

# **Trip Server User Guide**

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This User Guide is for using Trip, version 2.0.0-rc.2, 4 May 2023 in a browser. Trip is an application supporting trip recording and itinerary planning.

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# 1 Introduction

TRIP - Trip Recording and Itinerary Planner, is a web-based application supporting trip recording and itinerary planning.

The intended use is for a hiker, mountain-biker or other adventurer, to be able to publish and share their planned itinerary, then subsequently log their positions at intervals, allowing someone else to be able to monitor their progress.

In the event of contact being lost, the plans and tracking information can be passed to rescue services etc., to assist with locating the missing adventurer.

The application is open-source ([https://en.wikipedia.org/wiki/Open-source\\_software](https://en.wikipedia.org/wiki/Open-source_software)) and can be obtained from <https://www.fdsd.co.uk/trip-server-2/>.

The following features are provided:

- Remote tracking client applications such as TripLogger Remote for iOS (<https://www.fdsd.co.uk/triplogger/>) or GPSLogger for Android (<http://code.mendhak.com/gpslogger/>) can be used to submit locations to the server.
- Sharing tracks with others.
- Viewing tracks on a map provided by a tile server, e.g. OpenStreetMap tiles. (<https://www.openstreetmap.org/>)
- Creating and sharing itineraries using the Markdown markup language. (<https://daringfireball.net/projects/markdown/>)
- Using the map, interactively creating routes and waypoints for an itinerary.
- Uploading and downloading routes, tracks and waypoints for an itinerary as a GPX (<http://www.topografix.com/gpx.asp>) file.
- Viewing routes, tracks and waypoints of an itinerary on the map.
- Splitting, simplifying and joining routes and tracks.
- Deleting individual points from routes and tracks.
- Account maintenance – uploading TripLogger settings.
- Account maintenance – password change.
- Itinerary shares report – list shared itineraries including nicknames.
- Itinerary search by coordinate and radius.
- Administration – user management.
- Administration – tile usage report.

## 2 Overview

To access the system, you will need to request the administrator of the TRIP installation to create an account for you, using your e-mail address and providing you with an initial password. You should see Section 10.1 [Change Password], page 17, after your first login.

Thereafter you will be able to login to the system using the provided e-mail address and associated password. The application uses nicknames to identify users as a way of avoiding disclosure of e-mail addresses between users. In order to share your information with other users, you will need to know their nickname.

**Note:** nicknames are case-sensitive. ([https://en.wikipedia.org/wiki/Case\\_sensitivity](https://en.wikipedia.org/wiki/Case_sensitivity))

## 3 Remote Logging

Currently, there are three remote logging applications known to work with TRIP (<https://www.fdsd.co.uk/trip-server-2/>).

1. GPSLogger (<http://code.mendhak.com/gpslogger/>) for Android phones
2. TripLogger Remote for iOS (<https://www.fdsd.co.uk/triplogger/>) for Apple Watch, iPhones and iPads
3. Traccar Client (<https://www.traccar.org/client/>) also for Apple iPhones and iPads

TripLogger Remote is an iOS application providing various options to minimise battery use of the iPhone or iPad. It also supports the Apple Watch Series 3 onwards. If you would like to help test future versions of this app, please contact [support@fdsd.co.uk](mailto:support@fdsd.co.uk).

Instructions for configuring these application are displayed on the **Tracker Info** page of the web application, See Chapter 5 [Tracker Info], page 6. There are also instructions for using the TripLogger Remote app.

## 4 Tracking

Select **Tracking** from the menu to display your track log or the track log of another user who has chosen to share theirs with you.

If another user has shared their track log with you, a selection list titled **Display shared user's tracks** will be displayed. Select the user whose tracks you wish to see.

Specify a time and date range for the track points you wish to see.

You can also specify a maximum Horizontal Dilution of Precision HDOP ([https://en.wikipedia.org/wiki/Dilution\\_of\\_precision\\_%28navigation%29](https://en.wikipedia.org/wiki/Dilution_of_precision_%28navigation%29)) value to exclude less accurate positions.

