



User manual

Sustain your endurance.

Tredict

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Corrections and comments are welcome and can be sent to the e-mail address below.

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You can also find the user manual in HTML form at this web address:

<https://www.tredict.com/glossary/>

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1. Introduction

A warm welcome! Nice that you are interested in Tredict.

With this manual you can immerse yourself in the many possibilities of the software.

Tredict is a comprehensive platform for training planning and training analysis in endurance sports and has been online since 2020. The platform is just as suitable for individual athletes as it is for trainers who train other athletes or larger companies who simply want to distribute their training plans. Used as a user-friendly training diary, as powerful training analysis software or as a flexible preplanning tool, Tredict covers a wide range of possible applications.

Developed in Germany, Tredict is particularly focussed on data protection, is manufacturer-independent, GDPR-compliant and does not require tracking.

Tredict is a so-called a web application and offers versatile planning and analysis options for runners, racing cyclists, swimmers and triathletes that deliberately go beyond the possibilities of some other platforms. Tredict is most fun on a large monitor, as diagrams and tables can be displayed better this way. Nevertheless, you can of course use Tredict on a tablet or mobile phone without any problems. The application has been developed to be "responsive" and automatically adapts to your screen size. Open Tredict in your web browser and simply create a shortcut on the screen of your mobile phone. You will deliberately not find Tredict in the Google Play Store or Apple App Store. Tredict is a stand-alone web app, independent and does not want to be influenced by the strict conditions of the stores.

By connecting your training tracking device, e.g. your running watch or bike computer, to Tredict, you can plan training sessions for the device and automatically upload completed activities to Tredict. The list of supported devices and manufacturers can be found in the FAQ.

[Frequently Asked Questions](https://www.tredict.com/faq/) [https://www.tredict.com/faq/]

All changes and innovations to the application are recorded in the changelog. You will also find an RSS feed that you can subscribe to.

[Changelog](https://www.tredict.com/changelog/) [https://www.tredict.com/changelog/]

2. Effort

Effort is one of the cornerstones of accurate training planning and form determination in Tredict and can be calculated from 3 different input values - wattage, heart rate and speed. In turn, the calculated effort is the input value for your form curve and is intended to interact with this form curve. The effort amount also indicates at a glance how effortful an activity was. To summarise, you can later see in the evaluation and also the form curve over a certain period of time whether the effort has been increased or decreased and adjust your further training or that of an athlete accordingly.

The Tredict effort offers a high level of configurability with high expressiveness at the same time.



Indication of low, moderate and high effort.

2.1 Redundant effort calculation

The effort calculation is designed redundantly in Tredict. Tredict essentially calculates the effort from 3 different data sources. The time series recorded by your device will be used in the order you have specified.

- Power
- Heart rate
- Speed

Regardless of the source from which the effort was calculated, the effort from wattage, heart rate or speed should be approximately the same in theory. The underlying calculations are designed for comparability; after all, the effort is the input value for your form curve, regardless of the zone type used for calculation. To do this, however, you need correctly set capacity values and a zone model for all zone types that is up to date. In practice, this is usually not relevant, as you often decide on a zone type, e.g. "Running by heart rate".

2.1.1 Zone priority chain

Specify which zone priority chain you prefer in the general settings. If you train with a power meter, you could set the zone priority chain to 'wattage -> heart rate -> speed'. If the wattage is not available for a certain reason, the effort is calculated from the next zone type, the heart rate.

Training settings	
Preferred sport	Running
Zone priority chain ?	Power > Heart rate > Pace / Tempo
System of units	Heart rate > Power > Pace / Tempo
Beginning of the week	Power > Heart rate > Pace / Tempo
Primary distance source ?	Pace / Tempo > Heart rate > Power
Capacity change	Heart rate > Pace / Tempo > Power
	Power > Pace / Tempo > Heart rate
	Pace / Tempo > Power > Heart rate

The zone priority chain can be defined in the settings.

2.2 Effort factors


The effort of an activity is influenced by 4 factors.

- Active Duration - The longer the activity, the higher the effort.
- One of the 3 performance values - heart rate, wattage or speed.
- Zone Intensity - A higher intensity range increases effort over the same time.
- Capacity - Maximum heart rate, FTP, FTPa

To summarise:

The longer the activity, the greater the effort required. The more intensive the activity, the greater again the effort required. A long and intensive activity, e.g. a half marathon competition, therefore requires a great deal of effort.

Heart rate zones[?]

 bpm

Description	From	To	Intensity
Leicht	0	145	low
Moderat	146	161	moderate
Intensiv	162	∞	high

- Remove zone

+ Add Zone

<

>

06. Mär. 2024 18:52:15 *

Revision ▾

Save

The intensities in the zone settings play a role for the calculated effort.

2.2.1 Effort tracking

Per second effort for executed activities

Your recording device records the time series at one-second intervals. Tredict calculates a "micro effort" for every second, looks at the current input value at this time interval, e.g. 180 watts, calculates a base effort and multiplies this again by an intensity factor. The intensity factor is determined indirectly by your zone settings. If the input value falls into a zone range with high intensity, the factor is correspondingly higher.

The micro-efforts are totalled over the period of the activity, resulting in the total effort of the activity.

Effort of planned training sessions from the segments

The effort of planned structured workouts is not calculated from the second-by-second data, but from the planned segments according to the same principle. The zone priority chain also applies here. If a structured workout maps 2 different zone types in the segments, e.g. a segment by heart rate and a segment by speed, then the effort is only calculated from the heart rate segment if the heart rate is prioritised. It is therefore possible to enter the target values for all zone types simultaneously for sections that work with "Target value", so that the effort can be calculated accurately.

2.2.2 Capacity range

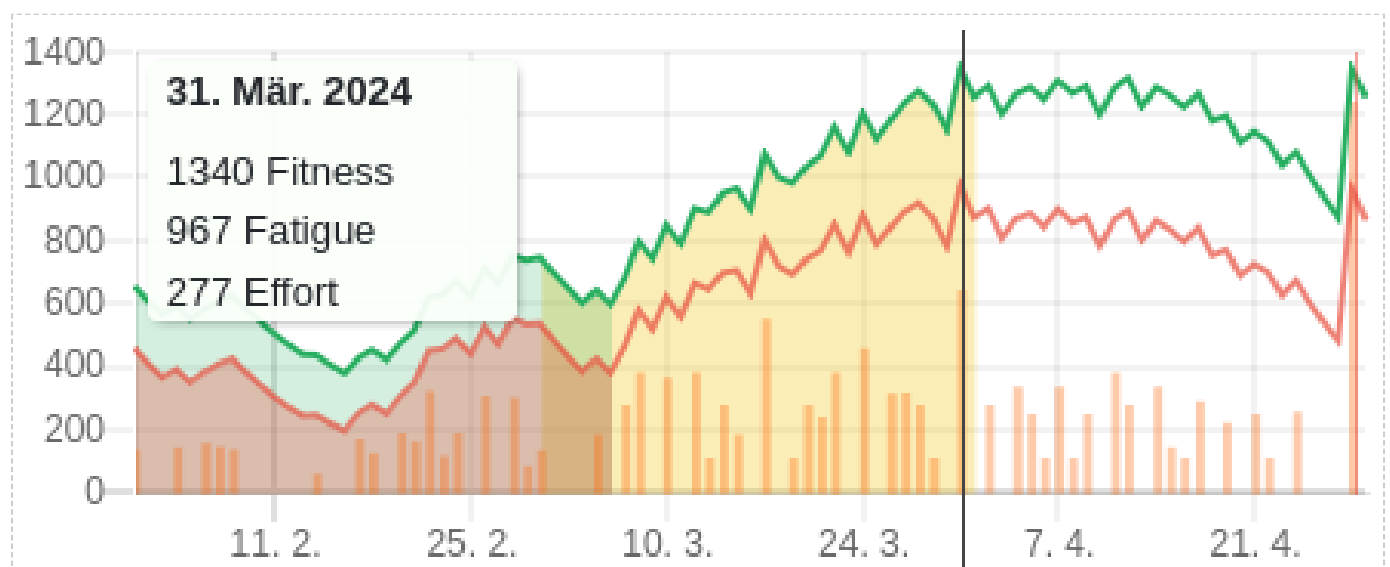
Your available capacity also plays a role in calculating the effort. The FTP is integrated into the calculation for the wattage, the FTPa for the speed and the range between resting heart rate and maximum heart rate for the heart rate.

For an accurate effort calculation, it is important that you know your capacity values.

You can specify the capacity values "maximum heart rate" or the "FTP or FTPa" by editing or adding a new capacity revision under "Zones & Capacity".

2.2.3 Gender-specific effort

For female athletes, the calculated effort is automatically increased by 20%. The increase results from a comparison of the world-class lists in athletics. Without this gender-specific correction factor, the shape curve would not behave correctly.




Display of the daily effort in the form curve with orange bars.

2.3 Manual effort correction factors

Tredict offers you the option of setting a manual correction factor for individual sport variants. For example, running on a treadmill is generally much more strenuous than running in nature due to the lack of air cooling. Tredict has already preset the correction factor to 1.05 here. You can find the correction factors under the settings for "Zones & capacity".

Please use this function with caution. Usually no settings need to be made here.

Effort factors

	Obstacle run	1	<input type="range"/>	
	Orienteering	1	<input type="range"/>	
	Road run	1	<input type="range"/>	
	Run	1	<input type="range"/>	
	Run on the treadmill	1,05	<input type="range"/>	140 -> 147
	Running ABC	1	<input type="range"/>	
	Track run	1	<input type="range"/>	
	Trail run	1	<input type="range"/>	
	Transition	1	<input type="range"/>	
	Virtual run	1,05	<input type="range"/>	140 -> 147

Restore defaultsSave

Manual effort correction factors for running.

2.4 Comparability with other platforms

The Tredict effort has some advanced features, described in this category, that make a comparison with other effort metrics, such as the TSS® from TrainingPeaks or the Strava effort, not meaningful. If the effort is harmonised with other platforms, the Tredict effort would lose its special significance, which includes, for example, high intensities or gender specificity.

An effort, regardless of the platform, is always a relative value that is only comparable in itself as long as the calculation basis is the same. Of course you can compare the Tredict effort with other Tredict athletes.

It is important that you, as an athlete or as a coach, get a feeling for this relative value so that you can compare it with itself.

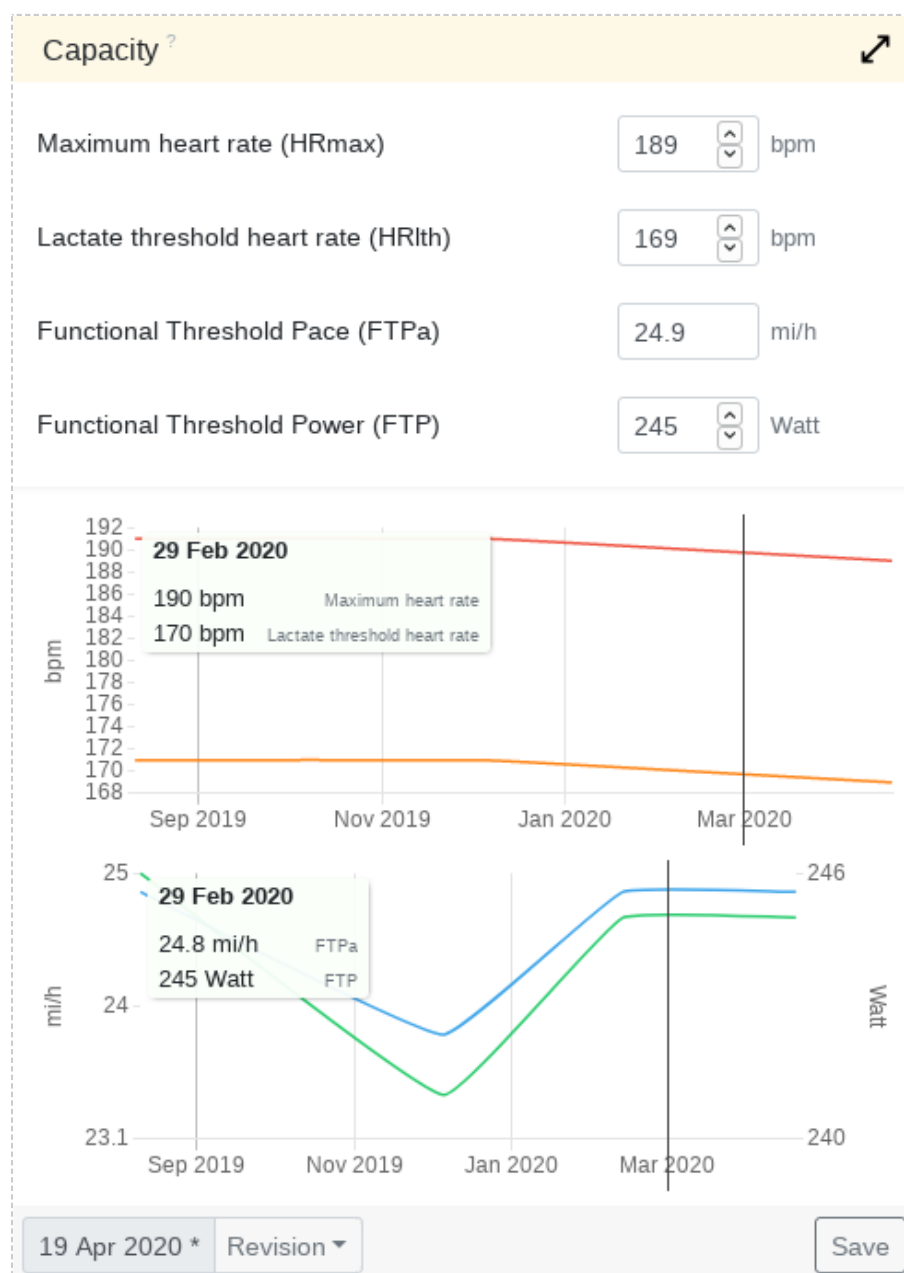
2.4.1 Calculate other platforms effort with the help of custom fields

If you do not want to do without the TSS® from TrainingPeaks and you have found the calculation formula for it, you can programme in the corresponding formula under "Settings" -> "Custom fields". The custom field created is then displayed for all activities and appears in the evaluation. Tredict is of course not responsible for the creation of your custom fields, which are not calculated on the Tredict servers.

3. Capacity

Maximum heart rate, functional power threshold (FTP) and functional power threshold pace (FTP_a) are capacity values that significantly influence the categorisation of your training speed, the effort calculation and your zone model and should be re-evaluated from time to time.

Without realistically set capacity values, Tredict will not be able to calculate correct efforts. Of course, you only need to adjust the capacity values according to which you want to train. For example, if you train purely according by heart rate, then it is sufficient if you have set the HR_{max} correctly.



Body capacities for cycling

3.1 Capacity values

3.1.1 Maximum heart rate

The maximum heart rate together with the resting pulse forms the heart rate capacity and is the basis for the effort calculation according to heart rate.

Training by heart rate is a widespread and successful method and you can achieve good results with relatively little equipment. Many performance indicators, which are formed from heart rate and speed, are available to you with this method.

3.1.2 Lactate threshold heart rate

The "lactate threshold heart rate" defines the range at which the oxygen utilization of the body is just sufficient to compensate for the oxygen consumption.

Above the lactate threshold, the anaerobic range begins, at which increased lactate is produced by low-oxygen energy production. The lactate threshold value is also often called the aerobic-anaerobic threshold.

3.1.3 Functional Threshold Pace/Tempo (FTPa)

Your FTPa is the basis for the effort calculation by speed.

To train by speed, you need a speedometer, e.g. a GPS watch. Training with the FTPa is universally applicable, as no heart rate belt or power meter is required. On the other hand, training according to FTPa is not as accurate and many advanced indicators that include heart rate or wattage are not available.

3.1.4 Functional Threshold Power (FTP)

Your FTP is the basis for the effort calculation by power (watts).

Training according to wattage is particularly popular in the field of cycling, but has also secured a place for runners thanks to its measurement independent of incline and decline. Training according to wattage generally leads to a better organisation of your strength.

3.2 Determining values

The determination of the maximum heart rate, FTPa and FTP is either done by means of a very strenuous competition of suitable length or specially designed test runs, which are available in many variations.

In the records overview of the evaluation you can display these maximum values for a certain period of time.

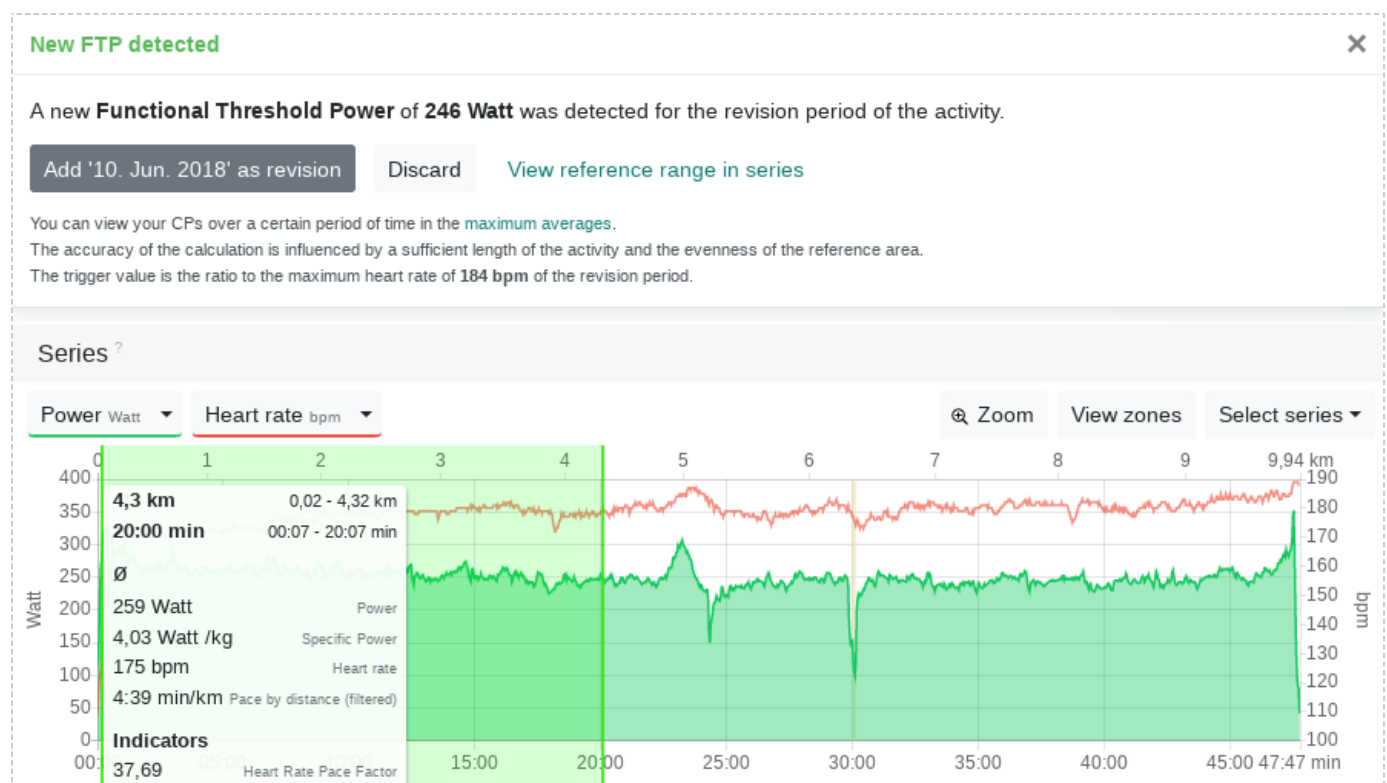
3.2.1 Automatic determination from intensive training sessions

Tredict can automatically determine the capacity values, such as HRmax, FTP and FTPa, if you have carried out suitable training sessions.

If you carry out training sessions that are sufficiently intensive, the automatic determination of capacity values is activated. The new value for transferring to a new capacity revision is then suggested to you in the detailed view of the executed training. The accuracy of the calculation is influenced by a sufficient length of the activity and the evenness of the reference area.

Read the detailed blog article: [Automatic determination of lactate threshold, FTP and FTPa](https://www.tredict.com/blog/automatic_determination_of_ftp_and_lthr/)

[https://www.tredict.com/blog/automatic_determination_of_ftp_and_lthr/]



A new FTP was automatically recognised in an executed training session.

3.2.2 Calculate FTP from FTPa

If the capacity card displays a magic wand, you can automatically calculate the FTP based on your entered FTPa. It works the same way the other way around.

Functional Threshold Pace (FTPa)	<input type="text" value="04:42"/>	min/km	
Functional Threshold Power (FTP)	<input type="text" value="245"/>	<div><div>^</div><div>v</div></div>	Watt

The FTPa can be calculated automatically from the FTP when a magic wand is displayed.

3.3 Correction factor from FTP and FTPa

FTPa and FTP are in direct relation to each other at Tredict, from which we calculate a correction factor.

This way Tredict can keep the relations to older FTPs and revisions when you change your power meter and is still able to measure the correct effort by power. This requires that you always reevaluate the FTP and FTPa simultaneously on a flat and optimal track. Unfortunately, changing to a new power meter is usually associated with a change of value range compared to the old device.

4. Zones

Zones are an important part of the exact intensity control of your activities.

A zone model can have as many zones as you want, with each zone associated with a low, moderate, or high intensity level.

A moderate or high intensity has a greater impact on the effort calculation.

Read the blog article: [How the zones influence the effort](https://www.tredict.com/blog/zones_and_effort/) [https://www.tredict.com/blog/zones_and_effort/]

Whether effort is calculated from the heart rate zone, power zone or pace zone, you can set the settings using the zone priority.

See: [Which zone priority chain is right for me?](https://www.tredict.com/faq/which-zone-priority-chain-is-right-for-me/) [https://www.tredict.com/faq/which-zone-priority-chain-is-right-for-me/]

The cadence zone helps you to classify the variability of an activity or to determine your running style.

Zones are available for running, cycling, swimming and miscellaneous activities.

4.1 Zone revisions

A zone revision enables you to define the zone model for a certain period, even retrospectively,

without having to influence the effort and intensity distribution of past training sessions.

A revision only affects those activities that fall within the period of the revision date.

That way Tredict allows you a granular control and evaluation of your training course. The temporal training evaluation of the efficiencies and capacities and the zone revision are in a reciprocal relationship.

For best analysis, it is necessary to re-evaluate your zones from time to time and adapt them to your current fitness level. With each reevaluation cycle you create a new revision.

In the analysis, you also have an exact overview of the revision history of your zones.

Power zones?

⚡ Watt

Description	From	To	Intensity
Very easy	0	170	low
Easy	171	190	low
Endurance	191	210	low
Avoidance I	211	222	moderate
Threshold	223	241	moderate
Avoidance II	242	245	high
Long interval	246	269	high
Interval	270	290	high
Short interval	291	311	high
Strength	312	∞	high

- Remove zone

+ Add Zone

Apr 06, 2020 *

Revision ▾

Save

A detailed power zone model for running

4.2 Zone models

An example of a common zone model with zone names and intensities (without individual values):

- Low Intensity - Very Light Effort - Long Light and Relaxed Workouts
- Low Intensity - Light Effort - Light and Possibly Long Workouts
- Moderate Intensity - Low Moderate Effort - Avoidance Range I
- Moderate Intensity - High Moderate Effort - Threshold I / Tempo I
- High Intensity - Strenuous - Threshold II / Tempo II
- High Intensity - Challenging - Avoidance Range II
- High Intensity - Very Strenuous - Interval Range

The exact composition of the zone model depends on many factors.

The most important factors are training theory used, maximum heart rate, lactate threshold value, functional threshold value of power and pace.

All are crucial when defining your zone model.

Tredict does not want to push you in any particular direction, because all models known to us have corners and edges and you should take these only as a reference point for your own individual model, which you can develop with time and experience.

4.3 Zone templates

Templates

Heart rate

bpm

5 zones based on the lactate threshold

Select template ▼

Covers all major zones and is based on the lactate threshold.

Base value: Lactate threshold 155 bpm

Description	From	To	Intensity
Active recovery	0	120	low
Extensive endurance	121	137	low
Intensive endurance	138	147	moderate
Lactate threshold	148	155	moderate
Oxygen capacity	156	∞	high

Add as new revision

Zone template for the cycling heart rate with the lactate threshold as a base value.

Through different zone templates you can easily fill your zone revision.

The values of the template are defined by base values like Lactate Threshold, Functional Threshold Power and Maximum Heart Rate. If these base values change in your capacity, you can create a new zone revision using the template.

You can choose from simple templates with 3 intensity classifications, but also more complex templates that allow for polarizing training.

5. Intensity distribution

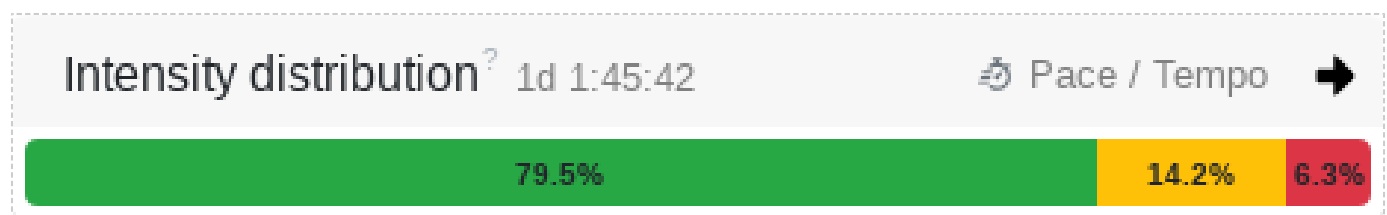
The intensity distribution shows you quickly and precisely the intensity of a training or a certain period of time.

