

If you need to delete one or more dots, you would need to select them first by clicking on them. Once they are selected, there are two ways to delete the dots:

1. Press the *Delete* key on your keyboard.
2. Right click on any of the selected dots and press the "*Delete*" button in the context menu that appears.

MOVE DOTS

To move one or more dots on the map you need to select the desired dot(s). Once you have selected them, use your mouse pointer to drag them to the desired location. For example, if you are editing a pre-recorded route, it may happen that all dots were added a few meters off the street due to poor GPS signal. To place them correctly on the street, select all the dots and drag them a little bit to their correct position on the street.

THE CATERPILLAR

A "caterpillar" appears when you select one dot. Its purpose is to indicate the dots that are in proximity and they are pointing into the driving direction. The peak of the dots is showing the direction of travel. When a caterpillar is displayed, three dots ahead of the selected dot and ten dots behind it will be highlighted:

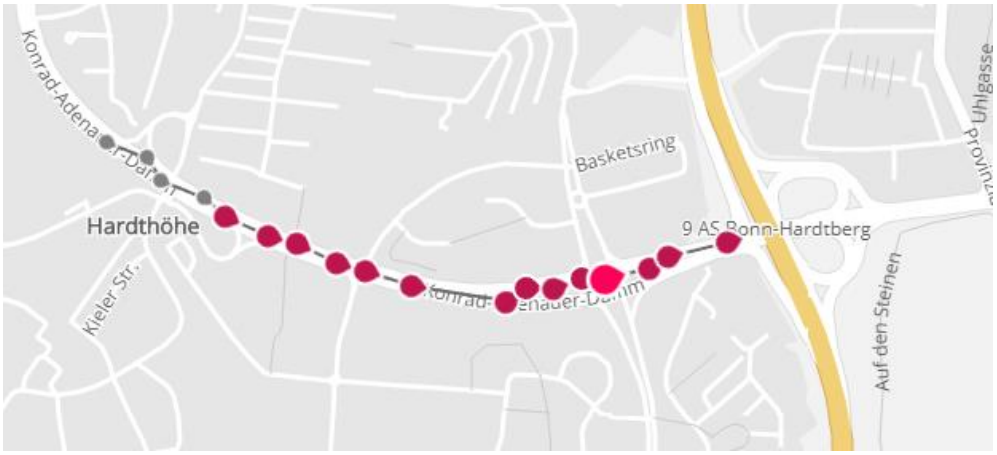


Fig.7: A caterpillar on the map

You can control the caterpillar by using the following shortcuts:

1. **Left Arrow/Right Arrow:** moves the caterpillar one dot backwards or forward.
2. **Space + Left Arrow/Space + Right Arrow***:* moves the caterpillar 10 dots backwards or forwards.
3. **Shift + Left Arrow/Shift + Right Arrow***:* select one dot backward or forward.

DEFAULT EVENTS

An event is something that happens along the route which the driver needs to be aware of. An event is attached to one dot and is shown on the route at that specific dot position and also be acoustically displayed. There are two types of events in the FollowMe Editor: *default (system) events* and *user generated events.*

Default (system) events are events that are predefined in the FollowMe Editor. They are shown to all users. Their major implication, when present on the map, is that *they influence how the route is going to be calculated and shown to the driver.*

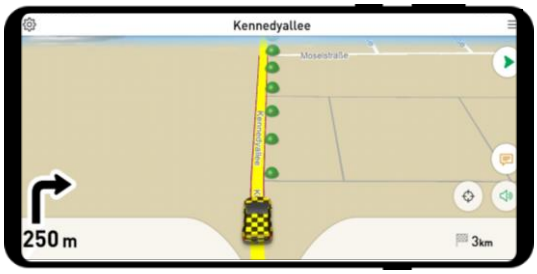
The default events themselves are split into these categories: Transfer mode, Service mode, Onroad/Offroad mode and Backwards/Forwards drive.

1. *Transfer Mode:* tells the driver there is no need to perform any services on that section of the route and they can speed up the transfer to the next service area.