**Note:** Entering a **Max hdop** value will also exclude all positions that have no HDOP value. Whether an HDOP value is available will depend on the features of the GPS logging application and hardware used.

You can further filter the results to show only those that include a note by selecting the **Show notes only** option.

### 4.1 List Tracks

Click the **List tracks** button to see any new locations. The page is not automatically refreshed when a new location is received.

**Restricted Sharing:** When a user shares their tracks with you, they can restrict how far back you can view their track points. In that event, the date range shown at the top of the page may be reduced to show the actual time period being viewed.

The following data is shown for each location. The values are those sent from the device. The units for those values are assumed to be as follows:

- Time—localised to the web browser's time zone.
- Latitude/Longitude—location using the WGS84 geodetic reference system.
- HDOP—Horizontal Dilution of Precision—estimated horizontal accuracy in metres.
- Altitude—metres.
- Speed—metres-per-second.
- Bearing— degrees.
- Note—optional text entered by the user for the location.
- Provider—optional data provider, e.g. GPS, Network.
- Satellites—Optional value indicating how many satellites the fix was using.
- Battery—most recently recorded battery percentage for the GPS device, where available.

To convert the speed to kilometres-per-hour, multiply by 3.6. To convert the speed in metres-per-second to approximate miles-per-hour, multiply by 2.24. For an exact conversion to miles-per-hour, multiply by 3,600 then divide by 1,609.344.



## 4.2 Show Map

Clicking the **Show map** button displays all the points matching the selection criteria on a map.

Dragging within the map area moves the map. The map can be zoomed in and out using the **plus** and **minus** icons at the top left-hand side of the map.

If the installation supports more than one map layer, there will also be a **stacked layer** icon beneath the zoom icons at the top left of the map.

While you are viewing the map, if any new track points are recorded for the user be monitored, the map should be updated within 60 seconds, showing their latest position within the criteria previously selected.

**Live Map Date Ranges:** When new track points are recorded the map respects the date range and other criteria you have specified. If the time of the new track points is outside the date range or does not meet the other criteria, it will not be included on the map.

## 4.3 Download Tracks

Clicking the **Download Tracks** button initiates a browser file download of the track points meeting the specified date range and other selected criteria. The downloaded file is in the common GPX file format which can be imported into many Geographic information system GIS ([https://en.wikipedia.org/wiki/Geographic\\_information\\_system](https://en.wikipedia.org/wiki/Geographic_information_system)) based applications.

## 4.4 Copy Tracks

The set of track points can be copied to an itinerary as a track log. Click the **Copy** button, then navigate to the intended destination itinerary. When the itinerary page is displayed, select the **Features > Edit > Paste** menu option.

**Note:** The copy and paste operations must be performed in the same browser session.

The copy operation does not copy the entire detail of the items being copied, instead just copying a reference to them together with any criteria used to select them. Should the results change in between the copy and paste operation, different values may be pasted from those displayed at the time the copy was initiated.

## 5 Tracker Info

Select **Tracker Info** from the menu to display information on setting up a tracker client application.

If you are using the TripLogger Remote for iOS app, you only need this page to ascertain the **Device identifier** which is a Universally Unique Identifier ([https://en.wikipedia.org/wiki/Universally\\_unique\\_identifier](https://en.wikipedia.org/wiki/Universally_unique_identifier)) (UUID). All the other information is for customising another client app. The UUID consists of a string of 32 characters separated by four dashes. This value needs to be copied, ideally by cut-and-paste, into the **User identifier** field in the app's settings page.

If you think there is the slightest possibility that your UUID may have been exposed to an unauthorised person, simply click the **Generate new tracking ID** to immediately revoke the previous UUID and generate a new one. There is absolutely no harm in creating new ones as frequently as you like. Just make sure to update the client application you are using with the new UUID and test that it successfully reports your location to the remote server.

### 5.1 Download TripLogger Settings

You can upload the settings from the TripLogger Remote for iOS app to the website as described in Section 10.2 [Upload TripLogger Settings], page 17.