It is distinguished between 3 intensity levels - low, medium and high.

The intensity levels result from the zone definitions, which you can create for corresponding time periods.

Measured is the time distribution of the intensities, not the distance.

The total time for the zone type is shown in the card header.



Pace intensity distribution of a training month

There is controversy over the best distribution of intensities over one certain period when it comes to increasing endurance and speed.

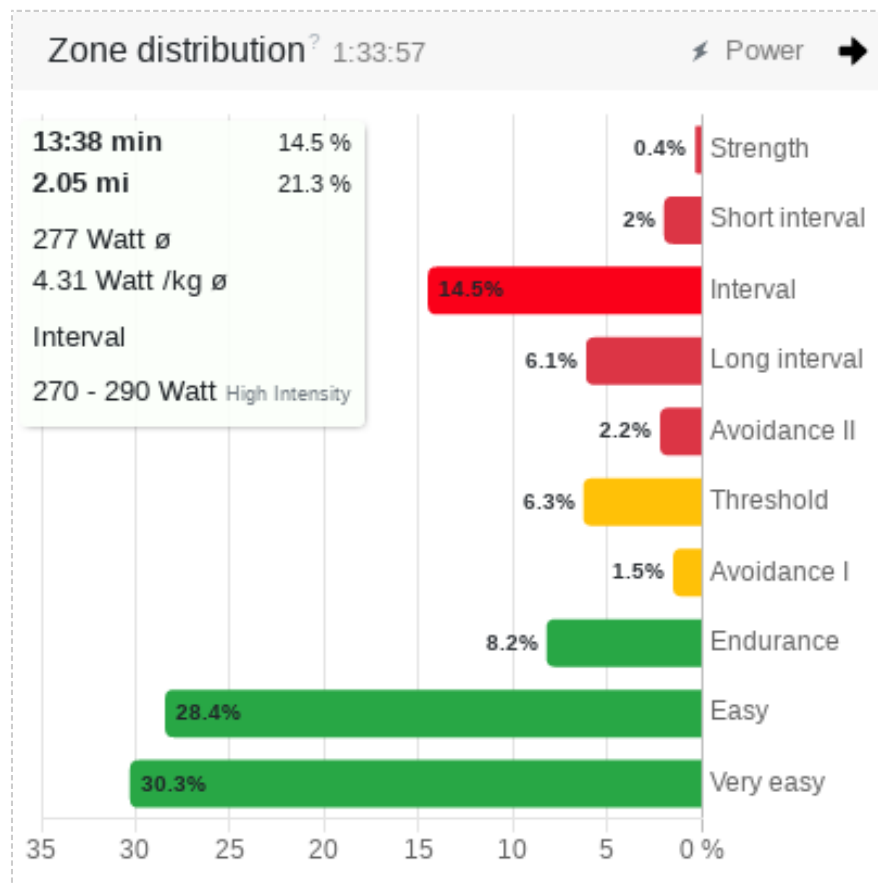
According to the 80/20 method popularized by Matt Fitzgerald, among others, 80% should be trained at low intensity and 20% at mostly high intensity. In addition, other sources show that polarizing training has the best effect, so moderate efforts should be avoided.

However, exceptions prove the rule, and there are athletes who seem to get the most out of training mainly with relaxed-pace runs.

You may also want to avoid all moderate and high training intensities first.

With the intensity distribution and a good zone setting, you can find out for yourself.

6. Zone distribution



Power zone distribution of an interval training

The zone distribution is even more accurate than the intensity distribution and shows you if the training went as planned or if you stayed too long in intensity and power zones that should have been avoided.

In the analysis you can view the zone distribution over a selected period of time. This can help you to readjust zone revisions and you can see how intensively you have trained in which revision periods.

To obtain an accurate distribution, the zone revisions in the category "Zones & Capacity" should always be adjusted to the current capacity values.

6.1 View the zone distribution of a segment

By marking a segment in the segment table, you can display the zone distribution of the selected segment.

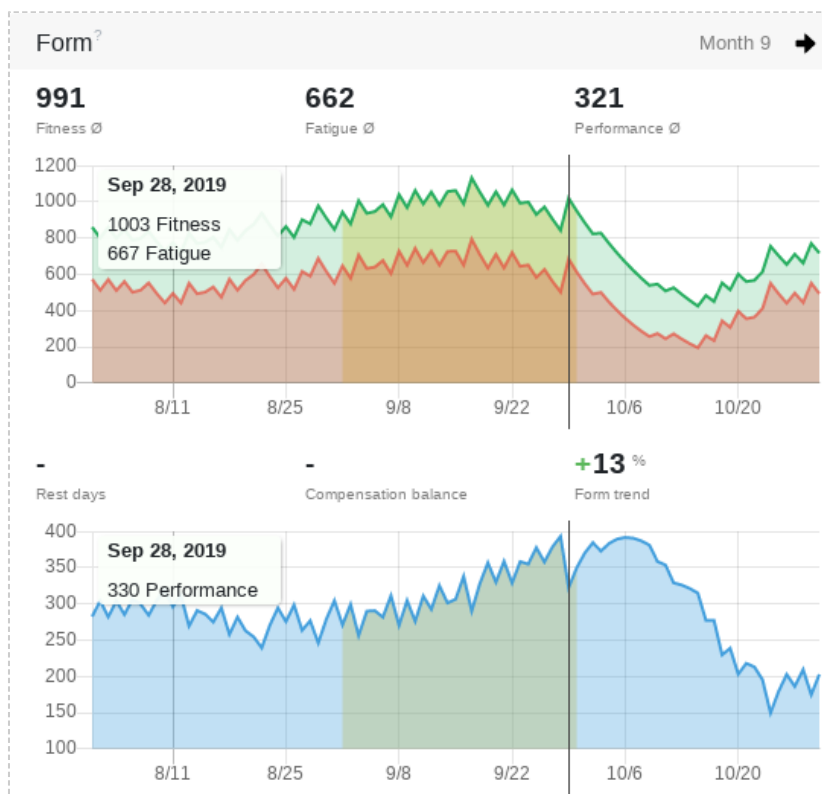
7. Form and Fitness

Your form is determined by fitness, fatigue and performance and follows the Banister model.

The underlying principle is that fatigue decreases faster than fitness, which results in performance.

Fitness and fatigue themselves are a result of your training efforts.

You can also think of fitness as your endurance capacity, which you can only draw upon if you are also performant, i.e. recovered.



Form curve in monthly view with the competition day highlighted. The form trend is calculated for month 9 with a yellow background.

7.1 Form elements and guide values

7.1.1 Fitness

Your fitness (green) is formed by the effort you aggregate through your activities. It is therefore an indicator of how much you have trained in the last weeks and months. At the same time, if you don't put in enough effort, your fitness level will drop steadily. So to achieve and maintain a high level of fitness, it requires regular training.

7.1.2 Fatigue

Your fatigue (red), just like fitness, is formed from the effort caused by your activities. If you have been exercising a lot lately, you will be more tired. However, fatigue drops off faster than fitness! The resulting gap between fitness and fatigue then compensates for the training stimuli you have set.

7.1.3 Performance

Your performance (blue) is the difference between fitness and fatigue. It is a good indicator of your compensation status. If your performance drops, then you have been training a lot lately and your body cannot compensate quickly enough. This may well be part of a training strategy and deliberate. As your performance increases, you compensate for the training stimuli and you recover. A training effect sets in! You can also read off a so-called supercompensation here. This occurs when you manage to achieve a higher level of performance than at your last performance plateau.

7.1.4 Compensation balance

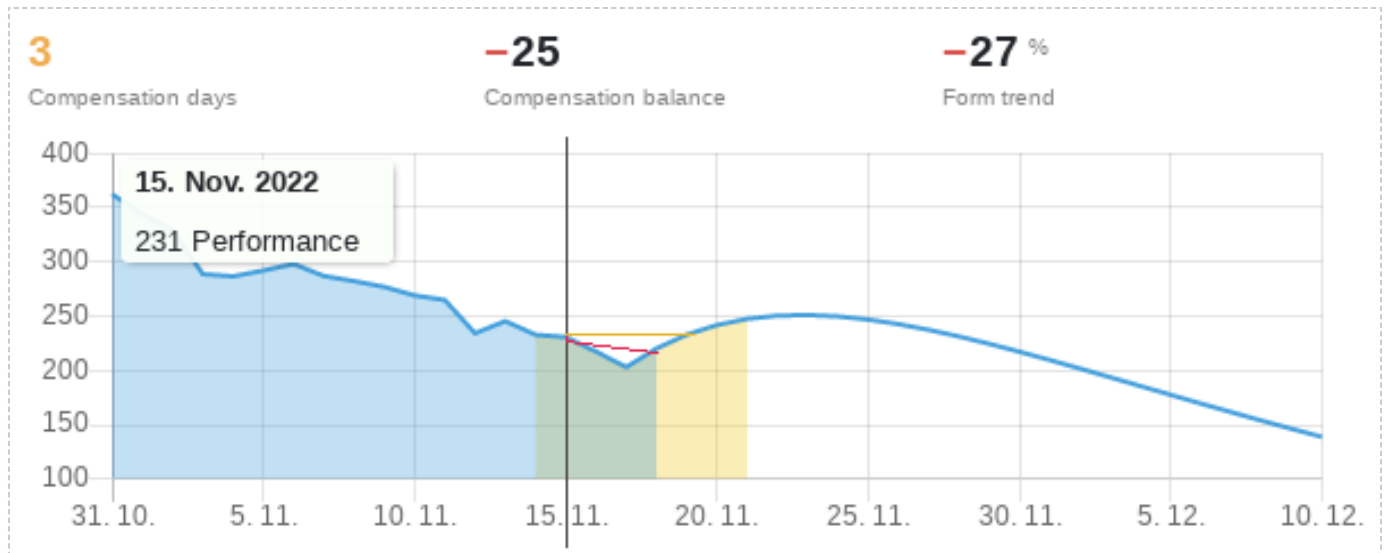
The compensation balance shows you how far you are from the last performance plateau (training peak). A negative compensation balance means that you have to compensate in order to regain the level of your last performance. A positive compensation balance tells you that you are in the supercompensation phase. So this value is a helpful indicator to show you if you are recovering (compensating) or already recovered (super compensated).

7.1.5 Compensation days

With the compensation days you can determine how long it takes until you have regained the performance of the last performance plateau (training peak). This value, in combination with the compensation balance, is a helpful indicator for how you can schedule the next training sessions.

7.1.6 Neutral effort

The Neutral Effort shows you how much effort you can expend before you have dropped to the performance of the previous training session. This allows you to fine-tune your next workout. This way you can decide whether you want to continue to compensate or set stronger training stimuli. This value is only displayed when you are in supercompensation.



Shown here is the negative compensation balance (red) and the compensation days (yellow).

7.1.7 Form trend

The form trend shows you the trend of the performance for the period set in the diagram.

3-week trend

The trend period spans 3 weeks in retrospect. In other words, from 21 days ago to "today". The form trend is thus formed from all values contained in this period.

Period trend

Click on the black arrow in the top right-hand corner of the form card to set the period to the selected week or month of the calendar. In the evaluation, the period is determined by your selection with the period sliders. If you are in the planning mode for a training session, the time period goes up to the date of the planned training session.

7.2 Training balance

A longer training phase can be observed over the entire period, by a reasonable balance between fitness and fatigue.

Temporarily tiring training stimuli may and should be set.

Recovery is just as important for a positive training effect to give the body the opportunity for supercompensation.

7.3 Determining recovery correctly

After a workout, your performance has decreased because you are exhausted.

By looking at your compensation days (often called rest days), you can see how much you need to sleep to reach your previous performance level again.

The compensation balance shows you the exact difference in the performance value.

With appropriate levels of training effort, you will have better fitness than before training.

7.4 Determining training effort correctly

The effort of a training session influences the increase in fitness and exhaustion equally.

With a look at the Neutral Effort you can see how high the effort can be in order not to fall below the performance level of the previous training.

You can think of the neutral effort as a guideline. Strong or combined training stimuli may also greatly exceed the neutral effort.

7.5 Well rested for the competition

In the last weeks before a longer competition, compared to the main training weeks both fitness and performance increase significantly and fatigue decreases.

You can see this at a glance from the form trend.

By planning your training in advance, you can also see the form curve at a glance and determine the intensity and length of your taper to perfection.

7.6 Detecting overload

If performance drops over a longer period of time, but fitness increases, this indicates an overload.

8. Training calendar

The training calendar is the centrepiece of Tredict. On the one hand, this functions as an extended training logbook for your completed endurance sports units and, on the other hand, as an interface for planning and creating your future training sessions.

You can choose from 3 time resolutions for the calendar. Weekly, monthly and yearly. Each resolution has a different granularity and a different range of functions. Clicking on a training session takes you to the training detail view for a completed training session and to the corresponding structuring view for a planned training session.

With a larger screen resolution, you will also find the form curve to the right of the calendar, which is linked to the training calendar. By moving the mouse pointer over the training day, the corresponding date is displayed in the form curve.

8.1 Navigation

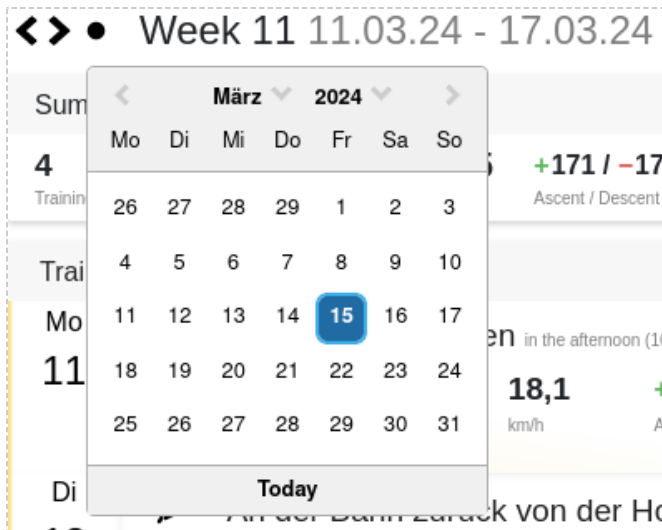
The two arrows at the top left of the calendar are intended for navigating between the calendar pages using the mouse or the touchscreen. A calendar page corresponds to your selected time resolution.

8.1.1 Date selection

Click on the black circle next to the navigation arrows to open the date selection dialogue.

8.1.2 Keyboard navigation

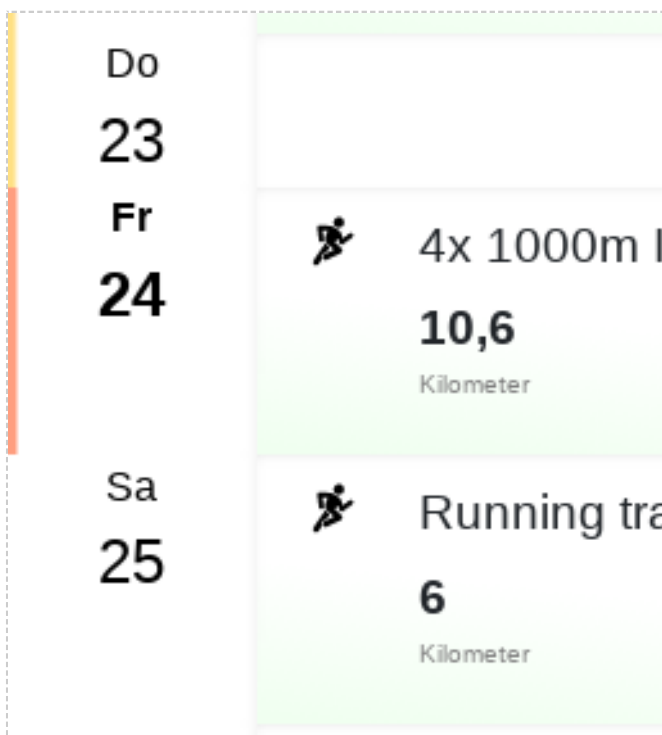
Use the left and right arrow keys on the keyboard to navigate through the calendar. Press the "Enter" key to return to today's date. The keyboard navigation also works in the training detail view and in the evaluation.



The date selection opens by clicking on the black circle.

8.2 Indication of "today" and past days

"Past days" are marked "yellow" in the weekly calendar. The day "Today" is marked "orange" in the same way. In the month view, the markers are placed above the training day.



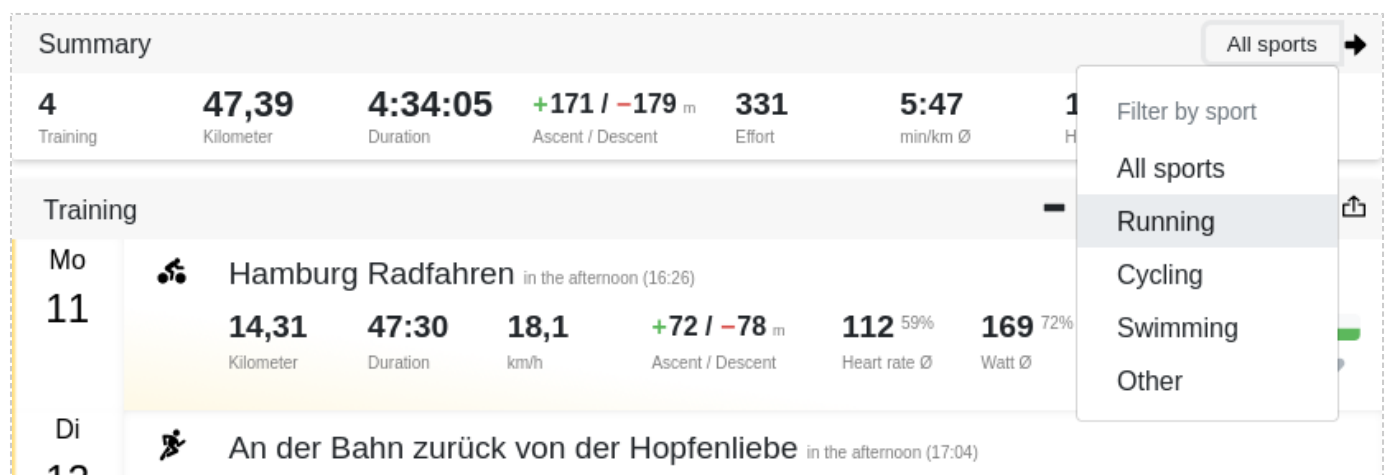
"Today" is marked in orange.

8.3 Calendar summary

With the training calendar summary, you have an aggregated view of the most important metrics from the current calendar section. The values training count, kilometres, duration and effort are added together. An average is calculated from the values for pace/tempo, heart rate and watts, which is dependent on the duration of an activity. A 2-hour training session therefore has twice as much influence on averaging as a 1-hour training session.

8.3.1 Filter by sport

It is possible to filter the calendar view according to the main sports. These include running, cycling, swimming and other sports. If a sport has been selected, e.g. running, only the training sessions with running as sport will be displayed in the calendar. The summary and the intensity distribution then also only represent this filter selection.

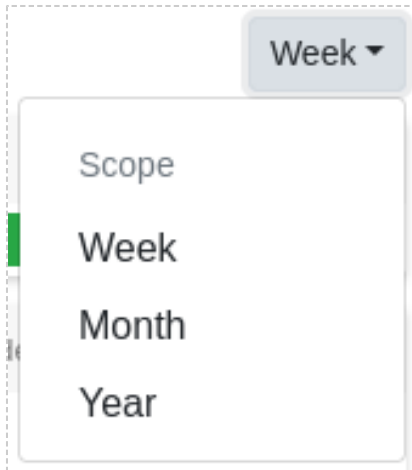


The calendar can be filtered by sport.

The main sports have an associated colour scheme. Running is greenish, cycling is yellowish, swimming is bluish and others are reddish. If you filter the calendar by sport, this sport is indicated by colour.

8.4 Time resolution

By selecting the calendar resolution, you can view the calendar in different granularities and have different functions depending on the resolution. The choice of resolution not only influences the calendar directly, but also the intensity distribution and the section in the form curve.



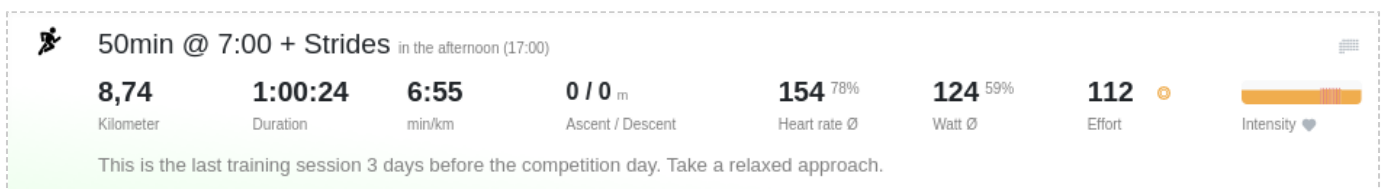
Select the calendar resolution.

8.5 Week view

The week view is the most macroscopic view, can be read from top to bottom and is therefore also suitable for mobile phones. The intensity distribution shows exactly the average of the selected week. It also applies here that longer units influence the average proportionately more.

Training entry in the week view with intensity

The particular feature of a training entry in the weekly view is that the further descriptive text of the activity is displayed below the metrics, giving you an overview for training instructions or subsequent summaries. At each training session you will also find either the intensity distribution or the segment preview, which shows the intensities for each individual training segment. Depending on how you have configured the training calendar. You can make the configuration in the title bar of the calendar. As Tredict is designed for intensity-based training, you will encounter the intensity distribution in many places.



A planned training session in the weekly view can be recognised by the grey dotted "calendar" symbol in the top right-hand corner.

8.5.1 Reschedule training and change date

You can move a training session to a different calendar date by dragging and dropping the training session.

8.5.2 Clone workout

Instead of moving a training session, you can also clone it, i.e. copy the training session. To do this, drag the desired training course to the date on which the copy of the training course is to be created. Then click on the "Clone training" button in the dialogue.

8.5.3 Move time period

It is often necessary to shift an entire training period, e.g. because several training sessions have been missed. In Tredict you can move several training sessions at once. To do this, take the first training of the period and drag and drop it to the new start date. In the dialogue that opens, click on the "Move a time period" button. You can now adjust the "From" and "To" dates to set the length of the training period.

Move time period

Period

From

24.04.2024

to

01.05.2024

New start date of the period

25.04.2024

Do you want to move a period from 7 days by 1 day to the front?

Only planned not executed workouts will be moved.

Change single workout date

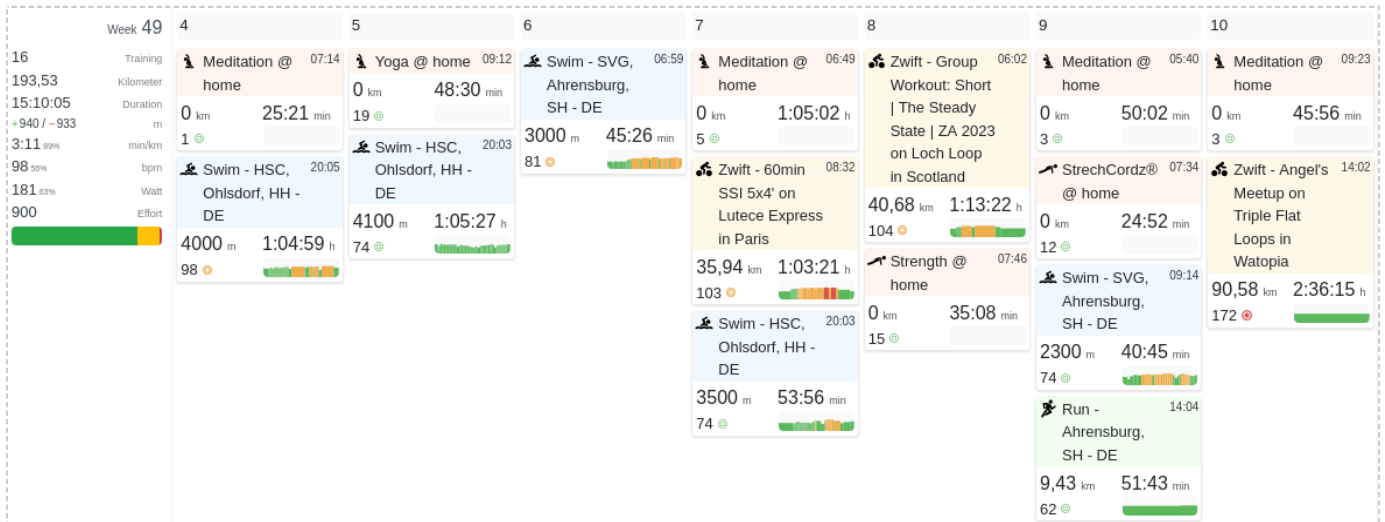
Cancel

Move

Move a complete training period.

8.6 Month view

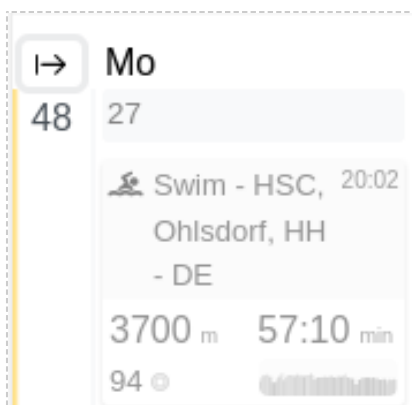
The month view is well suited for keeping track of and planning larger training periods. The month view may also be the more suitable choice if you do a lot of training sessions every day. The training sessions can be moved and copied here using drag & drop, just like in the weekly view.