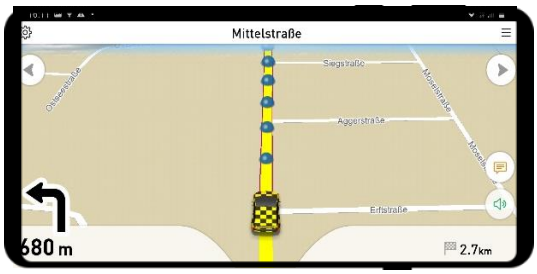
Transfer mode

2. *Service Mode*: the drivers need to follow a section of the route on which they need to perform services e.g. collecting dustbins/delivering packages/etc. on the left, right or both sides. Or according to specification (= System is in collection mode yet not specific to a side e.g. sprinkle road salt or not). Once added on a dot, this event will apply to all addresses on the route, until the event is overwritten.

Collect on left side



Collect on right side



Collect on both sides

Collect according to specification

3. *Onroad/Offroad*: Eventually you need to do services in an area which is not in your map yet, such as new building areas, complex industrial areas with no entry for the mapping industry yet.
   The *Offroad* mode creates a navigation path on the exact coordinates you define by adding the dots on the map.
   In Offroad mode, the MapTrip system can only access to the given GPS coordinates without the possibility to balance GPS deviations on the existing roads.
   In Onroad mode on the other hand, the coordinates will be processed with the help of road geometry for route calculation and inaccurate GPS coordinates will be compensate.

4. *Backward drive:* is used to indicate the driver that the road they are about to enter does not allow turns. Instead of driving down the road as usual, they should back into it so it's easier to exit.
   Forward event assigns the driver to drive with the driving direction again.

User generated events are additional events, which will be shown and read out loud to the driver when he reaches the position. The contents are freely configurable by the user. For example:

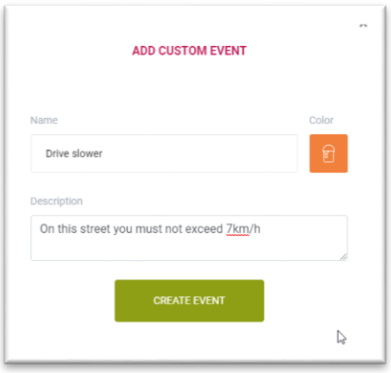
- As a special note for the driver or the service to be performed: "Drive slowly here" or "Danger from biting dog.
- As a job reference: a special position or contact person. E.g. "Garbage can behind the garage" or "Report to Mr. Müller".

ADD A USER GENERATED EVENT

You can only add user generated events when a track is loaded in the Editor. To add a custom event, you need to click on "*User generated events*" on the left sidebar and click on "*Create new event*". A Pop-Up will appear and you need to enter the name, description and choose a colour for the event. The name should be short, as it's just an identifier for the event. The description can be more detailed. Both – name and description – will be read out to the driver in the application. The colour doesn't influence anything and it's only used to distinguish more easily between the single events when editing a track.

One important note about custom events is that a user can save event templates in the system – yet not the events themselves. Once a custom event is attached to a dot, an independent copy is created. This copy can be edited individually without affecting the parent template.

For example: a new user generated event is added - telling the drivers to slow down the speed below the limit on a particular street:



This event will be attached to two dots, on two different streets:

Fig. 8: A customer generated event

But on the second street, the speed should be a maximum of 22km/h and not 7km/h. The Editor can edit the event inline (please see the “Editing events inline” section below) to change the message that the driver is going to get, without affecting the parent template:

Fig. 9: A customer generated event which is modified inline

Likewise, updating the parent template does not affect events which are already added on the map.

EDIT AND DELETE A USER GENERATED EVENT

Once created, a user generated event can be edited or deleted by a right click on it in the left sidebar and select one of the options in the context menu. By selecting the "*Modify"* action, a Pop-Up with the event information is shown and you can edit the name, the description and the colour.

Editing or deleting a user generated event does not affect events of the same type which are already attached to dots.

EDIT OR REMOVE A USER GENERATED EVENT WHICH IS ATTACHED TO A DOT

This is also called "Inline editing" because it means to edit an event that was already attached to a dot, on the map. To edit any event inline, you just need to right click on it and select the desired option "*Modify inline*" in the context menu.

Editing or deleting an event on a dot does not influence events of the same type attached to other dots.

ADD AN EVENT ON A DOT

There are two ways to add an event to one or more dots:

1. You can add an event by selecting one or more dots on the map and then click on the event name in the left sidebar.
2. Or you can select one dot and right click on it and selecting the *"+Create*" button in the context menu. This will show a list with all the events from the application. You need to click on the desired event name and click on the "Choose event" button to add it to the dot.