Clicking on the **Download Updated TripLogger Settings** button will download those settings, updating them with the latest user UUID that you may have generated. The settings can then be imported into the TripLogger app. This can be easier than trying to copy and paste the UUID from a browser window etc.

If you have never uploaded any settings, this option creates and downloads some default values that you can import into TripLogger. The values used for the default settings are configured by the administrator of your TripServer website. This procedure is intended for use when you are performing the app's initial configuration.

The downloaded file contains your current UUID, so, if you intend to share the file with someone else, you should generate a new tracking UUID and import that into TripLogger before passing the previous file containing the old UUID to anyone else.

## 6 Track Sharing

The track points you record can be shared with another user, by nickname.

**Nicknames:** Note that nicknames are case-sensitive. ([https://en.wikipedia.org/wiki/Case\\_sensitivity](https://en.wikipedia.org/wiki/Case_sensitivity))

You can limit the exposure of your track points to a point in time that is the lesser of the following:

- the most recently logged point
- a maximum time period in any event

The latter period effectively overrides the former, so there is little advantage in setting a most recently logged period of time that is longer than the overall maximum time period.

Click on the **Track Sharing** menu option to display the **Track Sharing** page. The page lists any tracks you are already sharing with another user.

Click the **New** button to share your tracks with another user. Enter the user's nickname and set any date range constraints you wish to apply. Check the **Active** checkbox when you're ready to start sharing.

### 6.1 Amend Share Details

To amend the details of a share, select the checkbox next to the appropriate user in the list and click **Edit selected**. The details are then displayed in the form below the list. Amend the periods and click the **Save** button to update the list of shares.

### 6.2 Activating and Deactivating Shares

You can activate or deactivate location sharing by selecting one or more nicknames from the list and clicking the **Activate** or **Deactivate** buttons.

### 6.3 Deleting Shares

Although deactivating a shared location stops the relevant user from seeing your location history, you can delete the location sharing altogether. The effect is the same, other than the nickname is no longer shown in the list. Select one or more users and click the **Delete selected** button.

## 7 My Location

To view your own location using the browser, select **Location** from the menu.

The browser is asked to provide your current location. You may need to allow permission before the location is provided. After a short delay, your location details are displayed at the top of the page and a marker showing your location is displayed on the map. Your location information remains private and is not automatically recorded anywhere else at this stage.

There is a checkbox titled **Request high accuracy location**. Selecting this option potentially provides a more accurate location. Some browsers will not provide a location at all without this option selected.

Click the **Update position** button to request a new location.

You can choose to display your location in a variety of formats by selecting different values in the **Display position format** selection list. The chosen format is displayed directly beneath the selection list.

### 7.1 Recording Your Current Location

If you wish, you can manually record the current location in your track log. If you want to include a note together with your location, type it into the **Note** field. To save your current location in your track log, click the **Record this position** button. When the track log is viewed, the **Provider** column shows **web-browser** indicating how the location was determined.

This can be a useful fallback in the event that the remote logging application is not working or that you are somewhere without GPS reception but can indicate on a map where you are.

### 7.2 Adjusting Your Location

If you know the location shown is wrong on the map for some reason, you can adjust your location manually.

1. Click the **Edit** icon displayed at the top right-hand side of the map.
2. The marker icon displays a red dotted outline. Drag the marker to the desired location.
3. Click the **Save** button that is adjacent to the **Edit** icon at the top right-hand side of the map.
4. The location at the top of the page is updated with the coordinates of the marker position.
5. Record this position in your track log by clicking the **Record this position** button. When the track log is viewed, the **Provider** column shows **manual** indicating the location was specified manually.

### 7.3 Copying Your Current Location to an Itinerary

1. Click the **Copy** button.
2. Navigate to an itinerary.
3. Click the **paste** button.
4. A waypoint is created for the copied location.