A week row in the monthly view with the weekly summary switched on on the left-hand side.

8.6.1 Week summary

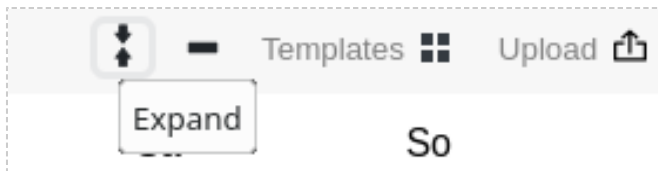
The week summary gives you a short summary for each week in the monthly calendar. As this takes up space, it is possible to show or hide the week summary. Click on the arrow at the top left of the calendar.



Switch the weekly summary on/off with the arrow.

8.6.2 Configuration of the month view

In the title bar of the calendar you will find configuration options to customise the calendar to your wishes. For example, it is possible to display the training sessions in the month view with more or fewer metrics in order to make better use of the space in the calendar. Here you can also set whether you would prefer to see the intensity distribution or segment preview of the training sessions.



Display training sessions with more metrics.

8.7 Year view

The freely configurable and sortable training table in the year view is provided for carrying out year-related analyses and searches. Here you can also delete several training sessions at once using the deletion mode.

Training													
Text search													
Deletion mode x Select columns v													
Date v	Type	Intensity v	Name	Distance v	Duration	Pace v	Tempo v	Ascent / Descent	Heart rate v	Power v	VO2max	Effort	Sleep
31. Dez.	Run		Run	8,19 km	48:39 min	5:56 min/km	10,11 km/h	+56 / -59 m	128 bpm	215 Watt	47,97 ml/min	64	3:56:00
31. Dez.	VR - Dirk's Meetup (Neokyo All...		VR - Dirk's Meetup (Neokyo All...	40,12	1:10:18 h	1:45	34,29	+193 / -180	138	181	-	133	3:56:00
30. Dez.	Yoga		Yoga	- m	50:06 min	-	-	-	68	-	-	12	4:56:00
30. Dez.	Strength training		Strength training	-	35:00	-	-	-	94	-	-	26	4:56:00
30. Dez.	Short run		Short run	5,36 km	31:19	5:51	10,26	+22 / -23	124	221	50,97	38	4:56:00
30. Dez.	VR - Twelve Spikes, Sand and...		VR - Twelve Spikes, Sand and...	33,49	1:00:21 h	1:48	33,33	+199 / -180	129	175	-	93	4:56:00
28. Dez.	VR - Dirk's Meetup (Neon Flat...		VR - Dirk's Meetup (Neon Flat...	44,07	1:20:41	1:50	32,73	+139 / -139	133	168	-	140	4:09:00
28. Dez.	VR - Central Park, NYC - US		VR - Central Park, NYC - US	17,78	36:40 min	2:04	29,03	+285 / -201	126	179	-	54	4:09:00
28. Dez.	Yoga		Yoga	- m	1:10:00 h	-	-	-	76	-	-	28	4:09:00
28. Dez.	70min Easy Run (high)		70min Easy Run (high)	13,91 km	1:10:00	5:02	11,92	-	135	237	-	96	-

Missed planned training sessions are displayed in grey in the year view.

8.7.1 Configure table columns

Configure the table columns as you need them and choose from a wide range of metrics. Click on "Select columns" to display the drop-down menu with the available metrics. Only the metrics that are actually available in the corresponding year as a result of your training sessions are displayed. For example, if there are no workouts with wattage, you cannot select this metric.

Deletion mode ✕
Select columns ▼

■ Stroke length max

■ Vertical oscillation cm

■ Vertical ratio %

Indicators

■ Efficiency index

■ "Form Power" Index

■ Heart Rate Pace Factor

■ Heart Rate Power Factor

■ Pace Power Index

■ Relative VO2max ml/min/kg

■ Running Effectiveness

■ VO2max ml/min

Environment and Weather

■ Atmospheric ozone DU

■ Clouds %

Configure the columns of the training list using the available metrics.

8.7.2 Sort table

Sorting table columns is a simple but powerful method for finding or analysing specific training sessions. By sorting by distance, for example, it is possible to find the furthest activities for the corresponding year. Simply click on the corresponding column in the table header that you want to sort and quickly switch between the different evaluation options. A few other examples would be sorting by VO2max to find your most efficient workouts or perhaps sorting by temperature to find the hottest workout.

Training Year 2021									
Text search									
Deletion mode ✕ Select columns ▼									
Date	Type	Intensity ♥	Name	Distance ↕	Duration	Ascent / Descent	Power Ø	Sleep	Temperature
08. Mai		<div><div></div></div>	RTR 2021 HH - DE	100,15 km	10:57:31 h	+497 / -490 m	182 Watt	3:22:00	2,6 °C
01. Jan.		<div><div></div></div>	6h Long Run	61,29	5:59:06	+337 / -340	207	-	1,9
24. Jan.		<div><div></div></div>	Very Long Run	52,53	4:35:59	+230 / -229	224	9:59:00	2
31. Jan.		<div><div></div></div>	Very Long Run	50,22	5:00:07	+288 / -272	195	8:36:00	-1
06. Mär.		<div><div></div></div>	LR - 1/2 Grüner Ring, HH - DE	50,02	4:58:13	+249 / -249	204	5:49:00	3,3
08. Jan.		<div><div></div></div>	Extra Long	48,52	4:49:30	+244 / -260	198	-	0,5
30. Mär.		<div><div></div></div>	Very long run	42,65	3:40:29	+157 / -158	225	6:06:00	8,5
26. Sep.		<div><div></div></div>	47. BMW Berlin-Marathon 202...	42,5	3:00:06	+98 / -103	273	5:54:00	16

The table has been sorted by "Distance" and additionally filtered by "Running". The longest activity of the year appears at the top.

8.7.3 Text search

The text search is a full-text search that also includes the further descriptive text of the activity. One option would be to add hashtags to the description text, e.g. #trail, and then search for it.

8.7.4 Deletion mode

The deletion mode allows you to delete several training sessions at once. This is necessary, for example, if duplicates have been created via 2 different data imports. Tredict has a multi-level duplicate detection, but some sources change the activities so much that the detection can no longer work. Click on the corresponding "Deletion mode" button for the deletion mode and then select all the sessions in the list that you want to delete.

Training

Year 2021

Text search

Deletion mode

×

Upload

Select columns

Delete 3 workouts

Cancel deletion

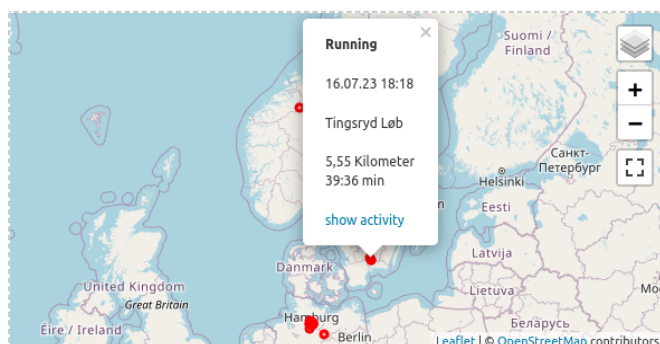
Deactivate deletion mode

Delete?	Date	Type	Intensity ♥	Name	Distance ↑ ↓	Duration	Ascent / Descent	Power Ø	Temperature
<input checked="" type="checkbox"/>	27. Feb.		<div><div></div></div>	1. Trailrunning Laufcup III in de...	31,34 km	4:16:01 h	+770 / -770 m	151 Watt	6,3 °C
<input checked="" type="checkbox"/>	24. Feb.		<div><div></div></div>	Langer krasser Lauf mit Hillspr...	22,88	2:35:39	+192 / -192	178	17,5
<input checked="" type="checkbox"/>	28. Okt.		<div><div></div></div>	Cycling	22,79	1:11:44	+89 / -85	171	16,1
<input type="checkbox"/>	31. Mär.		<div><div></div></div>	Long run	21,48	2:32:54	+63 / -59	166	21,7
<input type="checkbox"/>	06. Jun.		<div><div></div></div>	Verlaufen. Ein wenig mit Absicht.	20,9	2:36:12	+90 / -90	157	18

Delete several training sessions at once. With the deletion mode.

8.7.5 Overview map

If you still know where a training session took place but not when, you can look it up on the overview map and click on one of the red dots.



The training overview map shows you all training sessions on one map.

8.8 Adding a training session

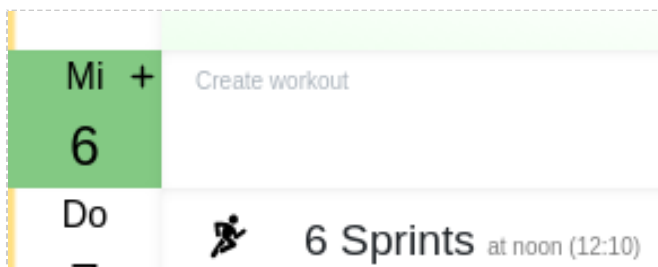
Of course, a training planning platform wouldn't be complete if you couldn't create a structured workout or upload a completed workout.

8.8.1 Upload completed training

In addition to automatically uploading your workouts by connecting your sports equipment manufacturer platform to Tredict, you can also manually upload workout files with completed workouts. Tredict supports the upload of training files in Garmin .fit format, Polar .json export format and .tcx format. If you have many files, e.g. by exporting from another platform, it is possible to upload them all at once by making multiple selections. To manually upload completed training sessions, click on the "Upload" button in the calendar title bar. To upload a planned structured workout, please read the section "Upload a structured workout" below.

8.8.2 Create workout

To create a planned training session or to manually add a completed training session for which there is no device recording, click on the corresponding date in the training calendar. Click to open the training details page for planned or structured workouts. You can read about how to structure a planned training session under "Activity planning".



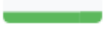

Click on a date to create or add a training session.

Upload structured workout

If you have a structured workout in Garmin .fit format from another platform, you can upload it in the training detail view. First select the date in the calendar and click on the upload symbol at the top right of the training details page.

8.9 Missed training sessions

Missed training sessions are displayed faded in the calendar. Click on the missed training session to either confirm it as completed in the training details page or delete it there if necessary.

Fr 15		Platten in the afternoon (15:13)						
	6,14	21:01	17,6	+31 / -34 m	108 57%	165 70%	16	
	Kilometer	Duration	km/h	Ascent / Descent	Heart rate Ø	Watt Ø	Effort	Intensity ♥
	Leider keine Dichtmilch dabei gehabt.							
		Länger und gleichmäßig in the afternoon (17:00)						
	10	1:10:00	7:00	0 / 0 m	136 69%	0 0%	81	
	Kilometer	Duration	min/km	Ascent / Descent	Heart rate Ø	Watt Ø	Effort	Intensity ♥

The missed running training is shown faded.

8.10 Indication of illness and injury

If you or an associated athlete has registered an illness or injury, the impairment of the injury is shown in colour in the training calendar. In the month view, the indication can be seen on the corresponding date, in the week view on the right-hand side of the calendar day and in the year view as a single column if you have selected the "Impairment" metric. A training session is also indicated by a "cross" symbol. As a coach, this gives you the opportunity to see how your athletes are doing. As an athlete, you will be able to recognise your injury status directly in the historical follow-up analysis.

29	
	Stor-Elvdal 18:37
Vandring	
2,87 km	48:23 min
16:50 min/km	
+103 / -102 m	
0 bpm	0 Watt
13	
	

A moderate injury is marked in orange on the date and the activity has a cross symbol.

9. Activity planning

You can plan a future activity or add a training that has already been done.

Training planning is an essential part of form curve prediction and allows you to fine-tune your training efforts and intensities, e.g. when you want to plan ahead for a competition. A manual activity appears, just like an uploaded activity, with the calculated values in the form curve and in the analysis.

Planned activities are displayed in your training calendar and automatically transferred to your watch or bike computer for execution. Provided the manufacturer of your device supports this.

Read the blog article: [Plan and create a training](https://www.tredict.com/blog/plan_and_create_a_training/) [https://www.tredict.com/blog/plan_and_create_a_training/]

9.1 Confirm or cover executed training session

A scheduled training session must be reconfirmed if the training date has passed, otherwise it will be deemed to have been missed and will no longer appear in the evaluation. If you have uploaded a training session that you have completed and it matches a planned training session, the planned training session is automatically covered, but can be uncovered again with a manual confirmation.

Planned segments?

Show pace calculator

Time ▾	13:00 m:s	→	10:46 min/mi	→	132 bpm	→	166 Watt	→	0 spm	...
Distance ▾	0.6 mi	→	7:00 min/mi	→	172 bpm	→	256 Watt	→	176 spm	...
Distance ▾	0.25 mi	→	19:00 min/mi	→	121 bpm	→	0 Watt	→	0 spm	...
repeat 4x										- +
Time ▾	13:00 m:s	→	10:26 min/mi	→	144 bpm	→	170 Watt	→	0 spm	...

Segments planning for interval training, resulting in duration, distance and effort

9.2 Training templates

A scheduled training can be saved as a template to be reused if necessary. Training templates can help you develop your training plan.



This planned training is displayed immediately in the form curve

9.3 Segments

The training can be planned in segments that you can define yourself. You can enter the desired values for pace/tempo, heart rate, power and cadence for each segment.

Depending on what you have entered and how the zone priority is selected in the settings, the effort for the planned activity is then calculated. The length of a section or segment can be defined by time or distance.

9.3.1 Create intervals

By grouping several segments, you can have them repeated to create interval workouts.

9.3.2 Enter predefined values

If you click on one of the colored zone arrows, you can enter a predefined value based on your zone model.

10. Templates

Templates are used to reuse training sessions and can be applied to you or your athletes in training planning. Templates are available for all sports such as running, cycling, swimming and other workouts.

10.1 Recalculation of target values

When using the training template, the target values of heart rate, wattage and speed are recalculated by default based on the current capacity revision.

Example:

A template set to 70% of FTP will result in 172 watts when applied, if the FTP is 245 watts for the training date.

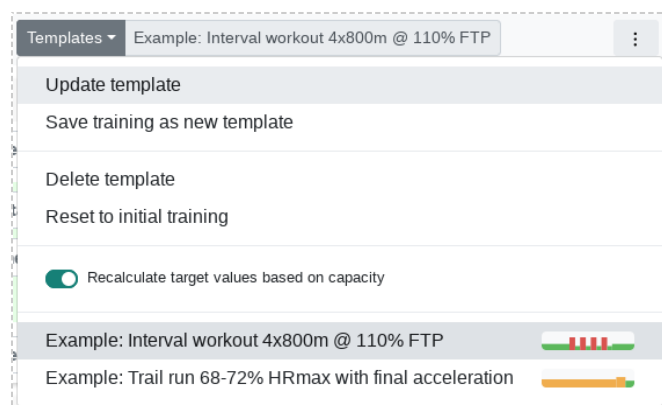
10.2 Create and manage training templates

The template is created like a normal scheduled training.

A planned training can be saved as a template at any time.

To do this, open the drop-down menu for the templates in the planning view and select the item "Save as template".

Now this template can be used in the drop-down menu and in the template selection in the calendar.



Updating a training template

Templates can be updated with customised target values or deleted.

10.3 Use of training templates

A template can either be selected directly in the planning view via the drop-down menu or dragged from the template pool into the training calendar. This works similarly on your own calendar or on your athlete's calendar if you are a coach.

Templates?

All sports →

🏋️ Example: Body strength training

15:00 min


59% HRmax

13 🟢

🏃 Example: Interval workout 4x800m @ 110% FTP

55:58 min 9,3 km


78% FTP 78% FTPa

92 🟡 

🚴 Example: Power peaks

1:18:00 h 24,36 km

66% FTP 63% FTPa

94 upm 90 🟡 

🚣 Example: Rowing by cadence

15:00 min

65% HRmax 23 spm

15 🟢

🏃 Example: Threshold speed test

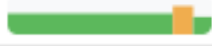
16:00 min 1000 m

0 🟢

🏃 Example: Trail run 68-72% HRmax with final acceleration

1:44:20 h 17,54 km

72% HRmax 79% FTP

79% FTPa 141 🟡 

Pool with training templates in the calendar

11. Activity summary

The summary gives you an overview of the effort and intensity of your activity.

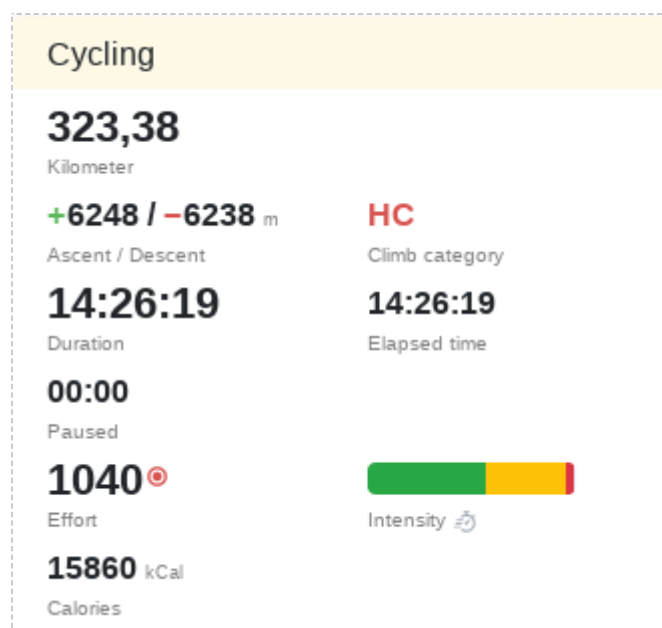
11.1 Distance

By default, the distance is aggregated from the distance series of your sports watch.

By clicking on the distance field, you can also calculate the distance derived from speed.

This can be beneficial with a well-adjusted additional speedometer, but is less accurate with normal GPS watches. The two data sources are described in more detail in the description of "Pace by Distance" and "Pace by Speed".

In the preferences category, you can permanently set the primary distance source.



Summary of a 200-mile bike race

11.1.1 Lengths and pool length

In addition to the distance, the length of the pool and the number of lengths that you swam are displayed.

11.1.2 Ascent and Descent

As no ascent or descent is absolutely straight, but is always a little up and down, the covered vertical meters are mostly much larger than the direct height difference. The ascent and descent show you the actual difference in altitude you have covered.

11.1.3 Climb category

The climb category is based on the categorization of the climbs in the Tour de France and reaches from '5' to 'HC'.

A category '5' climb requires only a small difference in elevation, whereas category 'HC' is the highest category, requiring a very high climbing performance.

The climb category is determined from the calculated Fiets Index. Tredict has calculated the Fiets indices for the climbs of the Tour de France and can therefore also calculate the climb category.

11.2 Duration

Duration is the main factor for the effort calculation of an activity. Only the active time is used for this and breaks are not included.

Tredict also shows you the time you have spent walking while running or standing instead of sitting while cycling.

The elapsed time is the period from the start time to the end time of the workout, including all breaks.

11.3 Split

The split indicates the time difference of the second half of an activity. A run of 10 kilometers is thus divided at kilometer 5.

11.3.1 Negative split

A negative split is an activity in which the second half was performed faster. This can have natural reasons, for example, the fast descent from a mountain in the second half. However, negative splits are also deliberately planned and say something about the ability to control intensity.

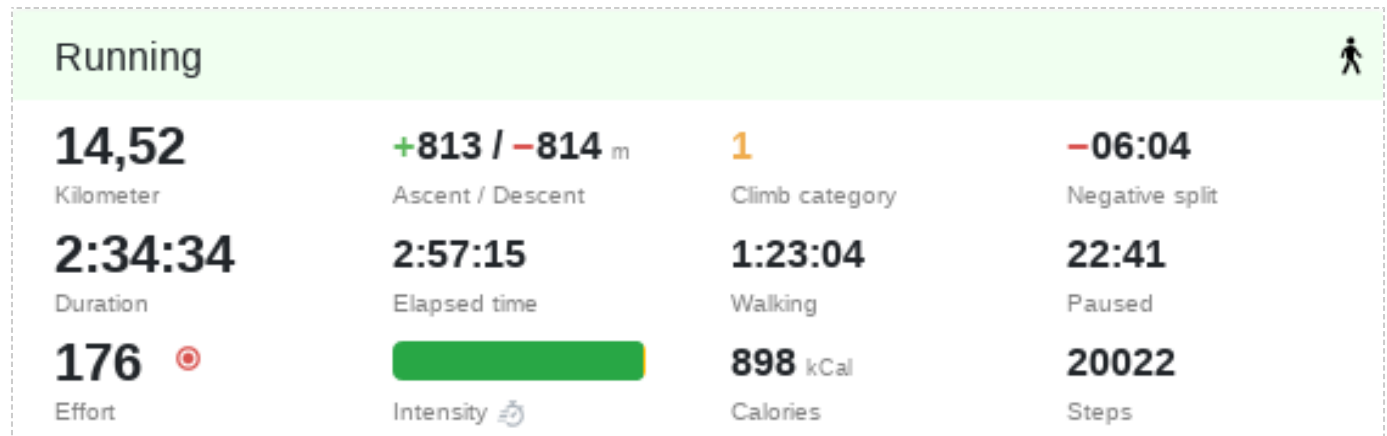
11.3.2 Positive split

With a positive split, the second half of an activity takes longer to complete. This could be the case if, for example, you first run fast down the valley and then have to run back up the

mountain. But a positive split can also mean that you started a run or bike race too fast at the beginning.

11.3.3 Identical split

In an identical split or even split, both halves of the activity are the same duration. An "even split" can show the ability to control intensity at a constant rate.



Summary of a slow fell-run in Norway

11.4 Effort

The effort is the input variable for the performance chart and influences your fitness and exhaustion.

Low efforts are marked green, moderate yellow and high red. For high accuracy you should regularly adjust the zones to your current fitness level and maintain zone revisions.

The effort is calculated using the following criteria:

- Active Duration - The longer the activity, the higher the effort.
- One of the 3 performance values - heart rate, wattage or speed.
- Zone Intensity - A higher intensity range increases effort over the same time.
- Capacity - Maximum heart rate, FTP, FTPa

Which of the performance values should be prioritized in the calculation, the zone priority, can be defined in the preferences in the settings category.

11.5 Intensity distribution

The distribution of the intensities allows you to quickly classify the type of training or whether you have been in the desired intensity ranges.

Tredict defines 3 intensity ranges - low, moderate and high.

With a click on the intensity distribution you can switch between zone types - heart rate, power, speed and cadence.

For an even more detailed overview, you can look at the zone distribution in your training.

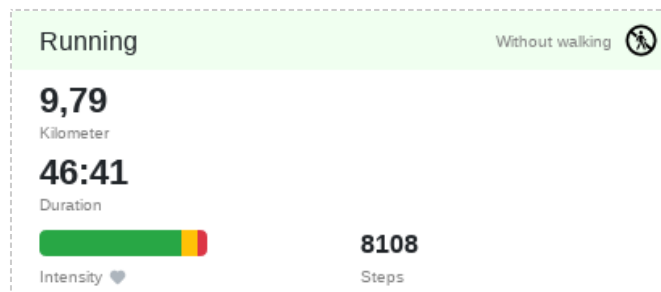
11.6 Calories

The calorie consumption is measured in kCal. It can be important, for example, during particularly long runs or for precise control of food intake, in the final phase of a training period.

11.7 Steps, Pedalstrokes and Strokes

The number of steps when running, pedalstrokes when cycling and swim strokes when swimming depend on the cadence and duration of a workout.

11.8 Show running activity without walking



Running training where the walking phases are hidden

In a running activity, you can hide the time you spent walking in the series chart, in the performance values and in the summary. To do this, click on the walking symbol in the summary.

This can be useful, for example, when analyzing interval training to compare the performance phases more easily.

12. Activity attributes

Properties of a training session that you define yourself after the training session has been completed are called activity attributes.

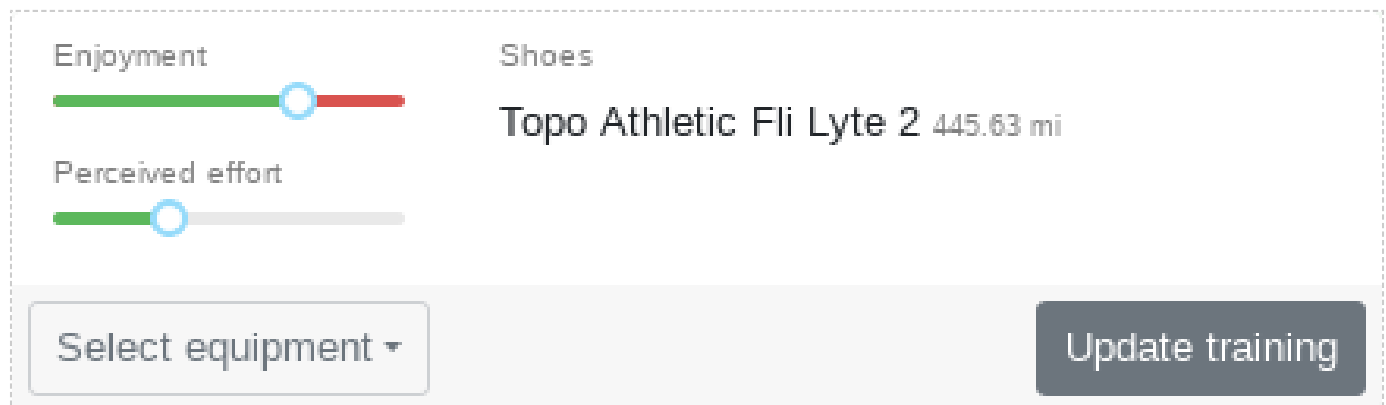
12.1 Enjoyment

The fun factor is an important indicator of your general condition when viewed over a longer period.