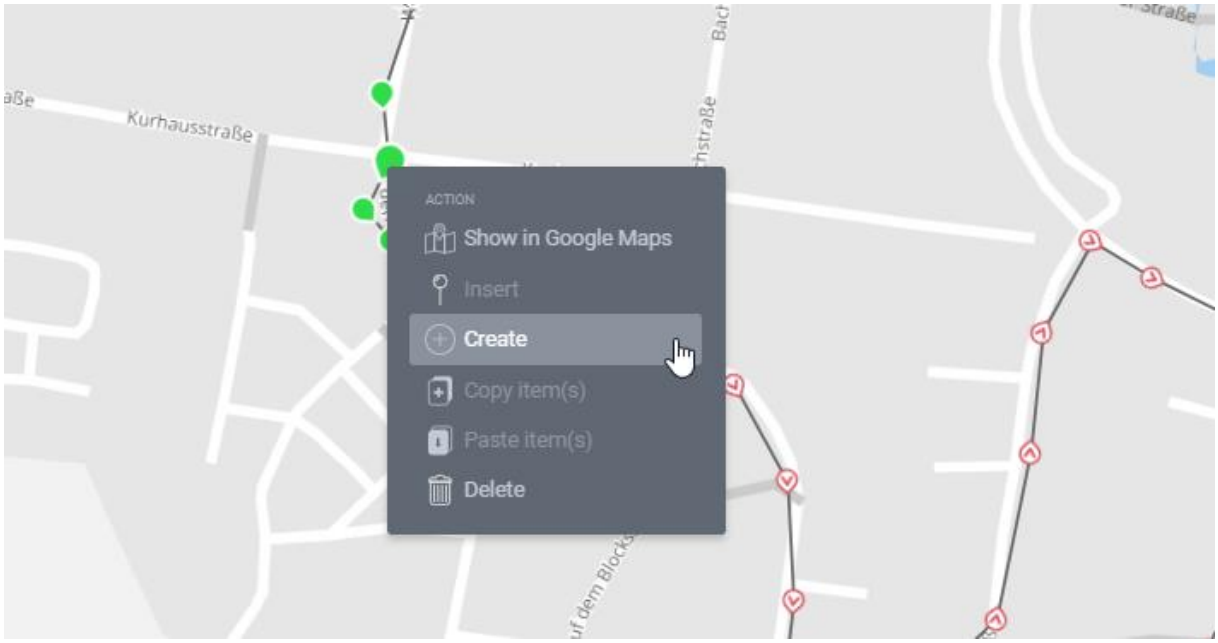


Fig.10: Context menu to add an Event

ADD A BACKWARDS/FORWARDS EVENT TO A DOT

The Backwards/Forwards events needs to be mentioned especially because they work a little bit different. Their main purpose is to visually and audibly indicate that a vehicle needs to back up on a street instead of driving regularly, because the street is a dead end with no place to do a U-turn.

They are different because you need to enable and disable them, which means you need to tell the driver to do a backwards drive *right before* the next street corner and then do a forward drive *right before* the end of the street. You do this by adding a dot on the track before the street corner and assigning a "Backward event" to it. Then, you add a track dot just before the end of the street and you assign a "Forwards event" to it. You can control if the actions are set correctly by looking at the instructions on the green bubbles. In addition, the reverse route will be marked in red in MapTrip for the driver.

Fig. 11: Event backwards placed before the street corner and event forwards before the end of the road

COPY PASTE DOTS BETWEEN TRACKS

To copy one or more dots from one track to another you have to select them and do a right click of one of the selected dots. In the now appearing context menu, you can click on "Copy Item(s)":

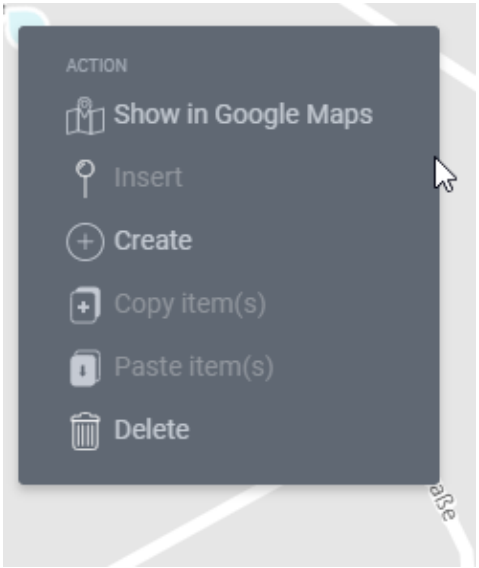


Fig 12: Context menu copy item(s) and paste item(s)

You have two options to paste the dots:

1. If you want to paste the dots into a new track, you can click on the "*Paste into new track*" button on the top right-hand side:  . This will close the current track and open a form to create a new track.