## 8 Itineraries

Itineraries provide the ability to record information about a specific trip, together with useful waypoints and routes. You may also wish to show and share previous track logs that relate to the trip or add track logs after the trip for future reference.

Additionally you can create and modify routes and waypoints. You can also modify track logs.

Although routes and tracks are quite similar in that they both can denote a path, they are treated a little differently by the system.

- Routes are intended to be something that is planned. Therefore new ones can be created and points can be added to existing ones. Two or more routes can also be joined.
- Tracks are intended to relate to points that have been visited. Each point must have a time related to it. Additionally, tracks can be split into multiple segments. Each segment represents a logical break in a track, which might be due to stopping and restarting a track or losing the GPS signal for a while. New points cannot be added to a track. However, points can be removed, tracks and their segments can be split and joined.

Itineraries are listed in descending start date order. Itineraries with no dates are listed in alphabetical order prior to those with dates.

You can only edit itineraries that you created yourself. You cannot edit itineraries shared with you by others.

### 8.1 Itinerary Notes

To create a new itinerary, select **Itineraries** from the main menu and click the **New** button.

When you first create an itinerary, you must give it a title and can optionally enter start and end dates together with some descriptive text.

The text is interpreted following the syntax of Markdown (<https://daringfireball.net/projects/markdown>) as created by John Gruber. Markdown is a wonderful way of being able to write markup in a format that is very presentable in its original text form and also efficiently displayed as formatted HTML on the web.

### 8.2 Map

The map can be rotated on touch devices by touching and twisting with two fingers. On a system with a keyboard, the map can be rotated by holding down the **shift** and **alt** keys simultaneously while dragging with the mouse. When the map has been rotated, an arrow icon is displayed in the top right corner of the map, pointing north.

Click on the **north arrow** icon to reset the map orientation.

### 8.3 Live Map

One or more live tracks can be viewed on an itinerary map. From the itinerary page, optionally select any routes, waypoints and tracks and click the **Show map** button.

To see live track logs on the map, click the **lightening** control displayed near the top right of the map. A list of users who are sharing their tracks with you are displayed, including yourself. You can modify the start range date and time for displaying locations and also filter the reported locations to only include those less than a maximum HDOP value. You can also modify how frequently the map checks for updates by altering the value for **Refresh interval (seconds)**.

If your browser supports providing your position, you can use it to track your own position. Generally, it is likely to be better to log your locations using one of the client applications, but this facility is provided as a fallback, should it be more convenient to use the browser. Bear in mind some browsers have an option to reduce the accuracy of your position for privacy reasons.

When the **Track & record yourself** checkbox is enabled, the browser will occasionally report your position. The positions will be added to your track log with the **provider** attribute set to **web-browser** and shared with any other users that you have given permission to. You can minimise the frequency of these updates by changing the value for **Tracking interval (seconds)**. The actual frequency of updates is ultimately dictated by the browser.

Click the **Start or Apply button** to put your choices into effect.

Clicking the **Stop** button stops both the live updates of tracked locations as well as stopping logging your own locations.

## 8.4 Sharing

Sharing of itineraries is treated quite separately to that of sharing tracks, although when viewing an itinerary map you can choose to see the track points shared by others even if you haven't shared the itinerary with them. In fact this is the only place where you can view and monitor the progress of multiple users.

To access itinerary sharing, select the **Sharing** menu option from the **Itinerary** tab of the the itinerary page.

The list of any existing itinerary shares is displayed. You can choose one or more of the shares and click **Activate** or **Deactivate** buttons to change their activation status. You can also choose to delete the share, although this has the same effect as simply deactivating the share, but additionally removes the nickname from the list.

Click the **New** button to start sharing the itinerary with someone else. Enable the **Active** checkbox to actually enable sharing.

## 8.5 GPX Upload

You can import waypoints, tracks and routes from a standard GPX file. Not all the possible attributes within the GPX file are supported, so keep the original if the contents might be important.