If it drops permanently, you may be training too intensively. In the best case, the fun factor increases before important competitions. In normal training, however, the enjoyment will be more balanced,

because a balanced training plan should be both demanding and athletically relaxing, instead of ending in burnout.

Individual training sessions can be very multifaceted and contain challenging and joyful sections alike. The value range for the enjoyment goes from 'very miserable' to 'balanced' to 'very joyful'.



The screenshot shows a training session summary interface. On the left, there are two sliders: 'Enjoyment' and 'Perceived effort'. The 'Enjoyment' slider has a green bar on the left and a red bar on the right, with a blue circle marker positioned towards the right. The 'Perceived effort' slider has a green bar on the left and a grey bar on the right, with a blue circle marker positioned towards the left. To the right of the sliders, the text 'Shoes' is displayed above a dropdown menu showing 'Topo Athletic Fli Lyte 2 445.63 mi'. Below the sliders is a button labeled 'Select equipment ▾'. To the right of this button is a large grey button labeled 'Update training'.

This training was fun

12.2 Perceived effort

The perceived effort can provide information about your current condition and your daily form.

If there is a high perceived effort even with very slow units, then you may be coming down with a cold, or you may not yet have recovered sufficiently from a very intensive session. But maybe you went for a high-speed run, and hardly felt tired at all. In that case, you may be at the peak of the super compensation of your previous

workouts, and you might have taken one too many rest days. But maybe only the weather was particularly good and you just feel great mentally.

Long easy runs should not be more strenuous than 'slightly strenuous', 'easy' would be even better.

Short crisp races can be 'very strenuous' or maybe even 'extremely strenuous'.

If your training is mostly 'demanding', you may not benefit from it, because the training is not sufficiently polarizing.

12.3 Equipment




You can link the shoes, bicycles or generic equipment you use to any training. Training values like distance, duration, speed, intensity distribution, effort and much more are aggregated on the equipment.

12.4 Injuries & Illness

If you have entered an injury or illness, it will be displayed on the training page. This allows you to draw conclusions about possible effects of the performance and efficiency indicators.

13. Performance

Performance values are the attributes of an activity that directly influence the effort required for a training.

Performance?			
			
7:40 98%	7:24 101%	6:54 109%	
min/mi Ø	min/mi grade adjusted Ø	min/mi max	
			
260 102%	261 102%	293 114%	422
Watt Ø	Watt perceived	Watt max	Kilojoules
			
165 85%	166 86%	177 92%	
Heart rate Ø	Heart rate perceived	Heart rate max	

Performance values of a tempo running unit

13.1 Speed - pace or tempo?

Pace and tempo are each speed quantities, but differ in scale and reference order.

In the context of Tredict, running, swimming or other activities are referred to as pace. The time refers to the distance: min/km, min/mi, min/100m, min/100yd.

Cycling is generally referred to as tempo, as high speeds are reached and pace is no longer a good benchmark. The distance refers to the time: km/h, mi/h.

Tredict determines the speed from 2 possible data fields of your recording device.

13.1.1 Pace/Tempo by Distance

The continuous distance in relation to the duration gives the speed.

Tredict uses the pace by distance per default, as this is most accurate with normal GPS sports watches.

13.1.2 Pace/Tempo by Speed

The data field "Speed in meters per second" is additionally provided by many sports watches.

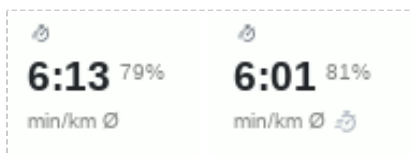
This field is somewhat less accurate for normal GPS sports watches, as the value is directly dependent on satellite reception. Therefore, there is often a discrepancy between the pace from distance and pace from speed.

But when using a footpod when running or a speedometer when cycling, the pace from speed can provide the much more precise values.

If you are using an extra footpod and the pace from distance and pace from speed show a high discrepancy, your footpod may not be calibrated correctly or may have an incorrectly set correction factor.

Speed and distance measurement may diverge

The pace from distance and the pace from speed can differ significantly if GPS reception is poor or the speedometer is incorrectly calibrated.



Strong deviation. Right tempo from distance, left tempo from speed in the same activity.

You can switch between the two modes with a click on the Pace/Tempo field.

You can set this permanently in the training settings.

13.1.3 Grade adjusted pace

For the altitude correction of the speed, first the gradients from the altitude data series are determined and slightly smoothed. Using the gradients, an energy cost calculation (according to Minetti and others) is carried out and the speed is corrected.

Grade adjusted speed is the basis of the "Effort calculation according to speed".

Speed, like wattage, is an output quantity, because something already achieved is measured.

13.2 Power / Watt

Wattage is another output variable that shows you how much power you actually put on the "road".

It is independent of ascents, descents or wind (for power meters with wind sensor) and thus provides more accurate values in the effort calculation compared to speed.

On an ideal course (flat and calm), pace and wattage are practically proportional to each other during a normal workout. Only at very high speeds is there a clear digression between power output and speed gain.

13.2.1 Specific Power - Watt/kg

Specific power shows wattage in relation to your body weight and thus establishes comparability to other athletes.

By clicking on the performance values you can switch to the specific power.

However, comparability is only given if all athletes use identical or compatible power meters.

13.2.2 Perceived Power

With the perceived wattage, the lower values are raised according to a specific ratio and the higher values are lowered.

The power is thus normalized.

Normalizing power is a trick and better reflects the perceived work done.

- A strenuous interval training has a higher value than the average wattage.
- A long, very even run has no difference in perceived and average power.

The Perceived Power is the basis of the "effort calculation by power".

13.3 Heart rate

The average heart rate is an important indicator of training control. It shows the actual intensity of your workout and responds to your daily form or illnesses.

In combination with speed or wattage, you can make reliable statements about your current aerobic performance (see Heart Rate Pace Factor, Heart Rate Power Factor).

Heart rate is the most important input variable and has direct effects on output variables such as pace and power.

The average heart rate is the basis of the "effort calculation by heart rate".

13.3.1 Perceived Heart Rate

The Perceived Heart Rate, like the Perceived Power, is a normalized value and reflects the true effort of the training in more detail.

13.4 Percentages of capacity

The percentages behind the performance values tell you what percentage of the maximum capacity was achieved during training.

Since FTP is a value with time reference to 60 minutes, valid percentage values of over 100% are possible.

- Pace % -> Percent of the Functional Threshold Pace (FTP_a).
- Watt % -> Percent of Functional Threshold Power (FTP).
- Heart rate % -> Percent of maximum possible Heart Rate.

13.5 Respiration rate

The respiratory rate usually increases directly with the increase in exercise intensity, at higher altitudes or when a state of exhaustion arises due to prolonged exercise.

The combination of maximum respiration rate, lung volume and number of pulmonary alveoli results in the oxygen uptake capacity.

13.6 Oxygen saturation

Oxygen saturation under heavy strain shows you when your body can no longer maintain the optimal oxygen supply to your muscles. This value is therefore an important control instrument in altitude training to protect against oxygen deficiency.

13.7 Total hemoglobin

The total hemoglobin value indicates the number of oxygen-carrying red blood cells. Values around 12-17 grams per deciliter are within a reasonable range. The haemoglobin value can rise due to altitude training or thickening of the blood (loss of fluid) or drop due to mechanical damage during very long exertion on the soles of the feet.

A fitness watch, chest strap and/or footpod is required to provide and support these metrics.

14. Dynamics

Dynamics values describe certain aspects of a movement sequence during an activity.

The course of movement itself is influenced by intensity, fitness level, efficiency, track characteristics, style changes, injuries and other factors. Conclusions about these activity attributes can be drawn from the dynamics.

Dynamics?			
173 <small>spm</small>	178 <small>spm</small>	47.64 <small>in</small>	52.76 <small>in</small>
<small>Cadence</small>	<small>Cadence max</small>	<small>Step length</small>	<small>Step length max</small>
241 <small>ms</small>	222 <small>ms</small>	9.7 <small>kN/m</small>	2.79 <small>in</small>
<small>Ground contact time</small>	<small>Ground contact time min</small>	<small>Leg Spring Stiffness</small>	<small>Vertical oscillation</small>
50.1L / 49.9R %	0.99 <small>in</small>		
<small>Ground contact time</small>	<small>Body elasticity</small>		

Dynamics of a running unit

14.1 Cadence

14.1.1 Running cadence

When running, the cadence is influenced by height, speed and track condition.

The left and right steps are counted, since each leg causes one step.

In theory, for optimal movement, larger runners have a lower cadence than smaller runners at the same speed. The optimal stride rate is influenced by other factors such as muscle-tendon elasticity, injuries and proprioceptive neuromuscular fitness.

You can display your cadence for a pace and your related height in the pace and cadence calculator. You can find this in the planning view of an activity.

Dynamic cadence

The dynamic cadence changes in relation to the speed during running, while adjusting the stride length.

Static cadence

A static cadence is a fixed cadence. Speed is only affected by the stride length. This is useful in training to train the sense of stride length, smoothness, movement and foot placement and can be beneficial for a comfortable rhythm in very long runs.

14.1.2 Cycling cadence

The cadence results from the complete rotation of the crankshaft. Thus, in contrast to running, the absolute crank movement is considered.

When cycling, cadence is influenced by speed, height, crank length, chain ratio, tyre size and track characteristics. It is necessarily varied over different distances, and should distribute power smoothly throughout the body without inefficiency.

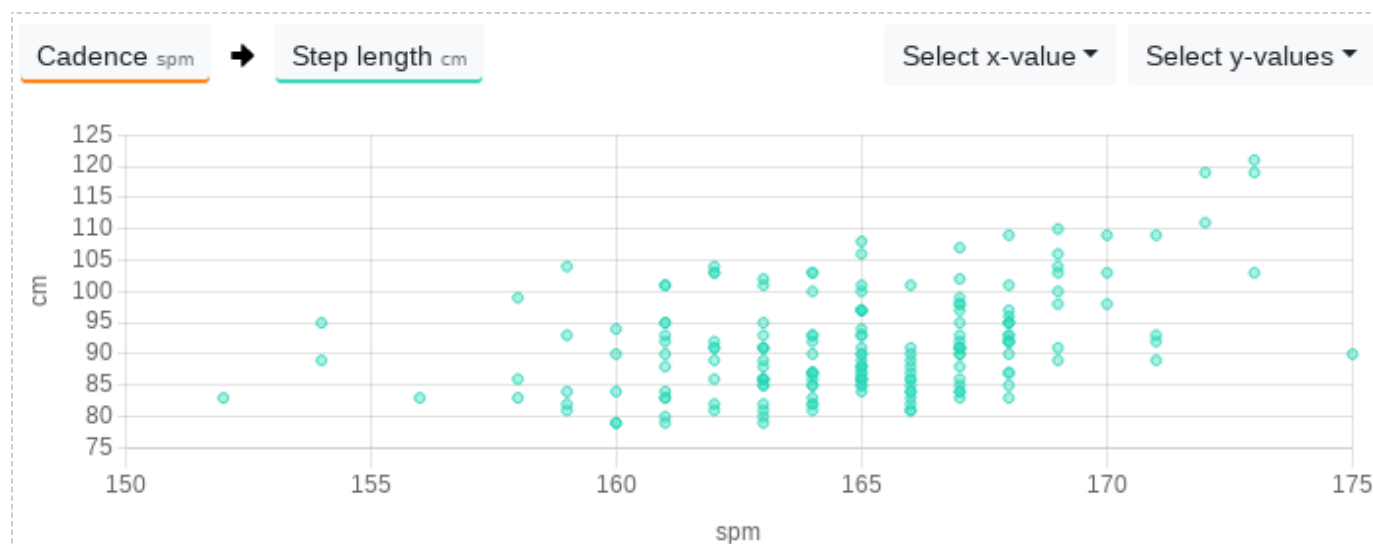
14.1.3 Swimming cadence

When swimming, stroke frequency is influenced by arm length, force, speed, water resistance and streaming. A lower stroke frequency at the same speed initially leads to a better utilization of strength,

but may increase the water resistance too much due to a higher amplitude.

An optimal stroke frequency results from a balance of power input and water resistance.

Similar to running, the swim strokes of the left and right arm are counted, since each arm causes a stroke.



The increase in the cadence of this runner is in relation to his step length.

14.2 Amplitude

14.2.1 Step length

The stride length is calculated from cadence and speed and the same basic characteristics apply as for the cadence.

The larger the stride length, the larger your motion amplitude.

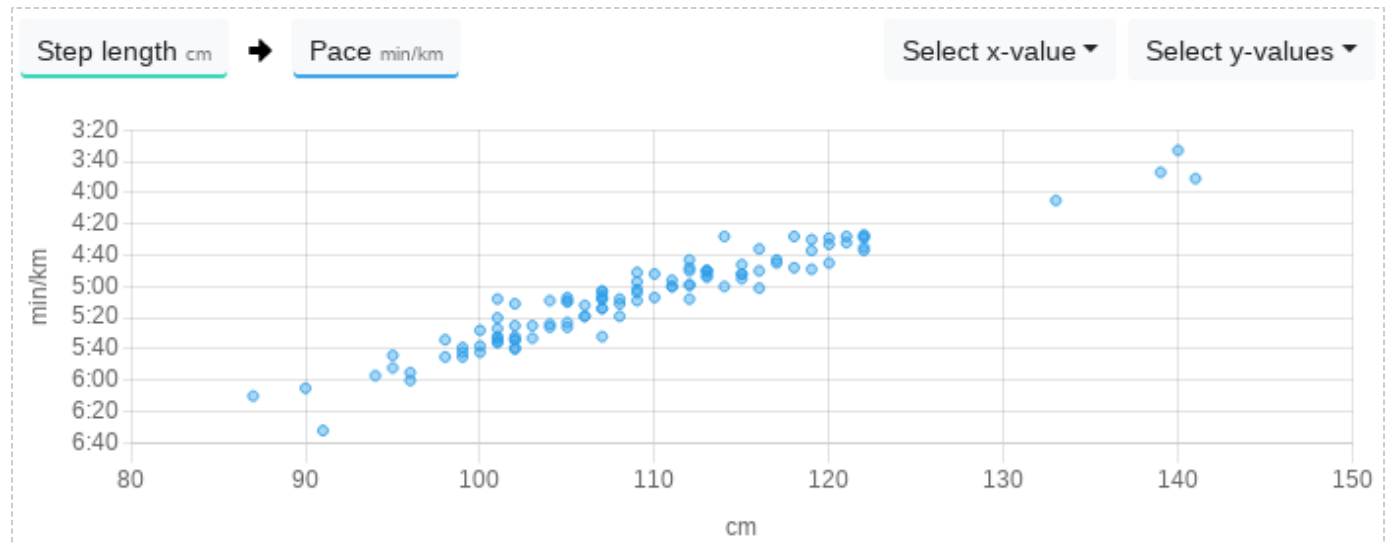
In order to achieve high speeds, it is necessary to extend the stride, because a cadence increase is no longer meaningfully possible at some point. At low speeds there are two main styles, the gazelle with long stride and low cadence and the glider with short stride and high cadence.

14.2.2 Stride length

The pedalstroke length when cycling is the distance covered by the athlete after one turn of the crank and is calculated from the pedal frequency and speed. It is influenced by the chosen gear and the power applied.

14.2.3 Stroke length

The stroke length when swimming is the distance the swimmer has covered after an arm stroke and is calculated from stroke frequency and speed. It is influenced by force and flow behaviour.



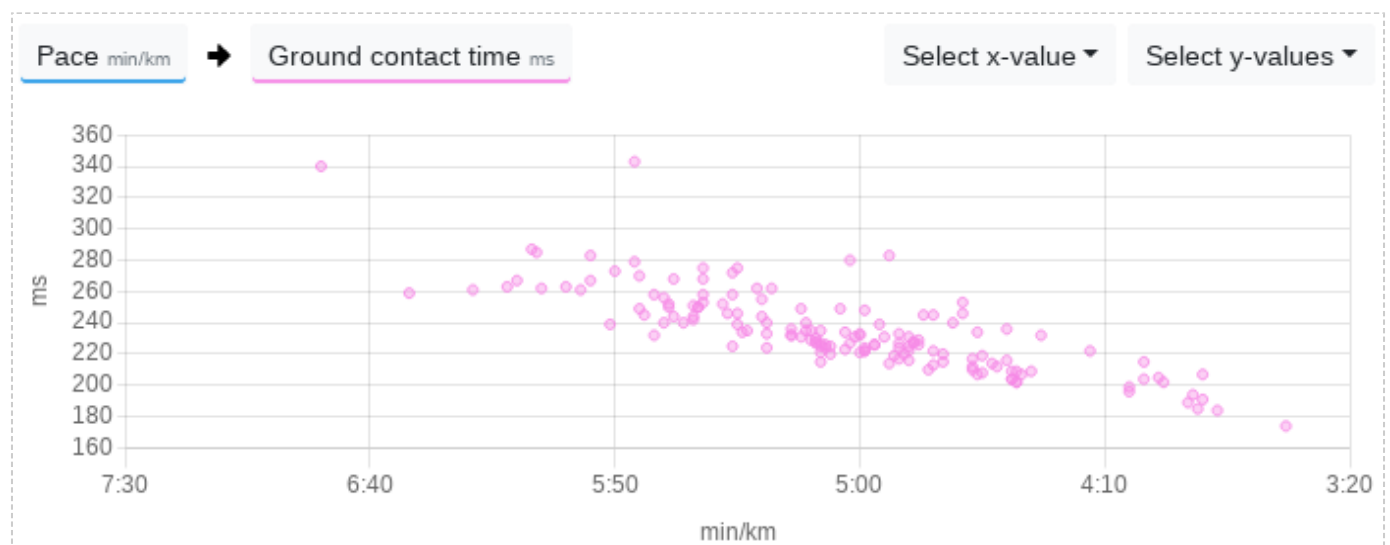
The faster this runner is, the longer his stride will be.

14.3 Dynamics while running

14.3.1 Ground contact time

The Ground Contact Time is the time in milliseconds that you touch the ground with each step. It is primarily dependent on the pace and cadence and decreases at higher speed and cadence. Secondly, it is influenced by the running style, whereby foot placement, proprioception and training condition play the biggest role.

Values of 150ms, for very fast runs, up to 400ms, for very slow runs, are in the normal range.

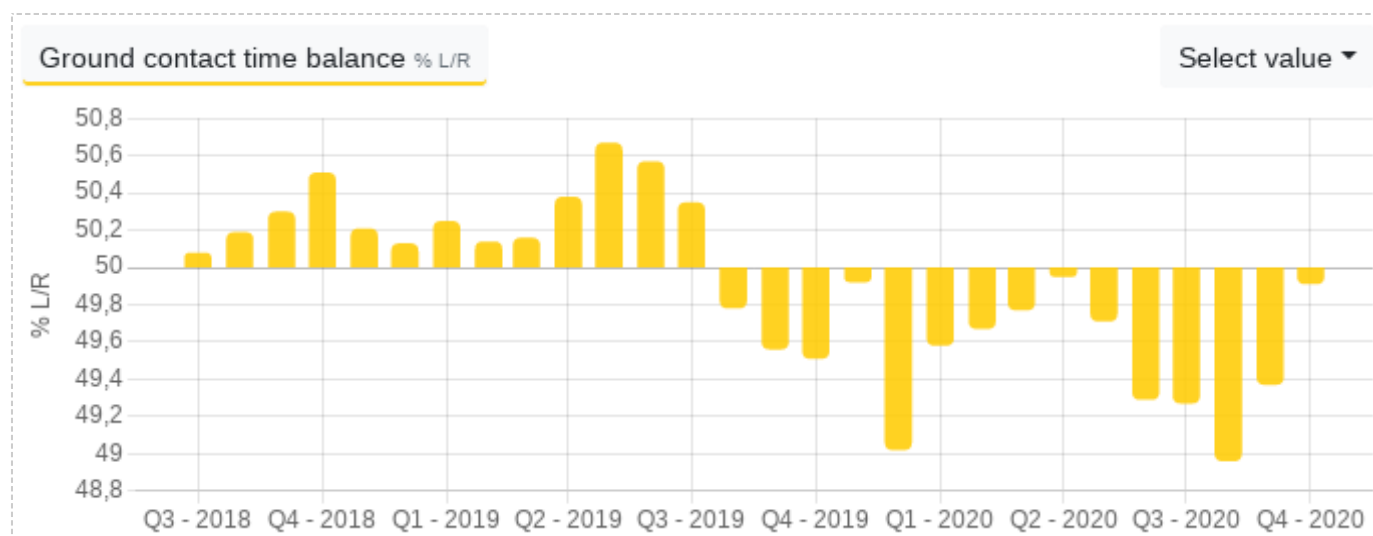


The ground contact time decreases with an increase in speed.

14.3.2 Ground contact time balance

By measuring the ground contact time of the left and right foot, the balance of ground contact time can be determined. It is given as a percentage, with 50% representing the exact centre. 49.5L / 51.5R % means that the left foot touched the ground for a shorter time overall than the right foot.

With the Ground Contact Time Balance, asymmetries can be detected, with values in the range of 49-51% being within the normal range, as long as this does not cause any problems.



For this runner, the balance of ground contact time was reversed within a year due to an injury.

14.3.3 Flight time

The flight time is calculated from the ground contact time and the cadence. The higher the flight time, the longer you are with both feet in the air.

14.3.4 Leg Spring Stiffness

The Leg Spring Stiffness is a proprietary value of the Stryd footpod and gives you an indication of the energy return capacity of your lower leg. At higher values, your lower leg can absorb and release more energy.

14.3.5 Vertical oscillation

When running, the body describes a flight curve with every step, which results in an up and down movement of the body and is described by vertical oscillation.

The higher the speed, the higher the vertical oscillation. Secondly it is influenced by the running style and the step frequency.

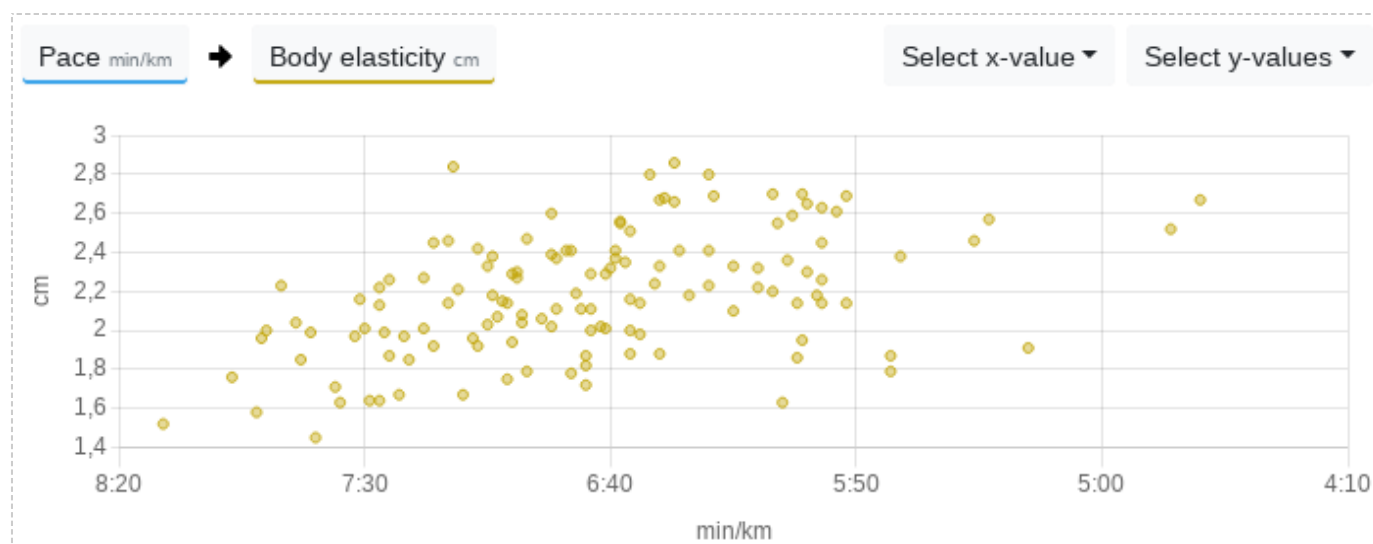
14.3.6 Vertical ratio

The vertical ratio describes the interaction of speed and vertical oscillation. A low value may be an indicator of more efficient running.

14.3.7 Body elasticity

Body elasticity describes the drifting apart of the lower leg in relation to the upper body when running and thus the body's own oscillation and elasticity.

This value is made possible by a combination of the vertical oscillation of the Stryd footpod and the vertical oscillation measured by a chest strap. This value is calculated by Tredict when the corresponding devices are worn simultaneously.



Lower legs and upper body drift apart more at higher speeds.

14.4 Dynamics when cycling

14.4.1 Platform Center Offset

The Platform Center Offset indicates the position at which the force is transmitted to the pedal relative to the pedal center. The PCO can help you to identify asymmetries or extreme values.

14.4.2 Left Right Balance

The Left Right Balance shows whether you have major differences in the power distribution on the pedals. Too much asymmetry can lead to injuries and is inefficient. However, deviations of a few percent are within the normal range.

14.4.3 Power Phase

The Power Phase shows you in which range of the pedal rotation power is applied.