Once you input the name, folder and description of the new track, the editor will add the points you copied to the track and show it on the map.

2. If you want to paste the dots inside an existing track, you have to load the track on the screen, select the dot after you'd like to paste the copied dots in and right click on it. This time, you need to click on the "*Paste item(s)*" button. This action will add the copied dots after the selected dot.

CREATE A ROUTE

You can preview how the route is going to be shown to the driver at any time. This is useful to see, for example, how an event affects the route, or if the route can go on a certain street or not. To show the route, you just need to click on the "*Create route*" button on the left sidebar.

It is important to note that the route you see is not what's going to be sent to the driver. The drivers receive the track you are editing and, for them, the route is calculated on the spot in the MapTrip application.

When you calculate a route based on a track, you will receive three sets of information: the route itself, drawn on the road as it will be used for the navigation, the textual instructions the driver is going to receive (like turn left, turn right etc.) and a visual representation of the "service points" (the points in which area the driver needs to stop and do something, on the left, right or both sides of a street):

Fig. 13: Loaded Route

The route is going to be drawn in a Burgundy colour, the instructions will be shown, in order, in green bubbles and the service points will be shown with coloured bubbles as follows: dark blue for "both sides", red for "left side", green for "right side" and orange for collect "according to specification".

To recalculate a route after you've edited the map, you need to click on the "Redraw Route" button on the left sidebar.

HIDE AND SHOW INFORMATION: TRACK, INSTRUCTIONS AND EVENTS

When showing a route, all the elements visible on the map can create some clutter. You can filter what you see by clicking on the “show track”, “show instructions” and “show events” button on the left sidebar. “show track” and “show events” are self-explanatory, yet when clicking on the “show/Hide instructions” button, the Editor will show and hide all the instructions bubbles and the service points at the same time.

HIDE AND SHOW INDIVIDUAL EVENT INFORMATIONS

The event descriptions in a small space can overlap, so that only the topmost event description is clearly legible.

To show or hide individual event descriptions, hold down the ALT key and click on the point to which the event is attached.

The track point remains dark blue - so you can see that an event is attached to this point.

To show the description again, click on the point again while holding down the ALT key.

OTHER FUNCTIONALITY: UNDO/REDO AND ZOOM-IN/OUT

Any action you do on the map can be undone or redone by pressing on the buttons in the far left corner of the application’s main area: 

To zoom in or out on the map, you have two options: either use your mouse’s scroll wheel or click on the plus/minus signs in the bottom far right corner of the application’s main area. To zoom in you can also double click into the card.

DOWNLOAD A ROUTE

If you want to upload a track manually to a device, you can do this by download it to your local computer in a first step. By clicking the “*download track*”  icon in the application’s main area while editing a track, you will be presented with a CSV or a .nmea file. You can download it now on your local computer and now be able to upload this file onto your device. You can upload this file back at the editor at any time and start from where you left off.

DUPLICATE A ROUTE

If you need to base your new track on an already existing one, you can use the duplicate functionality. To do so, load the track you want to copy and click on the duplicate icon:  . You will then be presented with a screen to choose the name and the description of the new track. Once you did that, click on the “*Duplicate track”* button to load the copy in the editor. The previous track will be closed (so be sure to save any changes beforehand).

CLOSE A TRACK

Once you’re done editing a track, you can click on the  icon to close it. Closing a track will discard any unsaved changes so, you can use this functionality after you’ve added some changes you don’t wish to save or right after you saved the track.

SAVE A TRACK

When you do changes to a track, they are only saved locally. Closing the browser window and coming back later will present you the track in the form you've left it, but closing the track will discard any changes. To save the track on the server, you need to click on the "*save the current track state*" icon.

Important note: this saves a track, but it doesn't make it available to devices. To make a track available to devices (after you've first added it or after you've done some changes to it), please see the "Publish a route" functionality from below.

EDIT TRACK METADATA

You can edit a track's name and description by clicking the button "*Edit track info*" in the application's main window. This will bring up a window similar to the one shown when you first create a track. You can change the name, folder and description of the track.