**Importing GPX Files:** Some sources of GPX files create waypoints for every point on a route which can make a mess of an existing itinerary resulting in a laborious cleanup operation. If you do not fully know the contents of a GPX file you wish to import, create a new itinerary for temporary purposes and import the file into the temporary itinerary. Check the contents and delete any

elements from the itinerary that are not required. You can then use the copy-and-paste functionality to copy the desired contents to the ultimately intended itinerary.

## 8.6 GPX Downloads

Select one or more routes, tracks and waypoints, then select the **Features > Transfer > Download GPX** menu option from the itinerary page, to download the chosen items in the GPX format.

The GPX file format can be imported into many Geographic Information System (GIS) based applications.

## 8.7 Download Full Itinerary

The full details of the itinerary, including the dates, text, sharing, routes, waypoints and tracks can be downloaded by selecting the **Features > Transfer > Download Full Itinerary** menu option on the Itinerary page. The downloaded file is in the YAML (<https://yaml.org> "YAML Ain't Markup Language") format, a text file format that can be readily understood by humans.

The YAML file can either be saved and used as a long-term backup or be imported into another instance of a TripServer application. The itinerary can be imported by clicking on the **Import** button on the itineraries page.

If you are creating a backup, it is a good idea to also select all the GIS attributes (routes, waypoints and tracks) and export them in the GPX format, as this is a common format that can be imported into many other applications.

## 8.8 Add Waypoint

Select the **Features > Add waypoint** menu option of the itinerary page to add a new waypoint to the route.

Optionally give the waypoint a name. A valid position/location is required.

A variety of common formats are recognised when entering a position.

**Position Recognition:** To be sure that the intended format has been recognised correctly, it is recommended you select the appropriate source position from the **Display position format** selection list and check the output matches the expected values.

**Tip:** If you are having difficulty persuading the system to recognise a particular format, enter a simple comma separated latitude and longitude value appropriate for the region, then select the **Display position format** you wish to use. The formatting output below the select list will indicate a format you can enter values in. Values are case-significant.

## 8.9 Creating a New Route

Optionally select one or more waypoints, routes or tracks in the itinerary that will help to zoom the map into the intended area.

Select the **Features > View > Show map** menu option to display the selected features on the map. Pan and zoom to the desired area.

To start creating a new route, click on the **new route icon** at the top right of the page. The icon depicts a slight left turn sign.

Click on each position you want the route to follow. When you have finished entering all the points for the route, either click the **Finish** button adjacent to the **new route icon** or click on the last point of the route.

On a system with a keyboard and mouse, holding down the shift key allows a freehand route to be created.

When you view the itinerary page all the new routes are at the end of the list of routes and are unnamed having only an ID. To edit the route's attributes, select the route in the itinerary page and select the **Features > Edit > Attributes** menu option.

Click the **edit icon** to modifying an existing route. Click and drag on existing nodes, or click and drag on other parts of the route to create a new node. Nodes can be deleted by holding down the **alt** key and clicking on the node to be deleted. On touch screen devices double-click the node to delete it.

## 8.10 Creating Waypoints using the Map

In addition to being able to create routes on the itinerary map, you can add waypoints by clicking the **new waypoint icon** (flag symbol) at the top right of the page. Click on the map at the location you wish to create a waypoint. A new anonymous waypoint is created.

When you view the itinerary page all the new waypoints are at the end of the list of waypoints and are unnamed having only an ID. To edit the waypoint's attributes, select the waypoint in the itinerary page and click the **Edit attributes** button.

## 8.11 Amending Routes

To amend a route, select it in the itinerary page then select the **Features > View > Show map** menu option of the itinerary page. To commence editing the routes on the itinerary map, click the **edit icon** at the top right hand side of the map. The icon represents a pencil inside a square.

Existing points can be dragged to a new location. To create a new point in between the existing points, start dragging the line in between two points. A new point is created when you finishing dragging.

Click the **Save** button adjacent to the **edit icon** at the top right hand side of the map to finish make changes. Click the **Cancel** button to abandon the changes.