14.4.4 Peak Power Phase

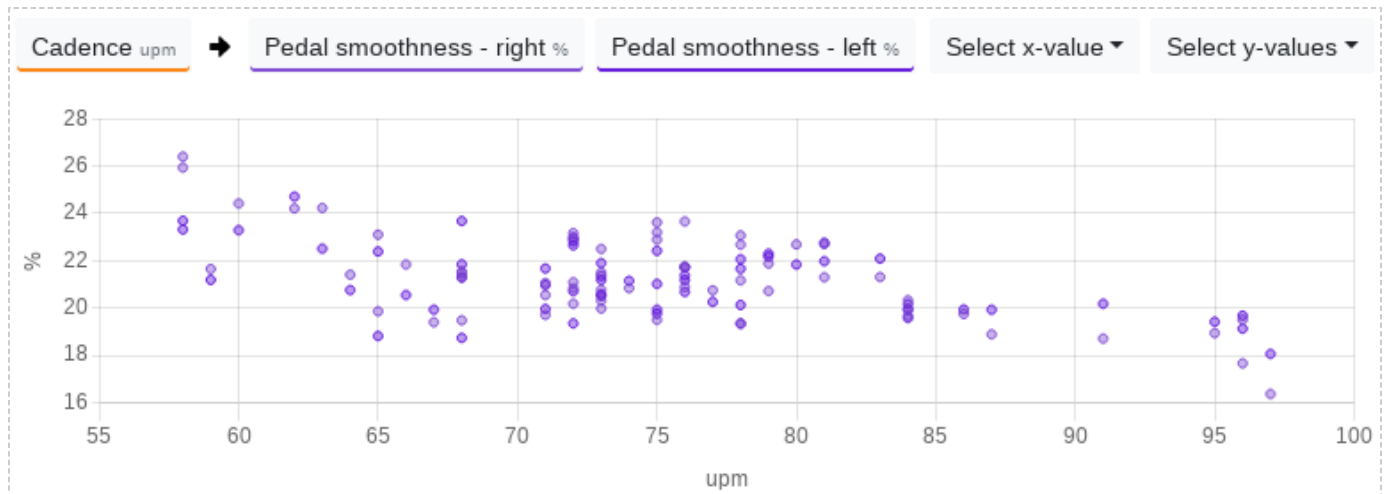
The Peak Power Phase is the range where you bring the most power into the pedal rotation.

14.4.5 Torque Effectiveness

The torque effectiveness is the sum of the force positively exerted by the foot on the pedal and the opposite negative force applied by the other foot to the opposite pedal.

14.4.6 Pedal Smoothness

The pedal smoothness is calculated from the average power and the peak power phase that is applied at the pedal.



For this cyclist, pedal smoothness increases with a lower cadence.

A chest strap, foot pod and / or special bicycle pedals are required for running and cycling dynamics, which provide and support these values.

15. Series chart

You can use the series chart to analyze the data that is present as a time series in your activity.

You can put up to 5 series on top of each other and synchronize up to 100 additional diagrams.

15.1 Modifiers

15.1.1 Primary value

By clicking on the serial type button in the legend, you select the primary value. This has its y-axis on the left side and the series is highlighted.

15.1.2 Segments

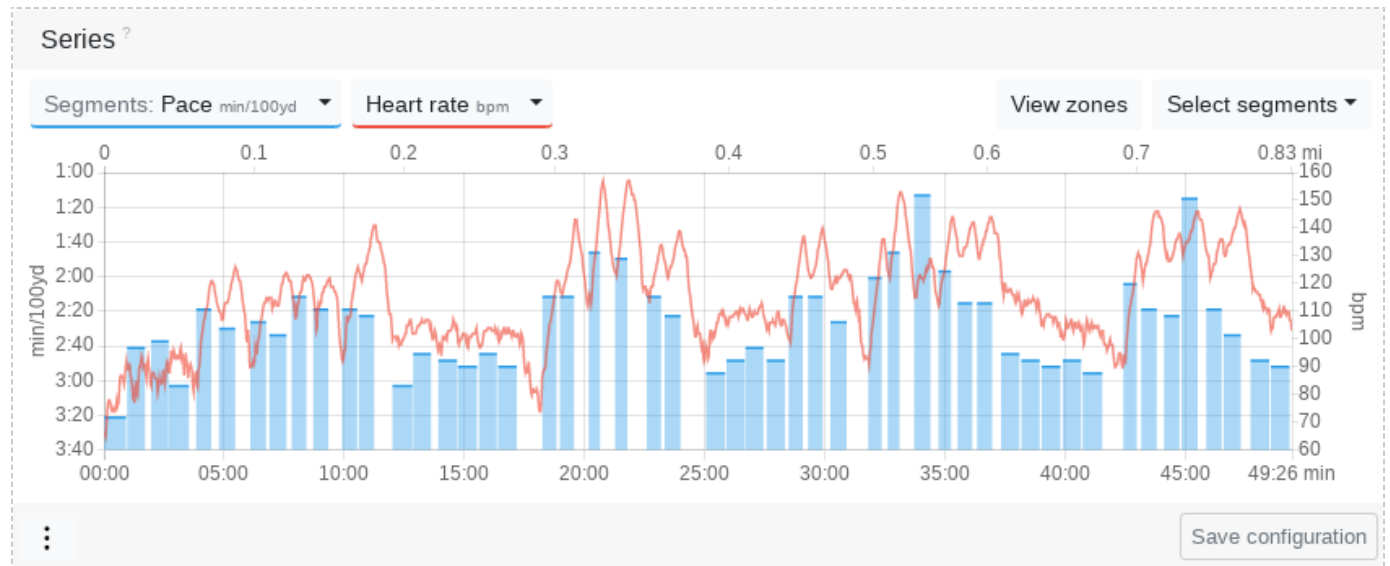
In addition to the series data, you can also view the aggregated segments in the diagram.

15.1.3 Zones

If a speed, power, heart rate or cadence series has been selected, the zone boundaries can be displayed by clicking on the "Show Zones" button.

15.1.4 Zoom

You can select a range for a time period in the chart, which shows you the average values and allows you to zoom in.



Training diagram of a length's swim with pace zone limits and heart rate

15.2 Chart settings

15.2.1 Chart height

The charts can be displayed at normal height or at a decreased height, to make a little more space when you display many activity diagrams or when they are not needed.

15.2.2 Synchronisation

Several diagrams can be either synchronized or decoupled from each other. 'Synchronized' means that the x-axis indicator synchronously follows the mouse position on all charts.

15.2.3 Axis indicator

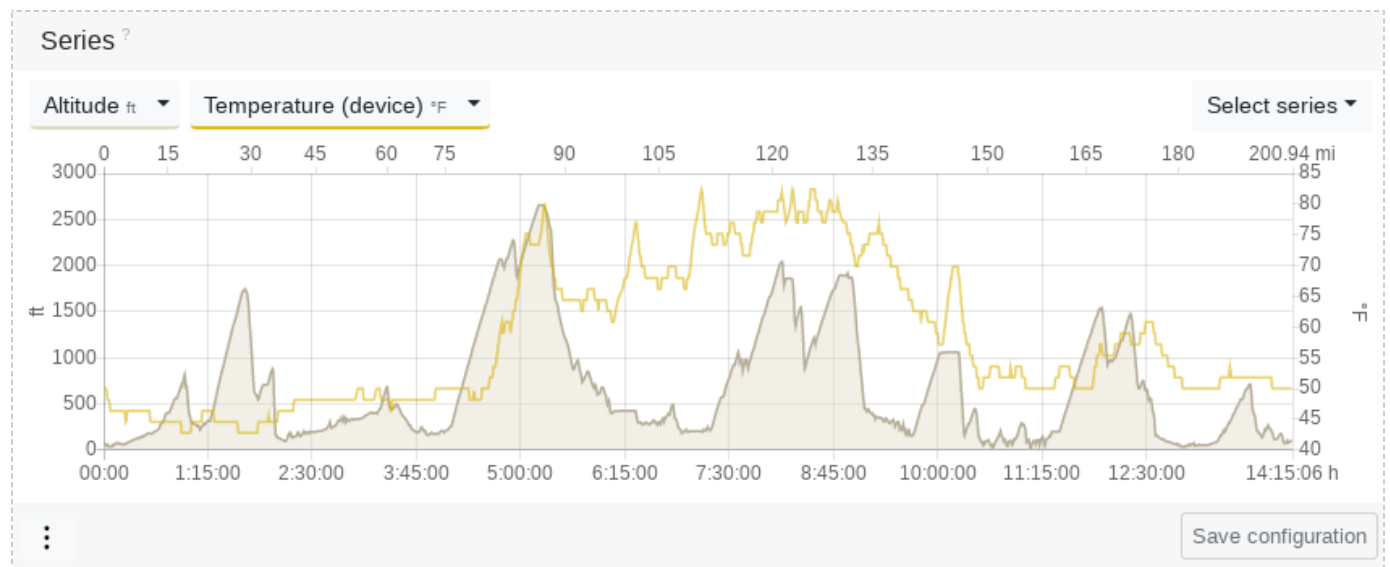
A Y- and X-axis indicator can be displayed simultaneously or only the X-axis indicator alone.

15.2.4 Breaks

You can display or hide breaks on the activity chart.

15.2.5 Walking phases

For running or miscellaneous activities you can display or hide the walking phases.



Elevation profile of a 200-mile bike race with temperature curve

15.3 Series settings

15.3.1 Lower/upper limit

With the lower and upper limit, you can put a filter on the data series that cuts off the lower and upper value range. This can make sense for very confused series, or to remove measurement errors or outliers.

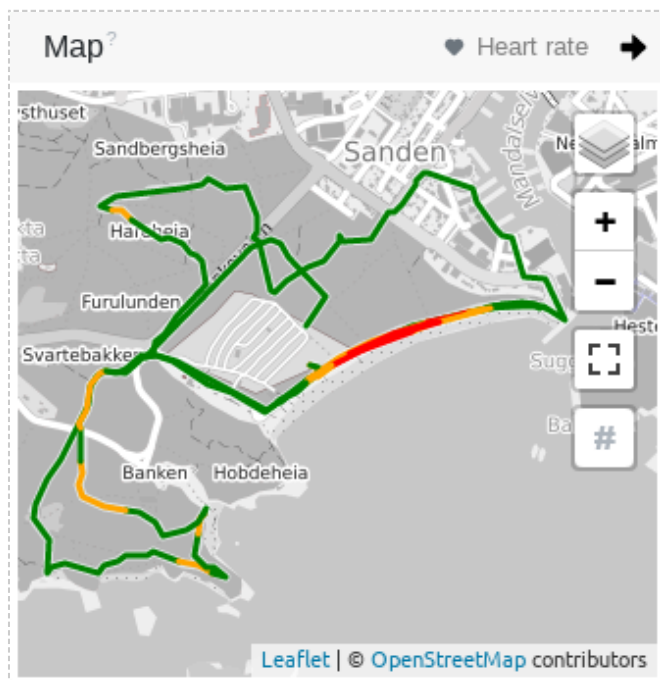
15.3.2 Simplify

Simplification reduces the number of data points in a time series while at the same time maintaining the informative value, as long as simplification has not been over-applied. Unlike smoothing, simplifying does not add data points. Smoothing would be aesthetically pleasing, but it no longer reflects the true course. We have therefore opted for the more honest option in this case.



Training diagrams of an interval run showing step frequency zone limits in the lower diagram

16. Map



Map in the training view with route intensities

If you've used an activity tracker with GPS functionality, you will be shown the route covered during an outdoor activity. The map content is provided by various "Open Street Map" derivatives, so that running, swimming and cycling activities can be presented in a meaningful way. You can deactivate the card in the privacy settings if you don't want that reduced extracts from the position data of your activity are transmitted to the so-called tile provider.

16.1 Intensity

You can select the zone type for the route to see at which position you were at which intensity level.

Depending on the intensity, the route is then colored green, yellow or red. Blue means that no intensity could be determined at this location.

16.2 Section marking

You can view the segment numbers or segment markers on the map by clicking on the diamond symbol. The segment markers are not necessarily the kilometre markers.



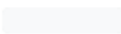



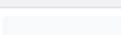



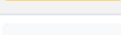

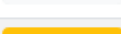

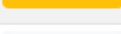

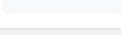



17. Segments

The segments view gives you a more detailed overview of your workout in tabular form. The table columns can be freely configured based on the available data.

Values displayed in bold are in a high intensity zone. Clicking on the intensity bar changes the zone type. With a swimming activity you can switch between individual lengths and segments that combine several lengths.

17.1 Mark segment

You can select a segment in the series chart by clicking it. The segment is then displayed in the series chart and the zone distribution shows only the data of the selected segment.

Segments?									
Intensity		Swimming style	Distance	Duration	Pace	Cadence	Stroke length	Swim strokes	Efficiency index
	# 1	 Breast	109 yd	2:12 min	2:01 min/100yd	25 spm	2.02 yd	54 strokes	93
	# 2	 Break	-	14 sec	-	-	-	-	-
	# 3	 Mixed	711	13:28 min	1:53	23	2.33	305	86
	# 4	 Break	-	55 sec	-	-	-	-	-
	# 5	 Freestyle	437	9:28 min	2:10	22	2.09	209	97
	# 6	 Break	-	43 sec	-	-	-	-	-
	# 7	 Back	109	2:26 min	2:14	24	1.85	59	103
	# 8	 Break	-	37 sec	-	-	-	-	-
	# 9	 Freestyle	109	1:41 min	1:32	28	2.33	47	74
	# 10	 Break	-	31 sec	-	-	-	-	-

Segments of a pool swimming training session with breaks at the pool edge

17.2 Efficiency metrics of tempo segments

To display values such as Heart Rate Power Factor or VO2max for specific intervals or pace segments, simply select the appropriate columns. So you can determine exactly how your efficiency metrics are under load.

17.3 Sort

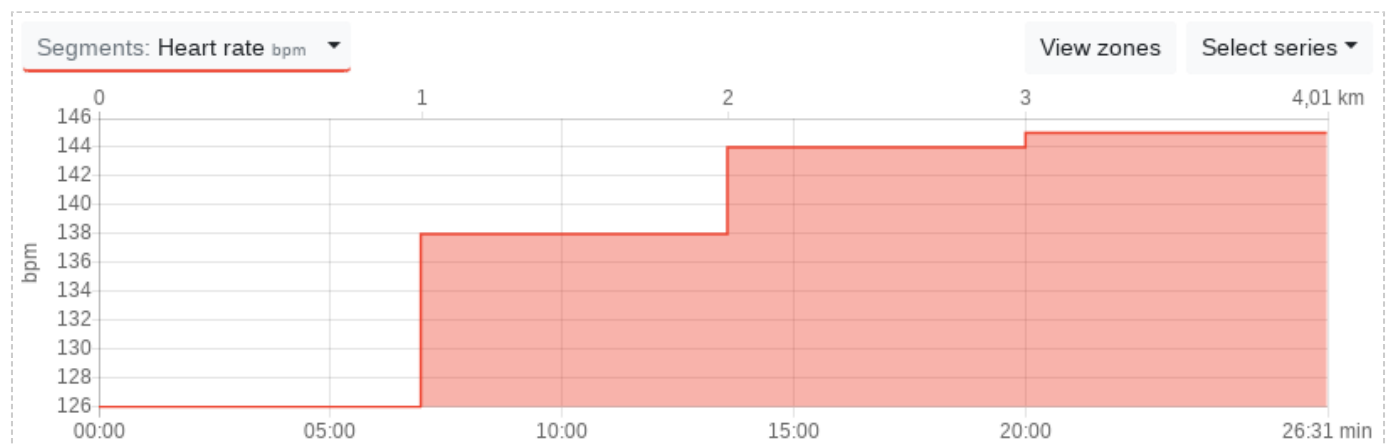
You can sort the table by column by clicking on the column caption. For example, you can sort by intensity distribution to quickly find the most intense section.

17.4 Display segment values in the series chart

All values and metrics that are available in the segments and are simultaneously available as a series can be displayed in the series chart.

This gives you a better overview of the change in the average value of the selected metric.

To do this, click select "Select Series" and select "Segments" at the bottom of the list.



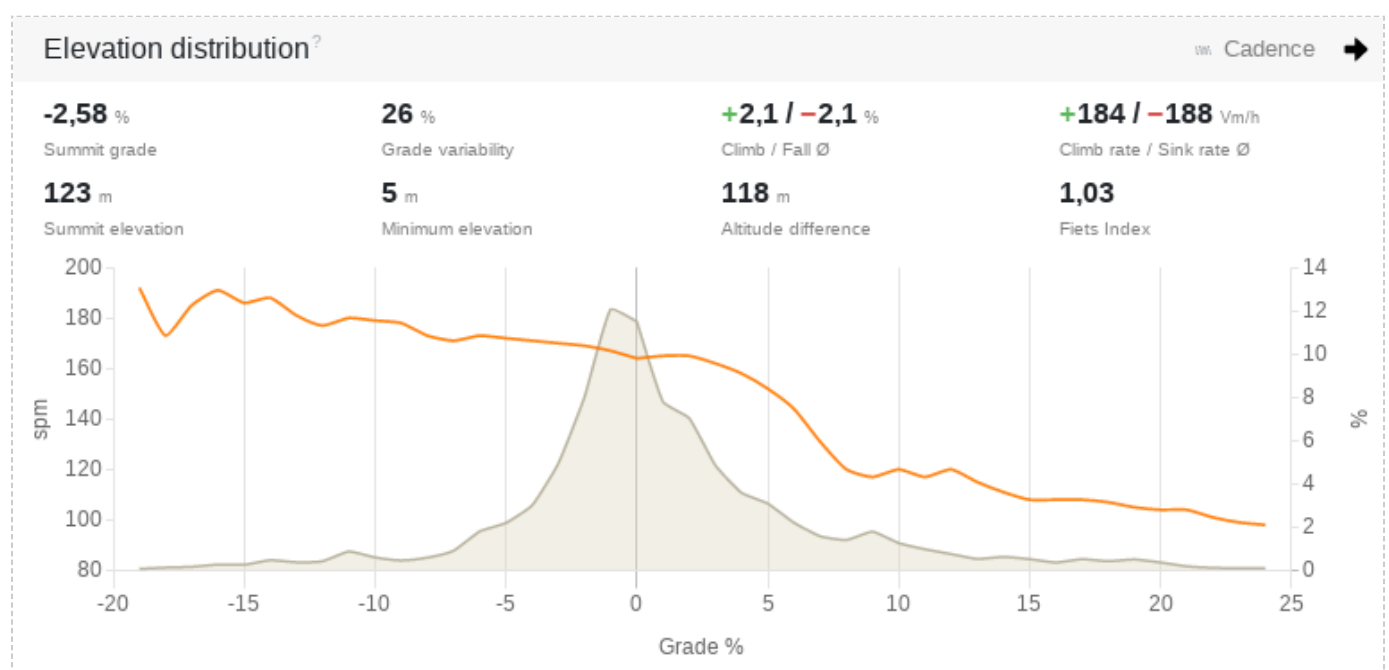
Values from the segments can be displayed in the series chart

18. Elevation distribution and data

With the elevation distribution it is possible to assign performance data, such as speed, wattage, heart rate and cadence, to specific grades.

The elevation distribution chart can show you, for example, whether you are tackling climbs, i.e. gradients in the positive range, too quickly. In this case, the heart rate curve would point sharply upwards.

The elevation data gives you an overview of the nature of the elevation profile and the effort you had to put into the activity to overcome the elevation.



Grade distribution with decreasing cadence

18.1 Altitude-related metrics

18.1.1 Summit grade

The summit grade is the average grade measured from the lowest point to the highest point of the activity. If the lowest point is behind the highest point, then the summit grade is negative. It is then a descent.

The average grade includes the elevation profile of the distance traveled and thus deviates from the direct linear grade.

18.1.2 Summit elevation

The peak elevation is the highest point of the activity.

18.1.3 Minimum elevation

The minimum elevation is the lowest point of the activity.

18.1.4 Altitude difference

The altitude difference is the direct linear difference between the summit elevation and the minimum elevation. In other words, the direct line of elevation from the lowest to the highest point of activity. Anyone who has walked up Mount Everest from sea level has thus covered a difference in elevation of just over 8,848 meters.

18.1.5 Grade variability

Grade variability can be used to classify the ups and downs of the peak grade or of a section. The higher the grade variability, the more effort must be invested in the direct climb to the summit point.

The ratio between direct linear grade and the average grade actually traveled gives the grade variability. A grade variability of 100% corresponds to the doubling between direct and average grade. Example: 20% average grade in relation to 10% linear grade results in a grade variability of 100%.

18.1.6 Climb and fall

The average climb and fall in percent are calculated from the ascent and descent traveled to the horizontal distance. These values correspond to the true perceived climb to the summit, since the elevation profile is included.

18.1.7 Climb rate and sink rate

The average climb rate and sink rate shows the vertical speed in meters per hour.

18.1.8 Fiets Index

The Fiets Index is a value for categorizing and comparing climbs. This was developed by the Dutch bicycle magazine Fiets and is quite common.

The higher the value, the more difficult and strenuous the climb. In the Alps, for example, you will find climbs with a value of 20. A low mountain range offers you something around 2-5. In an ultramarathon, a cumulative Fiets Index of over 100 is within the realm of normal.

18.2 Accuracy of height measurement

Many modern sports computers now have a barometric altimeter that provides satisfactory results. Nevertheless, height measurement is complex and inaccurate.

Accurate data acquisition is only possible through elaborate measurements on land and is therefore regionally limited.

Unfortunately there is no global model that provides exact data. This is for the following reasons:

- The earth is not exactly round, so there is no real zero point.
- Faster activities have less elevation data relative to distance because the recording interval remains the same.
- Pure GPS measurement has extreme inaccuracies of up to 50m per measuring point.
- Satellite data is degraded by trees, shrubs or houses.
- Barometric measurement changes with air pressure, which is variable.

This is a common occurrence during a workout. A thunderstorm during a workout degrades the data immensely.

Consumer devices lack the capability to perform an exact initialization of air pressure before starting an activity.

The best results are still provided by barometric altimeters, provided the weather is good. The necessary altitude data smoothing of Tredict is adapted to this measuring method.

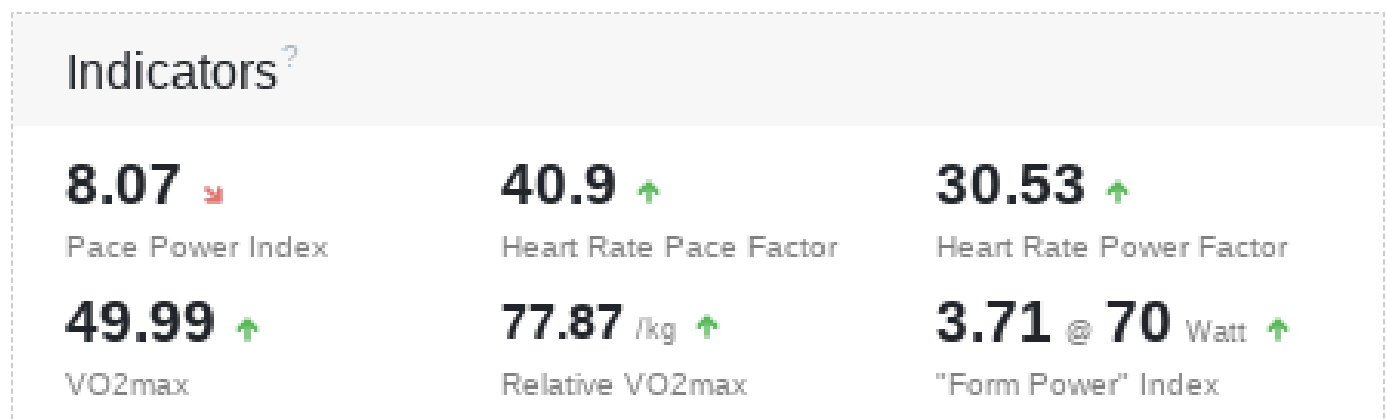
Tredict deliberately refrains from using satellite data for height correction, as these are generally too inaccurate and prevent comparability. If you include altitude meters, you should always use the same measuring method to ensure comparability.

19. Capacity indicators and efficiency indicators

Capacity indicators and efficiency indicators are benchmarks.

They allow you to:

- Identify trends in your efficiency and economy.
- Determine your current fitness level and use it to make predictions and zone adjustments.
- Compare yourself with other athletes.



The efficiency indicators show a strong increase in current performance

19.1 Heart Rate Pace Factor

The Heart Rate Pace Factor is a capacity indicator and describes the relationship between the average heart rate intensity and the speed of the workout.

The simplified formula for this is:

$$\text{heartratePaceFactor} = \text{avgSpeed} / (\text{avgHeartrate} / \text{heartrateMax})$$

A higher value at the same speed thus indicates a better aerobic capacity.

In the relational diagram of the analysis you can follow up on whether your aerobic performance improves, or which workouts are most effective. Create a chart with the Heart Rate Pace Factor on one axis and the pace on the other axis.

This value is suitable as a reliable and simple comparison parameter between athletes, as long as maximum heart rate has been correctly determined.

19.2 Heart Rate Power Factor

The Heart Rate Power Factor is a capacity indicator and describes the ratio of the average heart rate intensity and the normalized/perceived wattage of the workout.

The simplified formula for this is:

$$\text{heartratePowerFactor} = \text{normPower} / (\text{avgHeartrate} / \text{heartrateMax})$$

A higher value for the same power output thus indicates a better aerobic capacity, similar to the heart rate pace factor, but is more accurate in hilly terrain, for example.

Create a relation chart with Heart Rate Power Factor on one axis and Perceived Power on the other axis to find your best workouts.

This value is related to the output value of your power meter and should be re-evaluated when changing the device.