PUBLISH A TRACK

This is the final step in the track editing process. Once you're done with all the changes and you want to make the track available on your devices, just click on the PUBLISH NOW icon in the application's main window. Once you confirmed again this will make the track available on your devices once the driver has tapped on the synchronise button in the application itself. It will also mark the track as published with the green icon: to indicate its published and available on the devices.

This is also applying for any changes on already existing tracks. You need to publish the track again and synchronize on the device.

Therefore, you need to click the Synchronize button on your device in the MapTrip application in the right, upper corner.

MISCELLANEOUS: SEARCH FOR AN ADDRESS

To search for an address on the map, you can click on this button on the right bottom side:

A click on the button will open a window asking for an address. You can input the address in natural language, yet the more exact it is, the more accurate the results will be. If there is more than one address found for your query, you will be presented with a disambiguation screen asking you which of the addresses you wanted. Once the address has been found, it will be displayed on the map:

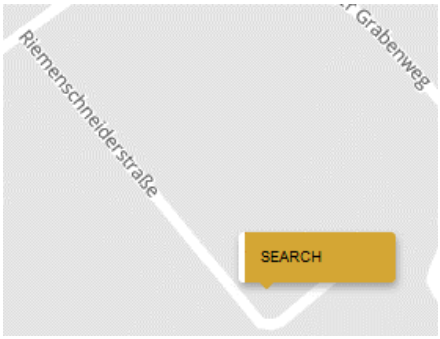


Fig. 14: Search result

MISCELLANEOUS: SEEING STATUS AND REMARKS

Status: When one of your drivers follows a route you created with the FollowMe Editor, you will see a recording of it when you load the track in the Editor. You can see the current state live for e.g. paused or finished.

Remarks: These are feedback messages saved by the driver localized while driving at certain point on the route. They are shown in light blue bubbles on the map as soon as the dispatcher loads the data by clicking on the button “Load status and remarks”.

To access the recordings, you can click on the *“Load status and remarks”* button on the upper right-hand side:  It will open a window listing all entries:

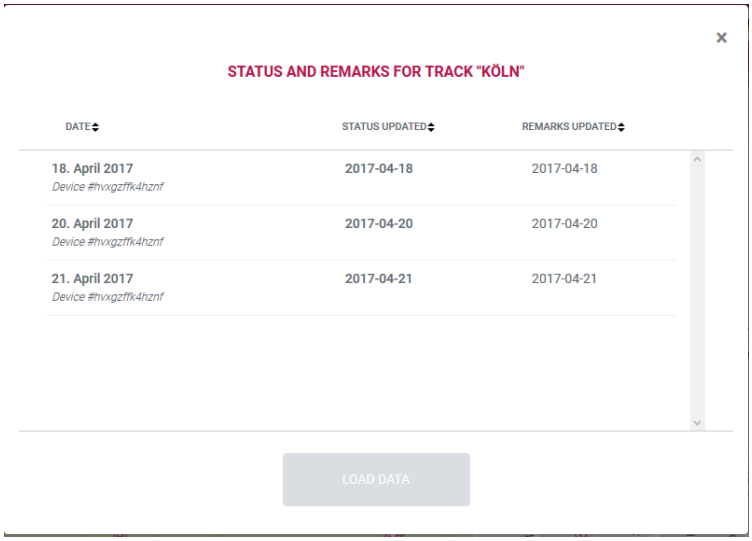


Fig. 15: Status and remarks per device

When you load the data for an entry, it is displayed on the map:

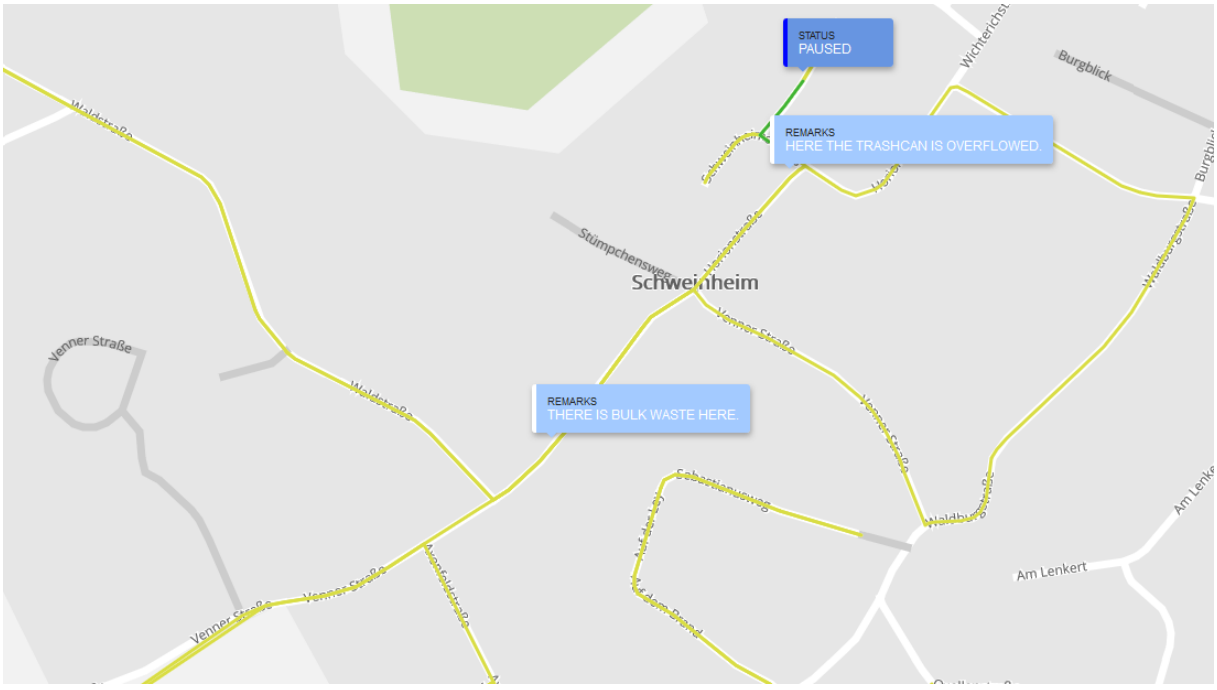


Fig. 16: Status and remarks

The following colours are used to represent the live status of a route in the Editor while the driver is actually following a route:

1. **TODO (not driven on yet)**
2. **DONE (driven on successfully)**
3. **MISSED (part of the tour, but not driven on)**
4. **Connection error (couldn't communicate to the server)**

Actions from the driver, like pausing or ending the tour are shown in dark blue bubbles on the map.

EMBEDDING THE EDITOR INTO YOUR OWN APPLICATION/WEBSITE

The FollowMe Editor is a standalone web-application, which means you can embed it into your own products easily. These are the requirements:

1. The application must be shown in a landscape form, where the ratio between width and height should be at least 1.5 (ideally 1.7)
2. If the area of the screen you are embedding the app is smaller, it is advisable that you zoom-out the embed. You can see an example of how that can be done here: https://followme.infoware.de/embed-demo/with-zoom.html
3. If you want to embed the editor into a web-view, please make sure that the implemented compatibilities are up-to date. The editor uses some functionality that might not be available for older version. It is safe to assume that, if the web-view implements a modern version of webkit, the editor will function properly.
4. You can take the user through a login screen, or you can log them automatically in the backend and load the embed using the session id. In that case, you should embed this url: *https://followme.maptrip.de/embed.html?username=demo&session-id=' + sessionId*
5. You can pre-set the language of the editor by adding the language code to the embed: *https://followme.maptrip.de/embed.html?language=de&username=demo&session-id=' + sessionId*

Software-Documentation

Documentation:

MapTrip Format description FollowMe route (CSV)

Description	MapTrip Format description FollowMe route (CSV)
Version	
Title	MapTrip Format description FollowMe route (CSV)
Date	June 2020

Software-Documentation

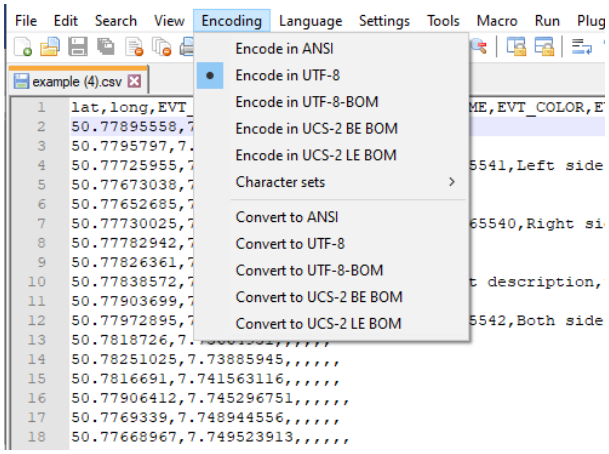
Format description FollowMe route (CSV)

This describes, how a FollowMe route should look like in a CSV format, so that it can be imported it into the FollowMe Editor.