## 8.12 Copying and Renaming Routes and Tracks

Route and track names and colours can be amended by selecting the route or track in the itinerary page and selected the **Features > Edit > Path** menu option of the itinerary page.

**Copying Routes and Tracks:** To make copies of waypoints, tracks and routes, select them in the itinerary list, click the **Copy** button, then click the **Paste** button.



### 8.13 Copying and Pasting between Itineraries

Select the waypoint, routes and tracks in the itinerary list to be copied, click the **Copy** button at the bottom of the itinerary page. Navigate to the target itinerary, then click the **Paste** button.

**Copy and Paste:** The copy and paste operations must be performed in the same browser session.

The copy operation does not copy the entire detail of the items being copied, instead just copying a reference to them together with any criteria used to select them. Should the results change in between the copy and paste operation, different values may be pasted from those displayed at the time the copy was initiated.

### 8.14 Moving Waypoints

To move a waypoint to a different position, select it in the itinerary page, then select the **Features > View > Show map** menu option. To commence editing the routes on the itinerary map, click the **edit icon** at the top right hand side of the map. The icon represents a pencil inside a square.

Drag the waypoint to the new location and click the **Save** button adjacent to the **edit icon** at the top right hand side of the map.

**Tip:** Multiple routes and waypoints can be selected for editing on the map in a single session.

You can also select tracks to be displayed on the map whilst editing routes and waypoints, but you cannot modify the tracks interactively on the map.

### 8.15 Joining Routes and Tracks

Two different itinerary routes or itinerary tracks can be joined together to create a single route or track. Tracks cannot be joined to routes and vice versa. To simplify these instructions, both routes and tracks are referred to as paths in these instructions.

Select all the paths to be joined and click the **Join paths** button at the bottom of the itinerary page.

**Tip:** To make it easier to visualise the different paths, give them each a different colour before attempting to join them.

A map is displayed showing each of the paths in their individual colours.

Use the **Up** and **Down** buttons to reorder the paths into the desired order.

Once satisfied with your choices, optionally edit the new path name and select a colour. Then click the **Join** button to make a copy of the combined paths.

### 8.16 Editing Tracks

Tracks can be edited by;

- splitting track segments
- splitting the track between segments to form two tracks
- deleting individual points

Select the track to be edited by clicking the **Edit path** button at the bottom of the itinerary page.

## 8.17 Split Track

If a track has multiple segments, selecting a segment and clicking the **Split track** button splits the existing track into two. The selected and following segments are moved from the current track to a new one.

### 8.17.1 Split Segment

Click on the segment ID to display the track segment points.

Clicking on the checkbox in the table header above the list of segments, selects all segments and displays them on the map below.

If there are more than 10 track segment points, you can page forwards and backwards through them.

**Tip:** Whether the checkbox in the table header was selected when you navigate to a new page is remembered. Therefore, selecting the checkbox and navigating through the pages allows you to quickly review a track segment.

To split a segment into two, select a single track segment checkbox and click the **Split segment** button. The selected track segment point and all subsequent ones in the same segment are moved from the current segment into a new segment.

**Tip:** To split a track at a particular track segment point, split the track in two operations. Firstly split the track segment at that track segment point, then secondly split the track at the new track segment.

## 8.18 Editing Route Points

In addition to being able to edit routes on the itinerary map, you can perform some operations using the **Features > Edit > Path** menu option of the itinerary page which cannot be easily accomplished on the map. E.g. Splitting the route. Sometimes it can also be difficult to select and delete points on the map when they are very close together, so navigating through the points in the **Edit path** mode provides another method to identify and delete them.

Editing routes is very similar to editing tracks as described above.

## 8.19 Duplicating the Itinerary

The **Features > Edit > Create duplicate itinerary** menu option of the itinerary page creates a duplicate of the current itinerary. The new itinerary is displayed once it has been created.

## 8.20 Assigning Colours to Routes and Tracks

This option is intended to make it easy to quickly give routes and tracks different colours, to more easily identify them on the map.