Read the blog article on the factors: [Visualize and recognize fatigue after a training session](https://www.tredict.com/blog/detecting_fatigue/) [https://www.tredict.com/blog/detecting_fatigue/]

19.3 Pace Power Index

The Pace Power Index is an efficiency indicator, or efficiency index, and describes the ratio of the average speed to the average wattage of the training.

The simplified formula for this is:

$$\text{pacePowerIndex} = \text{avgSpeed} / \text{avgPower}$$

Higher values indicate a better conversion from power to speed.

Cyclists can use this value to compare the efficiency of different gear ratios. Runners can use it to compare the efficiency change of a repetitive training.

In order to obtain an exact statement about changes in efficiency over time, similar conditions should prevail in the training sessions to be compared.

This value is related to the output value of your power meter and should be re-evaluated when changing the device.

19.4 "Form Power" Index

The "Form Power" index describes the ratio of average power to the Stryd Form Power.

The simplified formula for this is:

$$\text{formPowerIndex} = \text{power} / \text{formPower}$$

A higher value indicates a better efficiency of your training, since less power dissipation has occurred relative to the total power.

The "Form Power" index is directly comparable without further reference.

This value is related to the output value of your power meter and should be re-evaluated when changing the device.

19.5 Running Effectiveness

Running Effectiveness is calculated as the ratio of running speed and specific running power and can be used to predict power and speed.

The formula for this is:

$$\text{RE} = \text{avgSpeed (m/s)} / \text{specificPower (W/kg)}$$

Read the detailed blog article on running effectiveness: [The Running Effectiveness \(RE\) metric in Tredict](https://www.tredict.com/blog/running_effectiveness_in_tredict/) [https://www.tredict.com/blog/running_effectiveness_in_tredict/]

19.6 VO2max

The calculated VO2max (Volume-Oxygen-Maximum) is a sports science figure that describes your aerobic fitness.

It indicates the maximum amount of oxygen that can be absorbed by the body during a maximum load over a long period of time. The unit reads as millilitres of oxygen per minute and is abbreviated to ml/min.

Ideally, this value is determined by respiratory gas analysis during maximum physical effort, but it can also be calculated with deterministic factors from heart rate capacity and speed, so that an approximate comparability is given.

The simplified formula for this is:

$$\text{VO2max} = (\text{avgSpeed} / (\text{avgHeartRate} / \text{heartRateMax})^{\text{deterministicExponent}})^{\text{deterministicExponent}}$$

Similar to the Heart Rate Pace Factor, a higher value indicates better cardiovascular fitness, i.e. you can complete speed units faster or complete very long units at a lower heart rate.

Due to the deterministic factors, this value is only calculated for running activities. However, for any sport you can use the Heart Rate Pace Factor, which is proportional to VO2max in running.

VO2max is directly comparable without any further reference. For a reliable value, the maximum heart rate must have been determined correctly.

19.7 Relative VO2max

The relative VO2max is based on the VO2max but includes body weight.

This allows you to see how changes in your weight will affect your VO2max.

For comparability with other athletes, this value is only somewhat suitable, since the ratio of muscle to fat and water is not included. The unit reads as millilitres of oxygen per minute per kilogram and is abbreviated as ml/min/kg.

19.8 Swimming Efficiency Index

The efficiency index for swimming is a SWOLF value normalized to a 50m length.

So you can compare the value regardless of the length you have swum.

Outdoor swimming activities can also be classified in this way.

The SWOLF value describes the number of swim strokes per length plus the time taken. The formula for the Swimming Efficiency Index is:

$$\text{efficiencyIndex} = (\text{strokes} + \text{duration}) / (\text{distance} / 50)$$

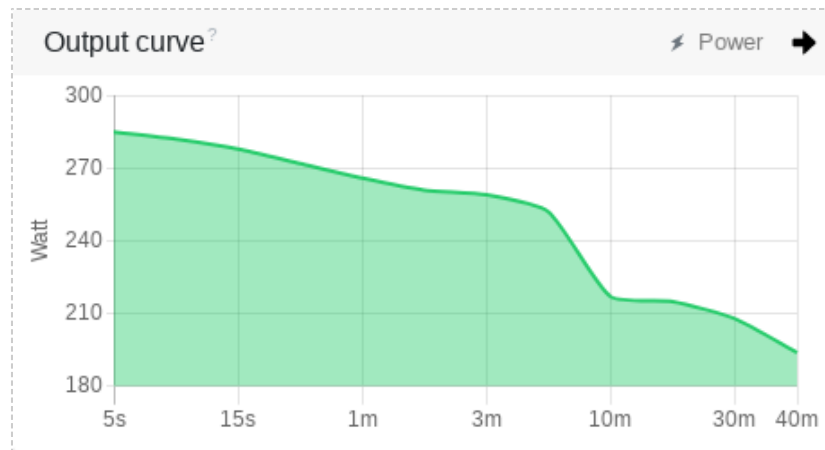
A lower efficiency index is therefore better, as fewer swim strokes are required.

The swimming efficiency index is directly comparable without further reference.

20. Power curve and mean maximum values

The performance curve shows you the maximum average values for the selected zone type in chronological order.

Example: 1m at 270 watts is the maximum wattage you have maintained for one minute.



Performance curve of a short interval training

20.1 Determining training type

With a glance at the heart rate, wattage, pace or cadence curve, you can find out which category the training belongs to.

Examples:

- Interval training with warm-up phase has very high maximum values in the shorter time ranges.
- A tempo training has high maximum values in all time ranges.
- A light long workout has low values in all time ranges.
- A cadence curve with very high short, high medium and low long values is typical of a profiled trail run.

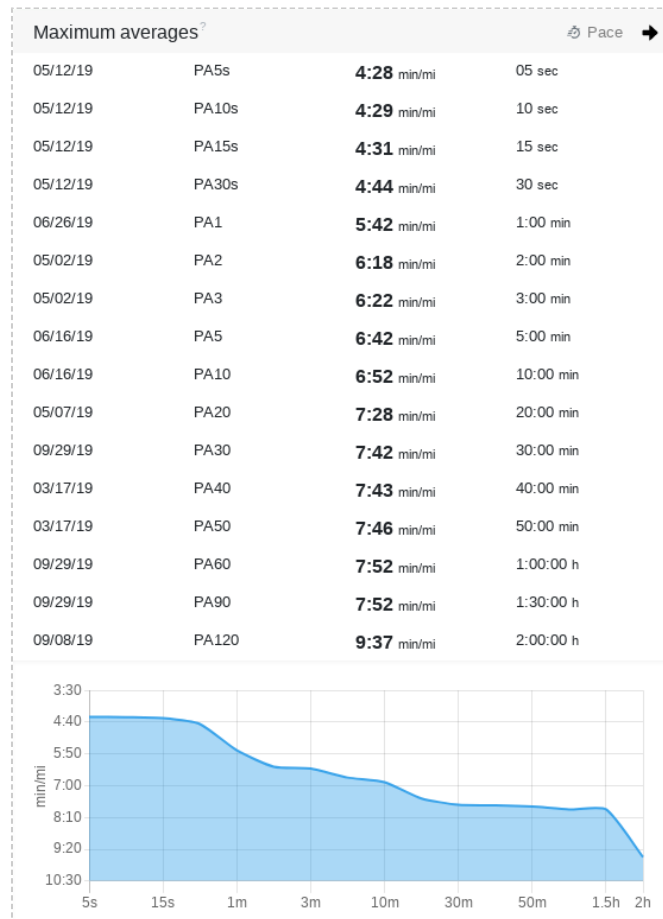
20.2 Approximate Maximum Heart Rate, FTPa or FTP

With the performance curve you can approach your FTPa and FTP after a high-intensity competition over 60 minutes, or find your maximum heart rate.

- Maximum heart rate -> HR5s
- Functional Threshold Pace (FTPa) -> PA60
- Functional Threshold Power (FTP) -> P60

As it is not advisable to simulate a competition during training for testing reasons, there are different variants of lower-effort performance tests to discover the three above-mentioned values. The performance curve will help you here as well.

The records overview in the analysis shows you the maximum values of your training over a certain period of time.



Pace maximum averages for all running activities in 2019

20.3 Remove incorrect values

If incorrect readings are displayed as a record in the analysis, you can deactivate the corresponding training on the training page to remove it from the analysis.

21. Track times

Route times are determined via the speed measuring points of your device.

Measuring points are added up in meters per second until the desired distance is reached. The last measuring point is only counted as a percentage in order to reach the exact distance.

Track times?			
05/12/19	50 m	08 sec	4:29 min/mi
05/12/19	100 m	17 sec	4:32 min/mi
05/12/19	200 m	37 sec	4:55 min/mi
07/04/19	400 m	1:31 min	6:07 min/mi
05/02/19	800 m	3:11 min	6:24 min/mi
09/22/19	1 km	4:07 min	6:37 min/mi
06/16/19	1 mi	6:44 min	6:44 min/mi
06/16/19	2 km	8:26 min	6:47 min/mi
05/07/19	5 km	23:25 min	7:32 min/mi
09/29/19	10 km	48:40 min	7:50 min/mi
09/29/19	10 mi	1:18:29 h	7:51 min/mi
09/29/19	21.1 km	1:42:54 h	7:51 min/mi

Track records over a selected period

21.1 Helpful information

21.1.1 Tip for distance deviation

If the training chart shows a deviation in the distance for the track time, although the duration of the record is correct, this indicates two possible reasons:

- The speed was more guessed than measured due to a weak or corrupted GPS signal from your device.
- You are using an additional speed sensor and it is not properly calibrated. Most footpods and bicycle pedals have a calibration or correction factor that should be checked from time to time.

21.1.2 My record is not displayed

The records are calculated according to the speed, so here too there may be deviations in the distance during the recording, so that in total the required distance is not reached. The reasons are the same as described in the distance deviation.

21.1.3 Remove incorrect values

If incorrect readings are displayed as a record in the analysis, you can deactivate the corresponding training on the training page to remove it from the analysis.

22. Proprietary data

Proprietary data?	
21h Recovery time	45.47 / 45.8 VO ² max
-3 / +4 / 0 Performance condition	3.2 Aerobic training effect

Proprietary data of a strenuous run

Proprietary values, such as Recovery time, Lactate threshold, Aerobic Training Effect, VO₂max, etc, are provided by your sports watch manufacturer and may have been acquired by the latter under license from a third company.

22.1 Proprietary VO₂max deviates

Experience has shown that the proprietary VO₂max value is somewhat higher during low intensity training than the VO₂max value Tredict shows. In other words, the value is rather too low for training sessions with high intensity. The exact algorithm behind this is not known to us.

23. Environment and Weather

The environment and weather have a significant influence on mental and physical performance during outdoor training.

The relationship between weather that is perceived as good and a high fun factor in endurance sports is clear.

Environment?			
52,38 °F	77 %	100 %	0,01 in/h
Temperature	Humidity	Clouds	Precipitation intensity
8,5 mi/h 3 Bft	S 183°	1009 hPa	0
Wind speed	Wind direction	Pressure	UV index
269 DU	> 10 mi		
Atmospheric ozone	Visibility		

Weather data of an activity

For absolute peak performance, colder temperatures are advantageous to prevent overheating.

Long endurance sessions and low-intensity workouts benefit from moderate temperatures. High temperatures can be useful in training, but are disadvantageous in a competition.

Wind has a strong influence on performance when running or cycling. Headwind is perceived very consciously, whereas tailwind is hardly ever perceived.

For running there are footpods with built-in wind sensors that can measure the wind factor and are supported by Tredict.

24. Race results

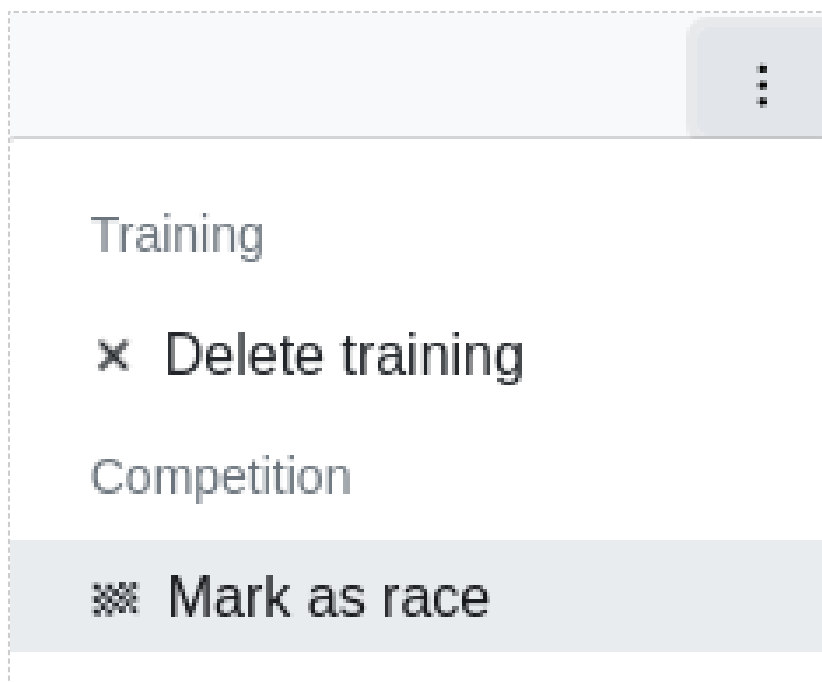
Enter the official time and distance for your races so that you can compare your race times in the evaluation.

If you indicate your ranking for the competition, Tredict automatically calculates your relative ranking to the total number of participants.

In running competitions, the age graded performance shows you how to evaluate your performance compared to the athletes elite.

To be able to enter race results, mark the corresponding activity as a race by clicking on the button "Mark as race" in the activity view.

If you have pre-marked a planned activity as a competition, the corresponding completed activity is automatically marked as a competition.



Mark activity as a competition.

24.1 Official distance

The official distance is the officially advertised distance of the race. It allows the correct comparison of the competitions with each other.

24.2 Official time

The official time is the officially measured time, which is in the certificate or result list of the competition.

24.3 Ranking

The total ranking or the ranking by age group and gender, in combination with the number of participants, can be used to calculate the relative ranking.

24.3.1 Relative ranking

To see how well you did in the competition compared to your fellow competitors, you can use the relative ranking. With a relative ranking of 10%, you ended up in the best tenth of the race. A smaller percentage is therefore better.

24.4 Age group comparison

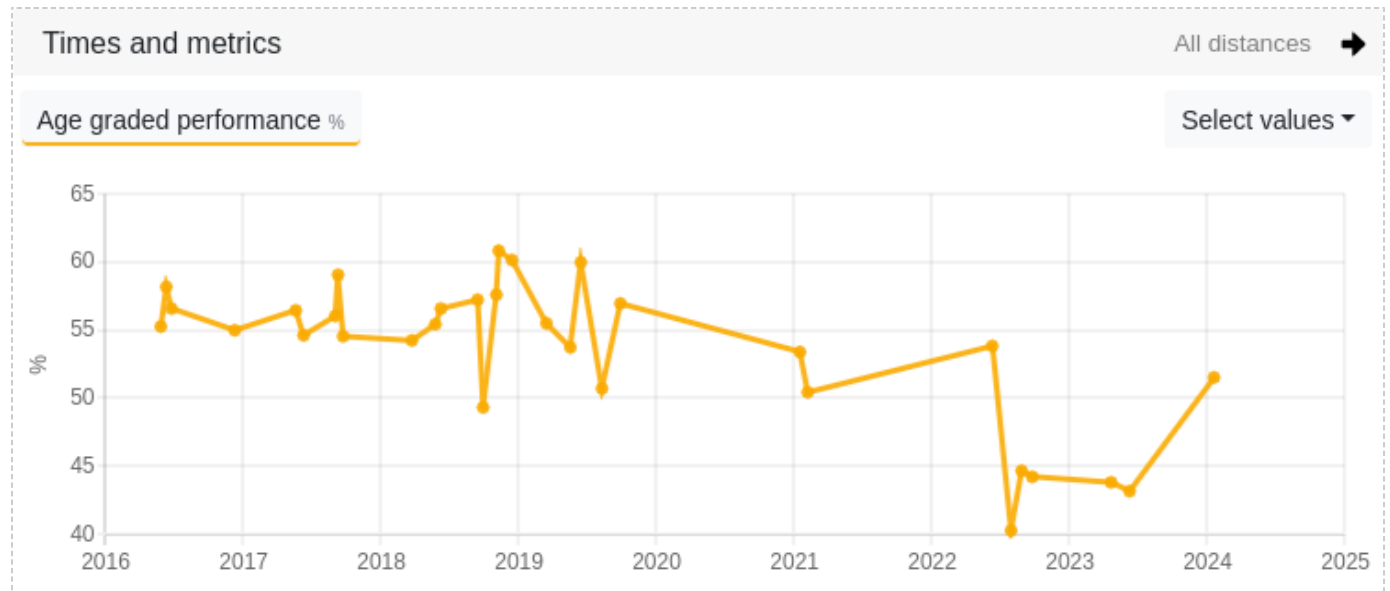
The age group comparison is only possible for running.

The age group comparison provides you with an easy-to-understand and accurate way of comparing your performance with the best in the world.

24.4.1 Age graded performance

To see how you stand in relation to the competition elite at the distance practiced and in your age group, look at the age graded performance. An age graded performance level of 100% means that you are just as good as the elite of your age.

The age graded performance is calculated from official distance and time in combination with the age you had on the day of the competition. The basis of the calculation are the [Age Graded Tables](https://github.com/AlanLyttonJones/Age-Grade-Tables) [https://github.com/AlanLyttonJones/Age-Grade-Tables].



The level of performance in the competitions is unfortunately going down, but peaked in 2019.

24.4.2 Time at top performing age

The most powerful age in terms of speed is, depending on the distance, between 15-28 years. This time illustrates what time you would have run at the most powerful age with the age graded performance achieved on the day of the competition.

24.4.3 Time at the present age

If the competition was already over a year ago, you can see how you would compete now, if the age graded performance has remained the same.

24.5 Race VO2max

The VO2max of a completed race is of particular importance as this VO2max was measured under high stress and can therefore be used for comparison and to calculate future race times.



Race VO2max for calculating future race times

25. Custom fields

With some programming and JavaScript knowledge, you can create your own custom fields and values. You have full access to all values of the training as well as to your zone and body data.

Custom fields are marked with a * in lists and are shown on the training page, also aggregated and represented in the annual overview and in the diagrams of the evaluation.

Custom field - Heartbeats

The total amount of heartbeats during an activity.

```
const { heartrate, duration } = this;

if (!heartrate || !duration) {
  return null;
}

return Math.floor(heartrate * (duration / 60));
```

activated

Delete

Save

This custom field calculates the number of heartbeats during a workout

25.1 Ruleset

The training object is bound to "this"

The training object with all its predefined metrics is bound to the keyword "this".

You can output this object with "console.log(this);" to the developer console of your web browser to see which metrics a training has.

Then go to the calendar view, evaluation or training details view to run the custom field. The developer console can be opened on Windows with Ctrl+Shift+I.

The field must return a number

The "return" keyword must be given a number. Otherwise the field "NaN" is calculated by the field and is not displayed.

Other strings cannot be returned for security reasons.

25.2 Aggregation

The aggregation of the field determines which method is used to aggregate the field in the evaluation, i.e. in [Aggregation chart](https://www.tredict.com/glossary/aggregation-chart/) [https://www.tredict.com/glossary/aggregation-chart/] or [Relation chart](https://www.tredict.com/glossary/relation-chart/) [https://www.tredict.com/glossary/relation-chart/].

Total

The calculation of the result of each training is added together in the evaluation. An example is the "distance" or "duration" of an activity. These metrics are summed.

Average by number

The result of the trainings is totaled in the evaluation and then divided by the number of trainings.

An example is the "temperature", which is displayed as an average of the number of training sessions in the evaluation.

Average by duration

The result of the training is summed up in the evaluation and then divided by the total duration of the training.

An example is the "heart rate", which is displayed as an average of the training duration in the evaluation.

25.3 Metrics and values of a workout

Please note that the list may be incomplete as new metrics are added from time to time and the list may not have been updated.

It is always a good idea to temporarily activate the debug field to see what metrics a training really has.

The underlying value system is metric and must be converted if necessary.

The following metrics can be bound to the training object "this".

25.4 Series of a training

This function is only available in the training details view.

In the object "seriesSampled" the time series of a training are stored.

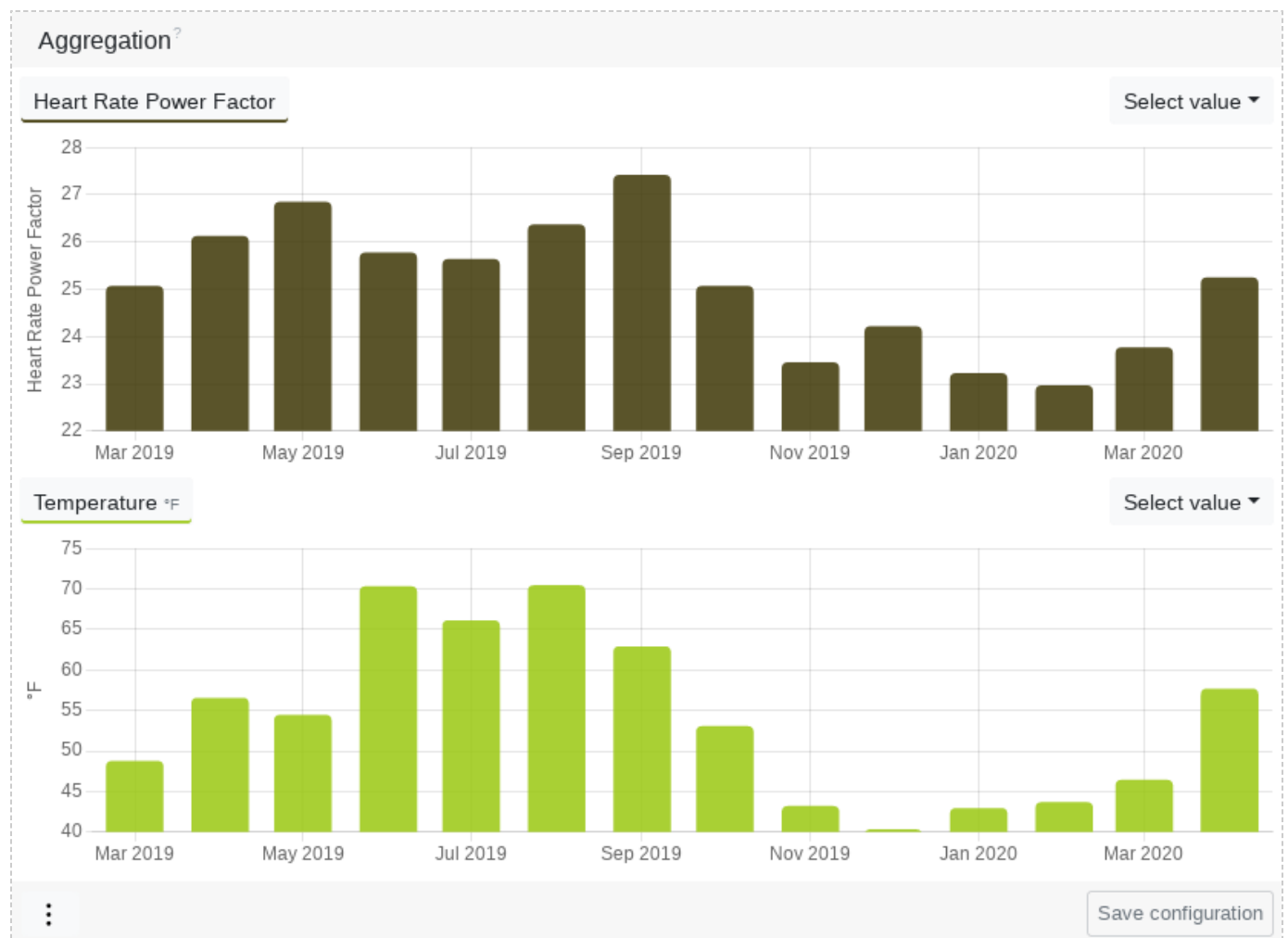
Get an exact overview of the possible values with the activated debug field.

The time series are stored in reduced form and must be extrapolated with "sample-Size".

```
this = {  
  ...,  
  seriesSampled: {  
    sampleSize: 2,  
    endOffset: 0,  
    data: {  
      heartrate: [ 123, 122, 122, 130, 132, ... ],  
      power: [ 223, 222, 252, 270, 270, ... ],  
      ...  
    }  
  },  
  ...  
}
```

26. Aggregation chart

With the aggregation chart, you can view almost any data field, including your own custom fields, in summarized aggregated form for display and evaluation. As scope, the monthly or weekly aggregation is available, which you can place, if necessary, over your entire training period. Up to 100 charts can be displayed against each other.