1. Required file format

The file format CSV stands for Comma-separated values (rarely Character-separated values) and describes the structure of a text file for storing or exchanging simply structured data. The file extension is .csv. There is no general standard for this CSV file format. CSV files can contain tables or a list.

The CSV file must be encoded in UTF-8 format. The editor Notepad ++ can be used to set the UTF-8 encoding, for example. Please see the following screenshot:



2. Required format of the first line

The CSV file must contain the necessary column headers in the first line. The columns can be divided by different separators. The semicolon (;), comma (,) and tab character are permitted for MapTrip.

lat
long
EVT_TYPE
EVT_DESCR

lat and long are the column header for the coordinates

The description lat is also permitted for: latitude
The description long is also permitted for: longitude or lng

The identifiers lat or long - or the alternative identifiers - are required for the transfer of a FollowMe route.

Example of a first line:

lat;long;EVT_TYPE;EVT_DESCR

Explanation for the format of the coordinates lat and long:

- The coordinates must be specified in decimal degrees: 50.701610;7.141167
- A division of coordinates into minutes, seconds (and milliseconds) is not supported
- The dot character must be used as decimal separator.

The identifiers EVT_TYPE and EVT_DESCR are optional.

3. Definition of Events

Events are actions which are added to the FollowMe route to provide better orientation while following the FollowMe route.

Listing of the Event types: EVT_TYPE: Code of the event as shown in the following table. The complete list of events can be found in the FollowMe Editor manual.

EVENT	EVT_TYPE
1	Free text
65539	Transfer start
65540	Collect on right side
65541	Collect on left side
65542	Collect on both sides
65543	Collect according to specification

Additional column headers may be present, but will not be evaluated and processed by MapTrip.

If additional column headers are present, they must be separated in each line by the appropriate number of separators. They do not have to be filled with values.

Example (lat;long;EVT_TYPE;EVT_DESCR) filled:

50.681713333333335;7.141875;65539;Transfer

Example (lat;long;EVT_TYPE;EVT_DESCR) last two digits not filled

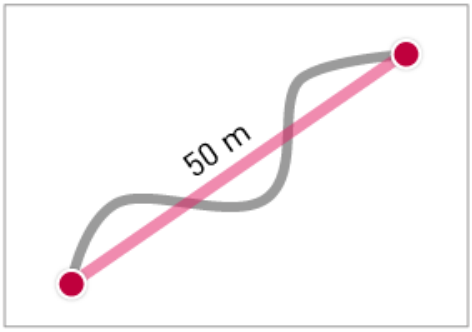
50.682071666666666;7.141625;;

4. Which separators to use between the columns

The columns can be divided by different separators. The semicolon (;), comma (,) and tab character are allowed in MapTrip.

5. Recommended distance between the dots

When planning a FollowMe route, it is recommended to keep a maximum distance of 50m air-line between the dots to ensure the most precise route possible. The shortest route between the dots is calculated taking into account all closures and one-way streets. In this constellation (50 m point distance), closures and one-way streets against the direction of travel are not used. To make this possible, the number of dots on the corresponding one-way street, closure must be increased. In this case the FollowMe routing ignores closures and one-ways streets. The streets become passable.



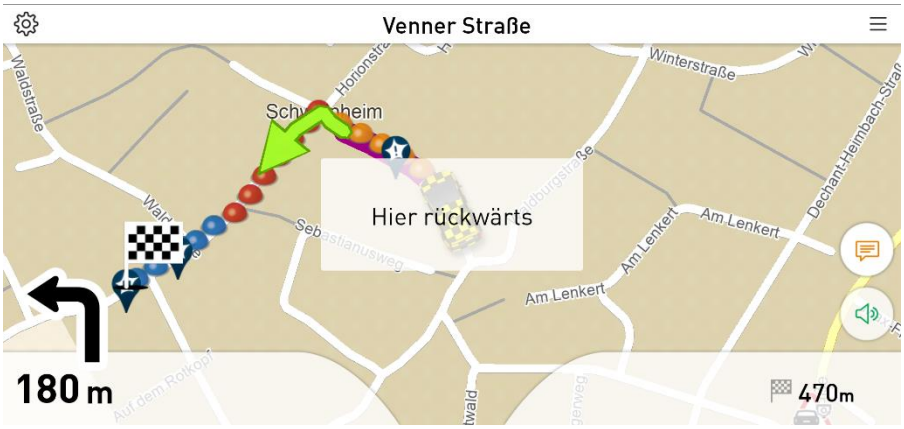
6. Example of a FollowMe route without events