Select select the routes and tracks you wish to change and choose the **Assign colours to routes and tracks** from the **Edit** menu of the **Features** tab. After confirmation each

colour defined on the system is assigned to each route and then each track in sequence. If there are more tracks and routes selected than there are colours, the colours are repeated from the beginning again.

## 8.21 Convert Tracks to Routes

To create routes from tracks or vice versa, select the routes and tracks you wish to convert and choose the **Features > Edit > Convert tracks and routes** menu option. After confirmation, a copy of each route and track is created.

**Note:** When converting a route to a track, each track point is given a time stamp from the early 20th century, with one second intervals, to make it clear they are artificial. (Some systems reject tracks that have no timestamps.) Conversely converting tracks to routes loses the time information.

## 8.22 Simplify Track

Sometimes, a track log has a high frequency of points. You might wish to reduce the number of points, (simplifying the path), perhaps before converting it to a route, or just to make it smaller to fit the maximum point constraint of some software or GPS systems.

Trip uses the Ramer—Douglas—Peucker ([https://en.wikipedia.org/wiki/Ramer%E2%80%93Douglas%E2%80%93Peucker\\_algorithm](https://en.wikipedia.org/wiki/Ramer%E2%80%93Douglas%E2%80%93Peucker_algorithm)) simplification algorithm implemented by the OpenLayers mapping project (<https://openlayers.org/>).

Select a single track, then choose the **Features > Edit > Simplify track** menu option.

The selected track is displayed on a map. A slider control is used to change the **tolerance** value. The higher the tolerance value is, the more likely points are reduced.

The display shows the total number of points originally in the track together with an estimated total number of points that remain after simplification. A preview of the estimated final track is displayed on the map, together with the original track shown translucent, so that you can judge the impact of the simplification.

The first and last point of each track segment are always retained. If that behaviour is undesired, consider joining the segments before-hand, as described in Section 8.15 [Joining Routes and Tracks], page 13.

Selecting the **Save** button saves a copy of the track, appending (**simplified**) to the track name.

**Note:** Due to some technical implementation limitations, the number of points in the final track may differ from the preview by a small amount, so checking the new track after simplification is advised.

**Tip:** To simplify a route, convert it to a track, simplify the track and convert the new track to a route. However, if the route contains individual point attributes (name, comment, description or symbol) these are lost when converting to a track.

## 9 Itinerary Search

Itineraries can be searched for by their location and a radius. Click the **Search** button at the bottom of the **Itineraries** list page.

Enter the position of the centre of the area to search, in any of the formats supported when adding a waypoint. Section 8.8 [Add Waypoint], page 11, Enter the radius in kilometres in the **Distance** input field. (E.g. 0.125 for 125 metres.) Click **Search** to perform the search.

**Note:** If a waypoint been copied using the **Features > Edit > Copy** menu option of the Itinerary page, it is used to pre-populate the search position for convenience. E.g. if you want to search an area, drop a waypoint on the itinerary map, copy it using the menu option, then initiate the search.

The itinerary search results shows a list of itineraries that have either waypoints, tracks or routes with a point lying within the search radius. Use your browser's options to open itineraries of interest in a separate tab or window to examine their contents without losing your search results.

**Note:** A path that intersects with the search radius but doesn't actually have a point within it, is excluded from the results.

## 10 My Account

### 10.1 Change Password

Click on the **Change password** option of the Account page to change your current password. You need to enter your current password before any changes can be made. Then enter your new password.

As you type the password, the system evaluates its apparent strength. The **Save** button remains disabled until the password is apparently sufficiently strong. Repeat the password in the next field, then click the **Save** button. Hints and warnings are displayed to assist in choosing a strong password.

### 10.2 Upload TripLogger Settings

If you are using the TripLogger Remote for iOS app, you can export your settings from TripLogger, save them to a file, then upload them by clicking the **Choose File** option, selecting the saved settings file and then clicking the **Upload** button to store the settings in the database. This can act as a quick backup of your settings, but can also make it easier to update your unique user UUID. See Section 5.1 [Download TripLogger Settings], page 6,

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