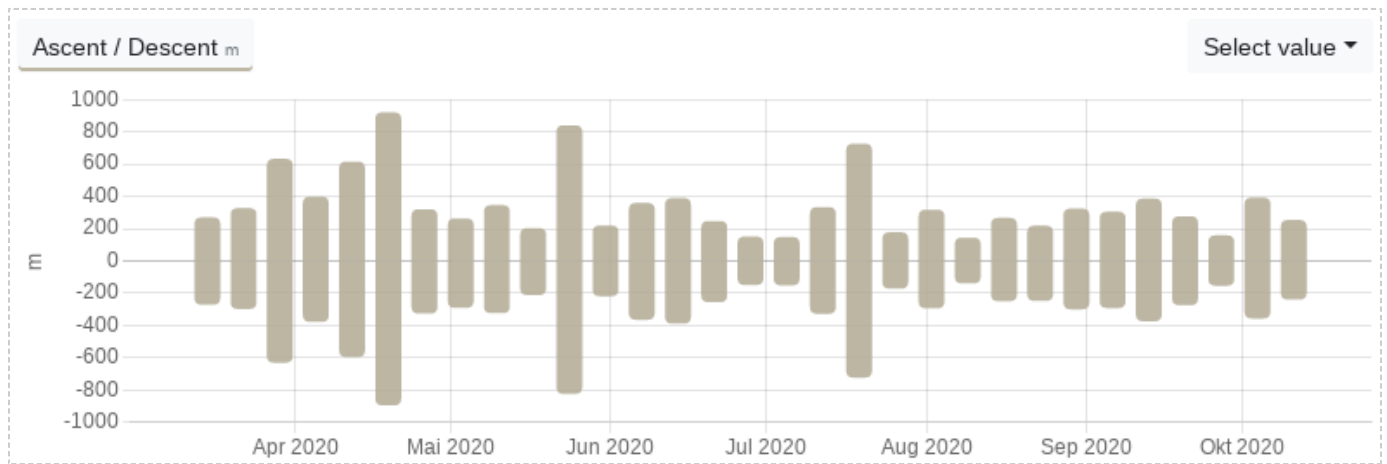
The relationship between these two diagrams indicates that this athlete's aerobic performance is temperature dependent.

This gives you a diverse overview of your training history and your training behavior.

A few examples of questions that can be answered by an aggregation diagram:

- How many kilometres did I run every month last year?
- How many training sessions did I do last season?
- Am I fitter in summer than in winter?
- Has the balance of ground contact time changed over the year?
- Has my Heart Rate Pace Factor increased in the last 12 weeks?
- Is my performance temperature dependent?
- Is my performance weight dependent?

- Is enjoyment dependent on speed?



Ascent and descent in the aggregation chart

27. Relation chart

With the relation chart, you can see the possible relationships and ratios of almost any data field, including your own user-defined custom fields, over a selected period of time.

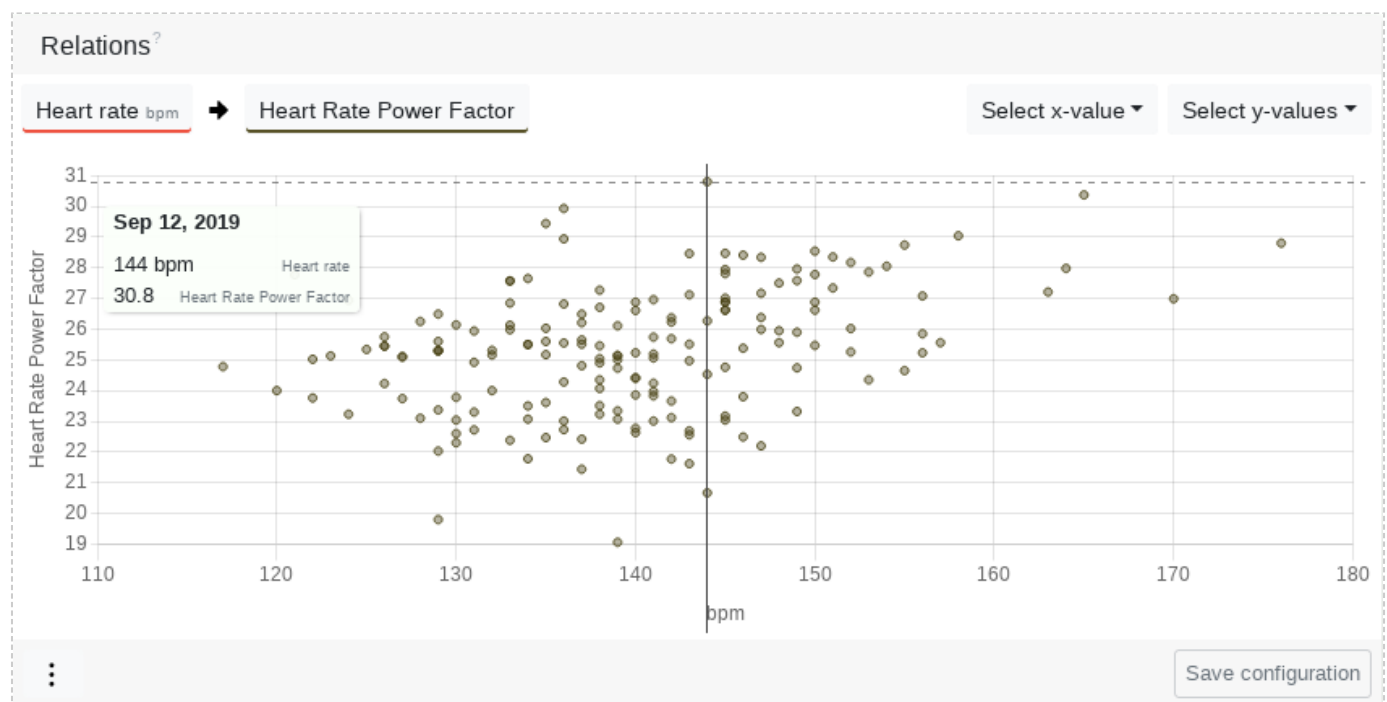
Up to 100 charts can be displayed against each other.

The relation diagram has a special meaning when evaluating efficiency metrics and analysing your best or weakest training.

27.1 Finding efficient activities

To find efficient activities, set the heart rate pace factor in relation to your own reference value. The reference value in this example is the average heart rate.

So you can easily see what your best activities were - the highest point with the lowest heart rate - and whether your aerobic efficiency differs greatly in relation to your heart rate.



The training on September 12 has the best aerobic efficiency in this period with a moderate average heart rate.

28. Body data

The body data changes with your age and fitness level and can be adjusted, updated and tracked via revisions.

Values such as resting heart rate or weight are important for the effort calculation or the efficiency metrics.

With Garmin Connect or Withings your body values can be synchronized automatically.

See: [Which recording devices and services are supported?](https://www.tredict.com/faq/which-recording-devices-and-services-are-supported/) [https://www.tredict.com/faq/which-recording-devices-and-services-are-supported/]

28.1 Resting heart rate

The resting heart rate, or static resting heart rate, is the heart rate that you can consistently achieve when you are completely relaxed.

The static resting heart rate is used to calculate effort by heart rate, the Vo2Max and other capacity indicators. Therefore, you should only change the static resting heart rate if it has really changed over a longer period of time. Otherwise the capacity indicators lose their comparability.

The static resting heart rate is best determined after waking up, when you have slept well, are completely stress-free, relaxed and healthy.

28.2 Dynamic resting heart rate

The dynamic resting heart rate is the lowest heart rate you have reached during the day and is usually measured by your fitness watch.

The dynamic resting heart rate is increased by factors such as stress or illness and therefore cannot reflect your absolute capacity. If you have measured a very low dynamic resting heart rate over a longer period of time, then you can consider transferring this to the static resting heart rate so that your effort and capacity indicators can be calculated more accurately.

28.3 Dynamic maximum heart rate

The dynamic maximum heart rate is the highest heart rate you have reached during the day and is also measured by your fitness watch.

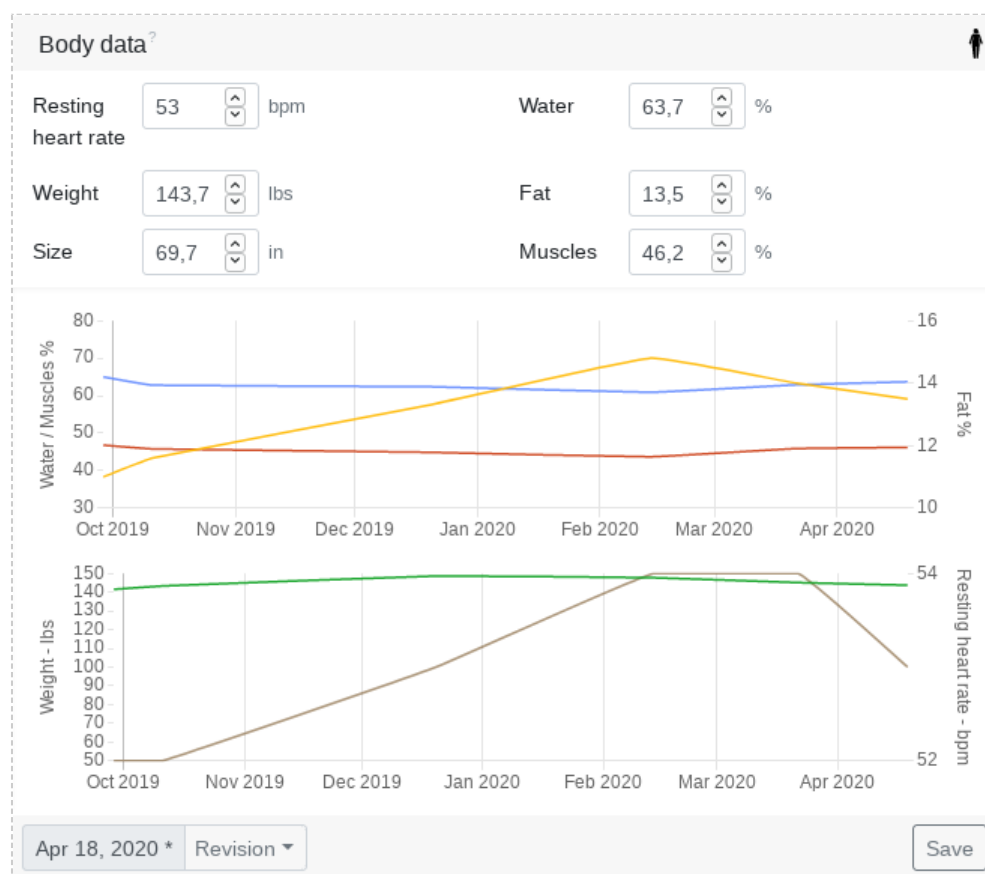
The dynamic maximum heart rate is not your absolute maximum heart rate, which you can only reach in the toughest competitions and is therefore not suitable for calculating your capacities. In combination with the dynamic resting heart rate, however, you can draw conclusions about your activity behaviour or state of health.

28.4 Height

Using your body size, you can determine your optimal cadence in relation to speed in the pace and cadence calculator.

28.5 Water, fat and muscle

The ratio of water, fat and muscle to one other is an important indicator of your overall performance capabilities.

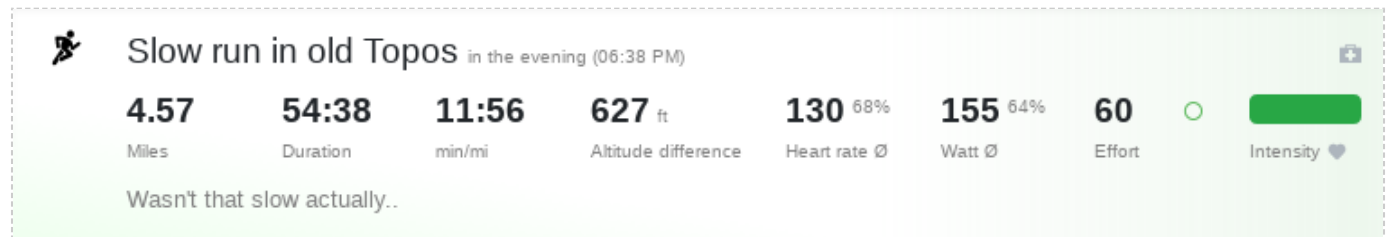


The Christmas holidays can be guessed from the change in the weight curve

29. Injuries and Illnesses

Endurance athletes are directly restricted in their activity in the event of injury or illness, therefore, you can track your impairments using Tredict.

Impairments are color-coded in the training calendar and on the training page and with an icon.

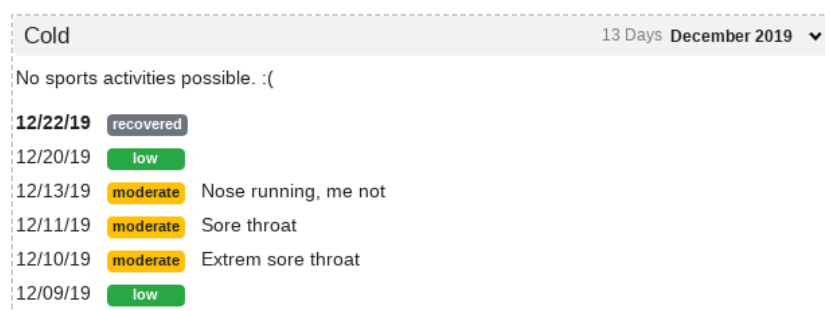


Color-coded calendar entry of a training with low impairment

29.1 Course

An injury or illness consists of one or more courses, which may have a low to extreme impairment.

For example, you can observe whether an injury has worsened or even improved after a workout. You may also be able to see over time why the last units before a cold had such poor aerobic efficiency values.



The course of an illness with various impairments

If you're connected to a coach at Tredict, you can give them valuable information about your condition by an injury entry, so that your training plan can be adjusted.

30. Equipment

With Tredict you can enter your equipment and assign it to your activities.

This allows you to track distance, usage time, effort, intensity, average power, average heart rate, cadence and many other fields for your shoes, bicycles or other items, such as running backpack, baby jogger and baseball cap.

For example, you can see which shoes you tend to use for more intensive training, or which bike you prefer to ride at speed.

30.1 Sort out

To sort out an equipment item, enter an end date in the usage period.

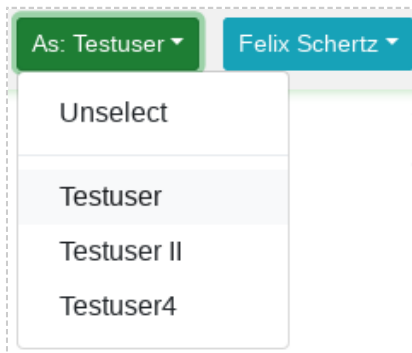
30.2 Default equipment

If you have marked a piece of equipment as default equipment, then the equipment is automatically assigned to a newly uploaded or synchronised activity. This can be very helpful if, for example, you only have one road bike but ride it regularly. In order for the equipment to be automatically assigned, your last Tredict visit must not be longer than 7 days ago. This ensures that equipment is not wrongly assigned to new activities for months or even years. To define default equipment, click on the black circle next to the edit icon.

Shoes?									
Runs	Name	Duration	Distance	Pace ⌚	Heart rate ⌚	Effort ⌚	Intensity ♥▼	Usage period	
3	Vivo Stealth II	2:12:21	13.4 mi	9:52 /mi	145 bpm	72	<div><div></div></div>	03/01/19 -	
1	Inov-8 X-Talon 200	1:13:10	6.1 mi	11:59 /mi	149 bpm	122	<div><div></div></div>	05/01/18 -	
17	Topo Athletic ST-2	17:00:04	119.54 mi	10:21 /mi	144 bpm	90	<div><div></div></div>	04/01/17 -	
5	Inov-8 Trail Talon 250	4:25:59	23.87 mi	11:09 /mi	144 bpm	76	<div><div></div></div>	02/08/20 -	
7	Topo Athletic ST-3	5:37:40	68.52 mi	10:49 /mi	141 bpm	65	<div><div></div></div>	08/01/19 -	
11	Topo Athletic Fli Lyte 2	17:33:29	431.28 mi	11:47 /mi	136 bpm	118	<div><div></div></div>	01/02/19 -	
6	Inov-8 Terra Ultra 260 G	9:01:59	48.09 mi	11:16 /mi	140 bpm	114	<div><div></div></div>	06/01/18 -	
1	Topo Athletic Runventure 2	1:45:04	9.25 mi	11:21 /mi	141 bpm	134	<div><div></div></div>	02/16/20 -	
8	Topo Athletic Fli Lyte 2 (2017)	11:17:24	397.37 mi	12:24 /mi	133 bpm	97	<div><div></div></div>	07/19/17 -	
	Brooks Adrenaline GTS 14	00:00	587.2 mi	0:00 /mi	0 bpm	0	<div><div></div></div>	11/01/14 - 10/01/16	
<div>Add</div>									

A shoe table filtered by certain values, sorted by intensity.

31. Coach



Choosing an athlete

Tredict enables coaches and athletes to connect.

Coaches can take over the training planning or get insight into the profile of an athlete, to discuss procedures in person.

The coach functions are free of charge.

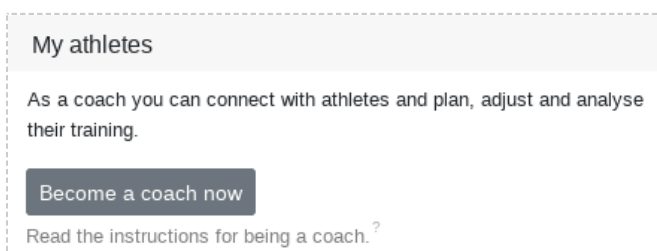
Read the blog article: [Being a coach and connecting with other athletes](https://www.tredict.com/blog/coach_and_athlete_connections/)

https://www.tredict.com/blog/coach_and_athlete_connections/

31.1 Coaching

As a coach, you can connect with friends and athletes to plan, adjust and analyze their training.

Click "Become a trainer now" to activate yourself as a coach.



Activate yourself as a coach so that you can get requests from your athletes.

If you are available as a coach, other Tredict athletes can send you a coaching request using the email address you registered with Tredict.

Share your email address with your athletes so that you can receive requests.

Connections with athletes can be terminated at any time by either side.

Tredict will not publish your email address and it will only be confirmed to your connected

athletes.

If the connection is successful, your name will also be visible to the athlete.

31.2 Ask a coach as an athlete

With the profile access for friends or coaches you can make your training progress visible and get help with training planning.

A connected coach can send you messages about your activities. If you give the coach write access, he or she can also create workouts for you and adjust your zone settings.

The coach gets the following page permissions:

Write and read access (if write access is enabled)

- Training
- Zones & Capacity
- Body

Read access only

- Evaluation
- Equipment

There is no access to your personal settings.

The requested coach must already be registered with Tredict and must have activated the coach mode.

Your email address and name will be given to the requested coach.

The request expires automatically within 2 weeks if it is not confirmed.


The request or connection can be ended at any time by both sides.


32. Public coach profile


With the free public trainer profile, you have the opportunity to market yourself as a trainer. The trainer profile will be listed in the public Tredict coach directory, making you easier to find. For further search engine optimisation of your own media, you can also describe your trainer activities and set backlinks to your own trainer website or your social media channels.


Your trainer profile is a prerequisite if you want to publish and sell training plans, but otherwise optional.


[Call up the Tredict coach directory](https://plans.tredict.com/en/coaches/) [https://plans.tredict.com/en/coaches/]




Felix Gertz
Coach for Running and Cycling
Tredict, Hamburg, Germany 
Hello, I am the inventor of Tredict. I am a runner and gravel cyclist and inspired by Scott Jurek, Matt Fitzgerald, Alina Reh, Joe Kelbel, Dean Karnazes, Matthias Marquardt, Herbert Steffny and many other great runners, writers and coaches.
4 published training plans [View coach profile](#)



Jürgen Nimmerfroh
Coach for Cycling
Leoben, Austria 
Seit 1995 bin ich mit dem Mountainbike über Stock und Stein unterwegs. 2012 habe ich mit kurzen entspannten Laufeinheiten begonnen mein Training etwas abwechslungsreicher zu gestalten. 2018 ist dann auch das
3 published training plans [View coach profile](#)



Kerstin Richter-Roth
Coach for Running
Oberbayern, Germany 
Ich bin Hobbyläuferin und bin über Marathon zum Ultramarathon gekommen. Dort bin ich dann hängen geblieben. Zum Ausgleich betreibe ich Triathlon in der Volksdistanz. Mit den verfügbaren vorgefertigten
0 published training plans [View coach profile](#)

Entries in the public coach list.

32.1 Details

To be able to publish your profile in a meaningful way, you need to provide just a few mandatory details.

Public name

Your public name is the first thing that athletes and users will see. Instead of your name, a club name or a company name can also be used if you are acting as a representative. To do this, enter the company or association name under "Optional data". This will then be used as a substitute.

Biography

If you are interested in better visibility in the search engines, the biography should be sufficiently informative. For example, tell us something about yourself as a running coach or about your racing bike club.

Language of biography

Indicate here in which language the biography is written so that we can sort it correctly in the trainer directory. If your language is not listed, please write to us.

Photo or logo

Here you can upload a photo of yourself or a logo of your company. This is an eye-catcher, so make sure it's good quality!

32.1.1 Optional data

The data you can enter here is optional, but at least as important in order to be found easily. For example, if you have your own website, then you should definitely add the link to it to get a better reach. This service is offered to you free of charge by Tredict.

Optional data you can enter are:

- Gender
- Company or club name
- City or region
- Country
- Languages you speak
- Sports

32.1.2 Backlinks

You can specify the following backlink types:

- Website
- Instagram
- Facebook
- Twitter
- Strava
- LinkedIn
- Xing

32.1.3 Sports

It is also an advantage if you indicate which endurance sports you are active in. These include running, cycling, swimming, triathlon, winter sports, rowing, yoga and other sports.

32.2 Activate or deactivate

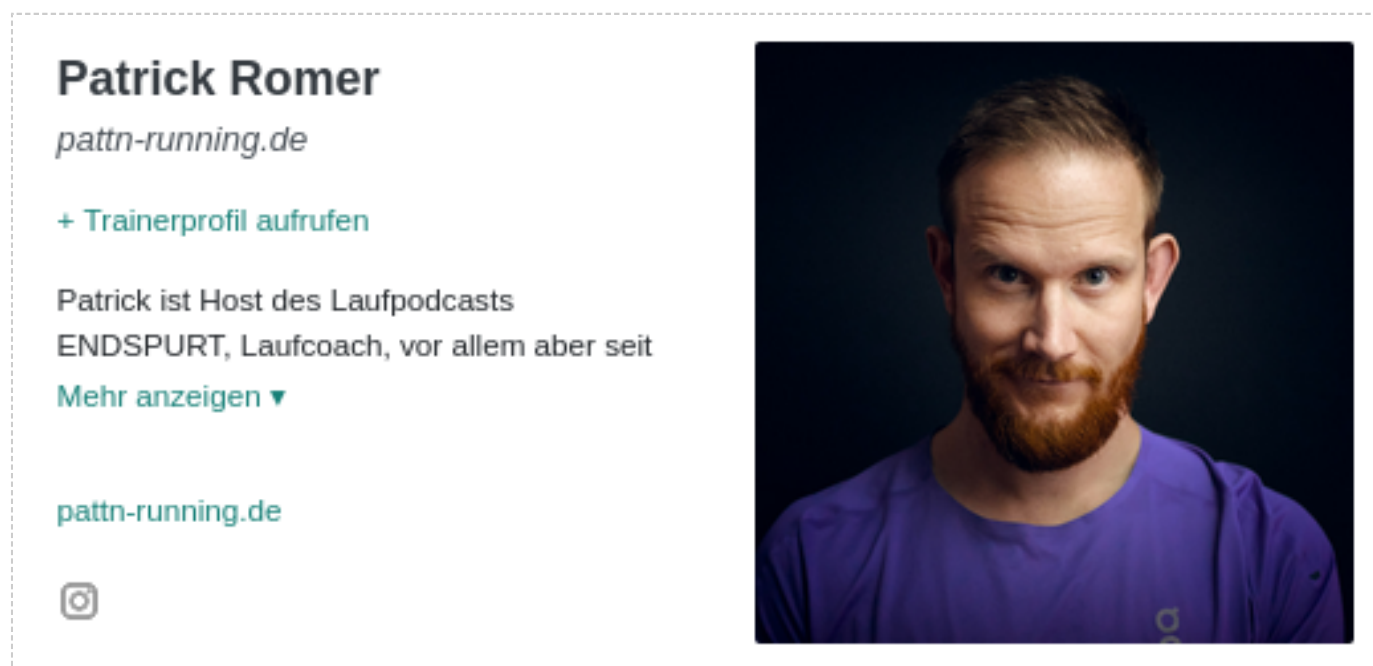
In order for your profile to be published, you must click on the "The profile is deactivated" button to activate it. If you no longer wish to publish your profile, you can easily deactivate it here. You can then continue to use your Tredict account as normal. If you deactivate your profile, all your published training plans will be set to unpublished.



The profile can be deactivated.

32.3 Profile as training plan author reference

If you want to publish training plans, either for sale or under a "Creative Commons" licence, your trainer profile will automatically act as the source for the training plan author reference. Without an activated trainer profile, you cannot publish training plans, as Tredict cannot determine an author under whose name the plan can be published.



The training plan author card is attached to the training plan.