lat;long;
50.68258333333333;7.141048333333333
50.682626666666664;7.140946666666666
50.68266833333333;7.140841666666667
50.68270666666667;7.14073
50.682743333333335;7.140618333333333
50.68278;7.140508333333333
50.68281666666667;7.140396666666667
50.682851666666664;7.140285
50.682885;7.140175
50.682916666666664;7.140066666666667
50.682948333333336;7.139958333333333
50.68298166666667;7.139855
50.683015;7.13976
50.68304666666667;7.13968
50.68307166666666;7.139618333333333
50.68309;7.139575

50.68309;7.139575
50.68309166666667;7.139568333333333
50.683105;7.139521666666667
50.6831;7.139456666666667

Screenshot of MapTrip of the above route from a CSV file.

7. Example of a FollowMe route in CSV format



(Hier rückwärts = Here backwards)

Here the column headings lat, long, EVT_TYPE und EVT_DESCR are used

lat;long;EVT_TYPE;EVT_DESCR
50.681691666666666;7.141931666666666;;
50.681713333333335;7.141875;65539;;
50.68175;7.141823333333333;;
50.6818;7.141781666666667;;
50.68186166666667;7.141743333333333;;
50.68192833333333;7.141706666666667;1;Backwards

50.68199833333333;7.1416683333333335;;
50.682071666666666;7.141625;;
50.682143333333336;7.1415766666666665;;
50.68221833333333;7.1415283333333335;;
50.682291666666664;7.141461666666666;;
50.682356666666664;7.14138;65538;;
50.68242;7.1413;;
50.68248;7.141221666666667;;
50.682535;7.14114;;
50.68258333333333;7.141048333333333;;
50.682626666666664;7.140946666666666;;
50.68266833333333;7.140841666666667;;
50.68270666666667;7.14073;1;Attention
50.682743333333335;7.140618333333333;;
50.68278;7.140508333333333;;
50.68281666666667;7.140396666666667;;
50.682851666666664;7.140285;;
50.682885;7.140175;;
50.682916666666664;7.140066666666667;;
50.682948333333336;7.139958333333333;;
50.68298166666667;7.139855;;
50.683015;7.13976;65541;;
50.68304666666667;7.13968;;
50.68307166666666;7.139618333333333;;
50.68309;7.139575;;
50.68309;7.139575;;
50.68309;7.139575;;
50.68309;7.139575;;
50.68309;7.139575;;
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50.68309;7.139575;;
50.68309;7.139575;;
50.68309;7.139575;;
50.68309166666667;7.139568333333333;;
50.683105;7.139521666666667;;

50.6831;7.139456666666667;;
50.683065;7.139366666666667;;
50.68302833333333;7.13928;;
50.682986666666665;7.139193333333333;;
50.68293833333333;7.139106666666667;;
50.68288166666667;7.139028333333333;;
50.682815;7.138951666666666;;
50.682743333333335;7.138873333333334;;
50.682671666666664;7.138793333333333;;
50.68259666666667;7.138708333333334;;
50.682523333333336;7.138625;;
50.682451666666665;7.138543333333334;;
50.682381666666664;7.138458333333333;;
50.68231;7.138371666666667;;
50.68223833333333;7.138283333333334;;
50.68217;7.13819;;
50.68210666666667;7.138093333333333;;
50.68205;7.137995;65542;;
50.682;7.137915;;
50.681955;7.137831666666667;;
50.681918333333336;7.137761666666667;;
50.68189666666667;7.137711666666666;;
50.68188333333333;7.13768;;
50.681873333333336;7.1376566666666665;;
50.68186333333333;7.137631666666667;;
50.681841666666664;7.1375866666666665;;
50.68181;7.13752;;
50.68177166666667;7.137435;;
50.681736666666666;7.137343333333333;1;Almost done
50.68169833333333;7.13724;;
50.68165333333334;7.137125;;
50.681603333333335;7.137003333333333;;
50.681556666666665;7.136886666666666;;
50.68150833333333;7.136773333333333;;
50.68146;7.136653333333333;;
50.68141;7.136533333333333;;