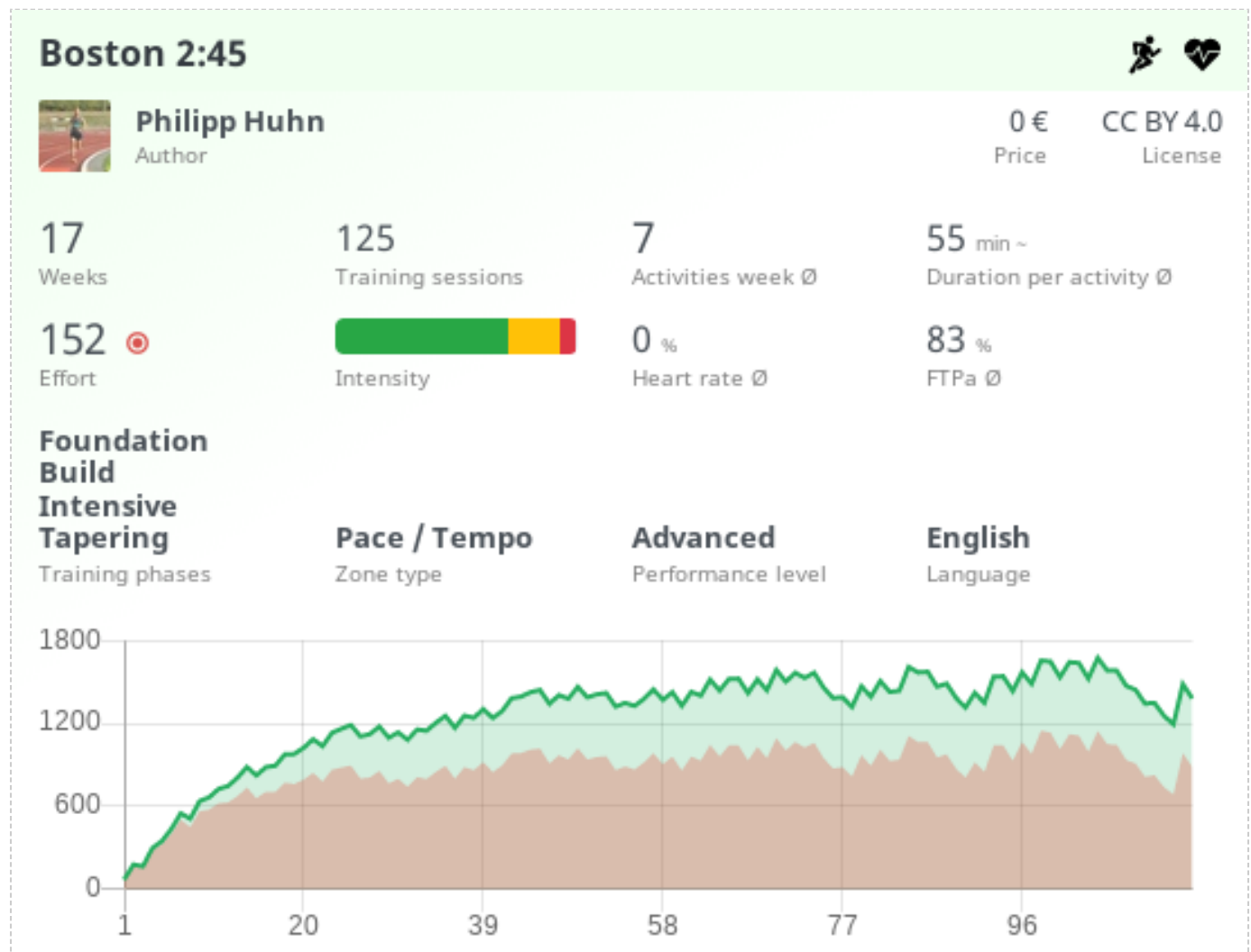
32.4 Badge for embedding

With the embed badge, you can set a backlink from your website to your trainer profile on Tredict. Simply copy the HTML code provided into your website.

33. Training plans

With Tredict, you can create reusable training plans for endurance sports that you can optionally publish and even sell. You can transfer training plans published by other coaches into your portfolio so that you can apply these plans to yourself or your athletes.

Visit the [public training plan directory for endurance athletes](https://plans.tredict.com/). [https://plans.tredict.com/]



A training plan for the Boston Marathon under a "Creative Commons" licence.

33.1 Applying a training plan

After transferring a training plan to your portfolio or if you have created your own plan, you can apply it to your training calendar.

33.1.1 Automatic intensity adjustment to the athlete

The special feature about Tredict training plans is the relative intensity distribution, which is automatically converted to the athlete's capacity when a plan is used. For example, the relative 75% hrMax defined in the plan becomes an absolute 135bpm heart rate in your training calendar if you have entered an hrMax of 180bpm in your capacity.

It is always a good idea to define your own capacity and zone settings, otherwise the Tredict defaults will be used.

Read the blog article: [How the zones influence the effort](https://www.tredict.com/blog/zones_and_effort/) [https://www.tredict.com/blog/zones_and_effort/]

33.1.2 Start date

When a start date is specified, the first workout of a schedule is copied to the start date and the schedule is rolled out further into the calendar accordingly.

33.1.3 End date

If the training plan ends with a competition, it may be useful to specify an end date instead of a start date. This makes it possible to use the training plan for a fixed race date.

33.1.4 Simultaneous multiple application

As a trainer, you often have several endurance athletes that you coach. The Tredict training plans can be applied to several athletes simultaneously, which saves you some work.

Training plan: Choose a date

Select a start date or an end date for the training plan "Boston 2:45".

End date ▾

04/17/2023







The 17-week training plan starts at **Monday December 26, 2022** and ends at **Monday April 17, 2023**.

Apply plan for 3 athletes ▾

A training plan is applied to 3 athletes at the same time.

33.1.5 Undo training plan application

In the application history of the training plan, you will find the option to undo the application of the training plan. This will remove all scheduled workouts of the training plan from the athlete calendar or your own calendar, even if they have already been changed. So be careful.

History of application					
Applied at	Title	Applied to	Plan period	Version of	
01.01.24 18:19	Haspa Marathon Hamburg 202...	<i>Myself</i>	08.01.24 - 28.04.24	10.01.23 20:07	 
20.12.23 14:47	Haspa Marathon Hamburg 202...	<i>Myself</i>	01.03.24 - 20.06.24	10.01.23 20:07	 
03.01.23 21:04	Haspa Marathon Hamburg 202...	<i>Myself</i>	02.01.23 - 23.04.23	03.01.23 19:10	 

A plan can be removed from the calendar again in the application history.

33.2 Creating a training plan

Create and distribute your own training plans for all popular endurance sports, such as running, cycling, swimming, triathlon and many more. You can offer your training plans for sale with the Tredict sales licence, publish them under a "Creative Commons" licence or simply leave them "private". Of course, you can still apply private training plans to your associated athletes.

Training plans can be published as soon as you have made the necessary entries in your public trainer profile.

33.2.1 Performance levels

Your training plans can have different performance levels to suit beginners as well as professionals.

- **Everyone**

The training plan is equally suitable for all performance levels.

- **Beginners**

Newcomers or those returning to endurance sports will find this plan a suitable composition.

- **Advanced**

Athletes with some experience and a good level of endurance can progress with these plans.

- **Professional**

This plan is aimed at ambitious athletes and professionals who already have a high level of endurance and can tolerate higher volumes.

33.2.2 Zone types

Using the Tredict zone types, it is possible to create Watt-based plans or plans that are oriented according to speed or heart rate.

- **Pace / Tempo**

The intensities and efforts of the plan are calculated using the speeds of the workouts.

- **Heart rate**

The intensities and efforts of the plan are based, among other things, on the heart rate during training. A heart rate monitor is required.

- **Power**

The intensities and efforts of the plan are calculated according to wattage, among other things. A power measurement device is required during training.

33.2.3 Training phases

Define training phases on the plan so that the athlete knows what your training plan is aiming at.

- **General**

In this phase, various principles are followed that cannot be assigned to the other training phases.

- **Foundation**

The foundation phase takes care of the important basic endurance and subsequently prepares the basis for further more specialised training phases.

- **Build**

In the build-up phase, volumes are increased and specialised units are added. The build-up phase takes the momentum of the foundation phase, builds on it and leads purposefully to the intensive phase or the seasonal plateau.

- **Intensive**

In the intensive phase of a training season, the main aim is to add endurance, speed and efficiency to what is already there. The volumes remain high. High-intensity sessions and other specific workouts are regularly added.

- **Tapering**

Race preparation is characterised by reduced volumes and tapering. Sometimes special training sessions are added to increase efficiency.

- **Plateau**

In the seasonal plateau, the important competitions are held, for which the other training phases were used for targeted training. The strenuous competitions are given weight through sufficient recovery, while the next competition is prepared for with training sessions that keep up the form.

- **Recovery**

The recovery phase or off-season is used for long-term regeneration after the hard race season. The distances and intensities are lower.

- **Special**

The special phase is a general special category for special training concepts, such as those found in ultramarathon training.

33.2.4 License

Choose from different licences if you want to publish your plan. There are 2 commercial distribution licences available to you and the "Creative Commons" licences, which are well suited for free distribution.

- **None (private)**
Not published
- **Tredict sales licence**
[Tredict sales licence](https://www.tredict.com/termsfuse/#trainingplans) [https://www.tredict.com/termsfuse/#trainingplans]
- **Tredict partner licence**
[Tredict partner licence](https://www.tredict.com/termsfuse/#trainingplans) [https://www.tredict.com/termsfuse/#trainingplans]
- **CC BY 4.0**
[Attribution](https://creativecommons.org/licenses/by/4.0/) [https://creativecommons.org/licenses/by/4.0/]
- **CC BY SA 4.0**
[Attribution - Sharing under the same conditions](https://creativecommons.org/licenses/by-sa/4.0/) [https://creativecommons.org/licenses/by-sa/4.0/]
- **CC BY NC 4.0**
[Attribution - Non-commercial](https://creativecommons.org/licenses/by-nc/4.0/) [https://creativecommons.org/licenses/by-nc/4.0/]
- **CC BY NC SA 4.0**
[Attribution - Non-commercial - Sharing under the same conditions](https://creativecommons.org/licenses/by-nc-sa/4.0/) [https://creativecommons.org/licenses/by-nc-sa/4.0/]
- **CC BY ND 4.0**
[Attribution - No derivative works](https://creativecommons.org/licenses/by-nd/4.0/) [https://creativecommons.org/licenses/by-nd/4.0/]
- **CC BY NC ND 4.0**
[Attribution - Non-commercial - No derivative works](https://creativecommons.org/licenses/by-nc-nd/4.0/) [https://creativecommons.org/licenses/by-nc-nd/4.0/]

33.3 Planning calendar

The planning calendar for training plans works in principle in the same way as you know it from your own Tredict calendar, except that here you work with fictitious days. The intensity distribution is in the focus here and you can develop the form curve of the plan according to your requirements. Each training plan starts with "Day 1" in the planning calendar. Later, when the plan is transferred to a real training calendar, the days are converted to a date accordingly.

33.4 Zones & Capacity

Each training plan has its own dedicated zone & capacity revisions. You can, with one click, transfer your own current revision into the plan and then adjust it accordingly. If you do not specify your own zones and capacities, the Tredict defaults will be used, which may not match the performance level of the training plan.

An unapplied plan uses its zone revisions to calculate the intensity distribution of the training sessions. In the later application by an athlete, the athlete's own zone revisions are then used again. This then possibly leads to a deviating intensity distribution in the athlete's calendar. Conceptually, this is intentional and also makes sense due to the conversion of the absolute values of a training session by means of the relative information in the plan.

Heart rate zones?

bpm

No own revision in use. The Tredict default is used.

Transfer the current revision from your own zone & capacity settings with one click.

Default template

Revision ▾

Transferred from my own current revision

Define the zones of the plan, otherwise the default settings will be used.

33.5 Embed and share

Embed your training plans into your own website. You will find an HTML code that you can copy. If you are even more tech-savvy and want to be flexible, you can even dynamically process a JSON link and apply your own styles to the training plan.

34. Sell training plans

Tredict supports you as a training plan sales platform in the sale and distribution of your self-created training plans and acts as a marketplace between you as the seller and the buyer of training plans. As a coach, you have a platform with which you can train your athletes and at the same time sell your endurance sports training plans to the public.

34.1 Training plan distribution

To publish training plans, you can select from various licences in the plan settings that are suitable for the distribution of training plans. This includes the Tredict sales licence if you want to sell training plans or most "Creative Commons" licences if you want to distribute training plans under a copyleft licence. Published plans appear in the public training plan list and can be offered for sale or purchased free of charge. The payment process is carried out via the widespread PayPal payment service provider, so that payments can be made by credit card, PayPal itself or e.g. direct debit. After purchasing a training plan, the user or buyer has full access to the plan and can use it from their training plan portfolio as often as they like in their calendar.

34.1.1 Who is authorised to sell training plans?

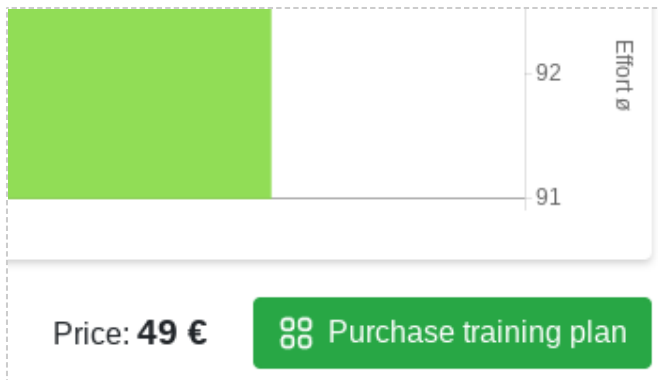
Basically everyone! As an individual, you must of course be of legal age. You also need to know and comply with the tax and business laws of your country. If you're not yet sure how big you want to go, the laws are generally very straightforward for side hustles, so don't let that put you off. The distribution of training plans for endurance sports via Tredict is equally suitable for individuals, small businesses, sole traders, trainers, companies and clubs.

34.1.2 Public training plan list

The public training plan list can be accessed in two ways. You can find the list directly in the Tredict application under "Training plans" and also on the dedicated public website, where you can also access your public trainer profile.

[Training plans for endurance athletes](https://plans.tredict.com/) [https://plans.tredict.com/]

The user or potential buyer has the option of filtering the training plan list using various criteria. The filter options consist mainly of the training plan properties, such as performance level, price, etc., which you assign to your plan.



The purchase of a plan is easily initiated.

34.1.3 Embedding in your own website

If you have your own website or a trainer blog, you can embed your published training plans into your own website and present them directly. Under "Embed & Share" of an individual training plan or your entire training plan list, you will find several options for integrating the training plans into your website.

Static HTML code

The easiest way to embed is to copy the HTML code using "Copy & Paste" and then paste it into your website. This is static embedding. No request is made by the user to the Tredict server. Advantage: You don't need to enter anything in your privacy policy and don't have to code anything.

Dynamic HTML code

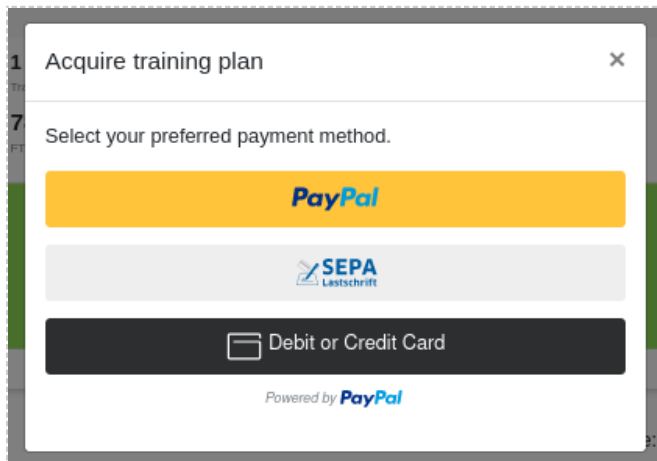
You can also call up the HTML code programmatically or dynamically. This means that changes to the plan always have a direct effect. If you make the request for the code on the server side, then you also do not need to write anything in your privacy policy, as your server and not the user makes the request.

Dynamic JSON code

You can call up the dynamic JSON code for flexible further use of your training plans. The JSON code offers you all the possibilities to programmatically integrate your training plans into your website in various ways.

34.2 Purchase process

On the public landing page of the training plan, a buyer can purchase the training plan by clicking on the "Purchase training plan" button. After a successful purchase, the training plan is transferred to the buyer's Tredict training plan portfolio and a date can be selected for application in the training calendar.



Selection of payment method when purchasing a training plan.

34.2.1 Payment process

Clicking on the "Purchase training plan" button opens a dialogue in which various payment methods are available. After selecting the desired payment method, e.g. direct PayPal, credit card or direct debit, depending on the country, the buyer is directed to the familiar PayPal payment dialogue. In the payment dialogue, the buyer is asked to confirm a payment authorisation, i.e. the payment is initially only reserved and will only be collected after the 2-week test phase has expired. Once the payment has been collected, it will be transferred directly to your PayPal account. Tredict does not hold the payment itself and only acts as an intermediary that can view and control the transaction.

34.2.2 Buyer trial period and invoice

After purchasing the training plan, the buyer has a 2-week trial period during which payment is initially only reserved. The payment can be cancelled by the buyer during the trial period with one click, without giving reasons. In the event of cancellation or return, the training plan will be removed from the buyer's portfolio and calendar. At the end of the trial period, the payment is automatically collected, the buyer's account is debited and an invoice is sent by email. The invoice can then also be viewed in the settings of the purchased plan.

34.3 Sales settings of a training plan

A training plan to be sold also needs a few additional sales settings that make the sale possible.

34.3.1 Price

This is the sales price of the training plan and is always the absolute gross price. The price already includes all taxes and fees, such as the VAT of your country of sale or the PayPal fee. You and the buyer will find a breakdown of the net amounts in the invoice, which is generated automatically.

34.3.2 Currency

Choose the right currency for your target group. Bear in mind that conversion losses can occur if you keep your account in euros, for example, but sell a plan in dollars.

These currencies are currently supported by Tredict for the sale of plans:

- US Dollar (USD)
- Euro (EUR)
- Danish Krone (DKK)
- Norwegian Krone (NOK)
- Swiss Franc (CHF)
- Australian Dollar (AUD)
- Canadian Dollar (CAD)
- British Pound Sterling (GBP)
- Japanese Yen (JPY)

34.3.3 Applicability to individuals

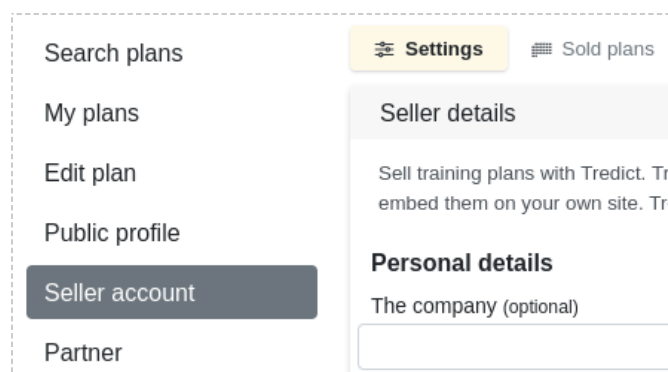
With the applicability you determine whether the buyer may only apply the plan to himself or to all his affiliated athletes. The applicability to "All connected athletes" is particularly interesting if you offer training plans for other coaches or clubs, e.g. for your own club.

34.3.4 Preview period

The preview period determines the visibility of training sessions in the training plan calendar in the public training plan list. Training sessions after the preview period will only be displayed once the buyer has purchased the plan. Possible time periods are: 'No preview', 'One week', 'One month', 'Complete period'.

34.4 Seller account

In the training plan seller account you enter your business details, link your PayPal account so that you receive your earnings and have an overview of your sold plans, invoices and refunds.



The seller account can be found under the category "Training plans".

All the information provided here is for the purpose of proper business processing. Your public trainer profile, which you can use to advertise yourself, can be found in the "Public profile" category.

34.4.1 Personal details

Tredict needs some personal data from you so that you can sell training plans for endurance sports in your own name. Tredict also implements the principle of data minimisation here. We only collect the data that is necessary for legally secure operation. This includes the billing address for invoicing in your name/company and a confirmed email address so that you can be contacted. As a person, you can act as a "natural person" or also as a "legal entity", on behalf of an association or a company.

All we need is your name/company name, address, country and the confirmed email address you used to register with Tredict.

The invoice is issued to the buyer in the name of this information and is therefore relevant for tax purposes.

This data appears on the automatically generated invoice as the biller address.

34.4.2 Value added tax (VAT)

If you are liable for VAT, you must state the amount of VAT that applies to your country of sale. This also includes the VAT identification number assigned to you by the tax office.

If you are not liable for VAT, select the "Exempt from VAT?" checkbox. You can then enter the reason for exemption in the text field below. This will then appear on the invoice. One possible reason would be, for example, the small business regulation in Germany.

☒ Exempt from VAT?

Reason for exemption

As a small business within the meaning of Section 19 (1) UStG, no VAT is shown.

Example of the small business regulation in Germany.

34.4.3 PayPal

PayPal.com is used as the payment service provider to process the sales transaction from the buyer, via Tredict, via PayPal to the seller. With PayPal, all common payment options are available, such as PayPal itself and payment by credit card. Depending on the country, there are also other payment options such as Google Pay, Apple Pay or direct debit. The proceeds from the sale will then be transferred directly to your PayPal account by the buyer.

Tredict only receives the metadata of this transaction via the PayPal API, but the transaction itself takes place between the buyer and you, i.e. your PayPal account. With the transaction data, Tredict is able to transfer the sold training plan to the buyer, automatically generate an invoice or initiate a cancellation if the buyer's trial period has not yet expired.

Transaction Activity		Details	Gross amount	Fee amount	Net amount
14 Feb 2024	Authorization from John Doe	Details	€44,99 EUR	€0,00 EUR	€44,99 EUR
14 Feb 2024	Refund to John Doe	Details	-€44,99 EUR	-€0,85 EUR	-€44,14 EUR
14 Feb 2024	PayPal fee reversal	Details	€0,85 EUR	€0,00 EUR	€0,85 EUR
Order details			Quantity	Price	Subtotal
Training plan - CF6e8oMu0 - Verkaufsplan			1	€44,99 EUR	€44,99 EUR
			Purchase Total		€44,99 EUR

A refund has been initiated in the PayPal account.

Connect PayPal account

In order to receive your money, you need a PayPal business account, which you then connect to Tredict. You can and may of course also create a PayPal business account

as a private individual! Just make sure that you are following your tax and business circumstances, which are determined by the amount of your turnover and the laws of your country.

To connect to an existing PayPal business account or to create a PayPal account, click the "Connect PayPal to Tredict now" button in Tredict.

PayPal

Your PayPal account is connected to Tredict. You are able to receive payments.

The PayPal account has been successfully connected.

34.4.4 Contactability

So that the buyer can contact you, your email address will be displayed in your trainer profile for plans under Tredict sales licence. However, this is only visible to the purchaser of the plan and cannot be found in the public trainer profile. Your email address can also be found on the invoice that is sent to the buyer after the payment has been collected.

34.5 Manage sales

You can manage and view sold plans and download tax-relevant documents here.

Sold plans							
Plan	Sales status ^	Updated at	Price	Purchased on	Invoice no.	Refund no.	Test phase
Verkaufsplan	completed	20.02.24 14:03	50 ¥	20.02.24 14:01	rD7HJxsu4		
Verkaufsplan	completed	09.02.24 23:18	44,99 €	09.02.24 23:17	QvgnedYzb		
Verkaufsplan	completed	09.02.24 23:00	44,99 Dkr	09.02.24 22:58	P3peQis3h		
Verkaufsplan	completed	09.02.24 22:51	44,99 \$	09.02.24 22:45	jWCuBqAiQ		

Overview list of sold plans in Tredict.

34.5.1 Overview of sold plans

Under "Manage sales" you can see an overview of which of your training plans have been sold and how often, or whether they are still in the buyer test phase. You can also download the corresponding invoice and refund vouchers here.

34.5.2 Sales status

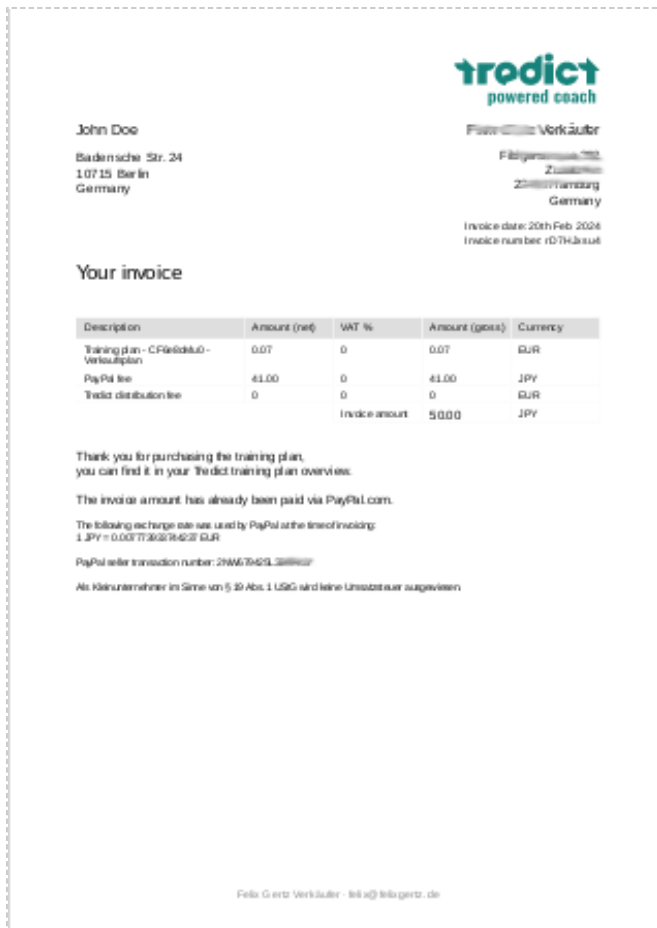
The sales status depends on the status of the PayPal transaction and can assume the following values.

- created
- reserved (Test phase)
- rejected (Buyer account cannot be debited)
- completed (Money was collected)
- cancelled (Within the trial period)
- refunded (After the trial period)

34.5.3 Invoice

After the 2-week buyer test phase has expired, the reserved payment is automatically collected and an invoice is sent to the buyer as a PDF by email. This can also be downloaded in your sales overview, as well as by the buyer himself in his plan settings. The invoice contains all legally relevant information, such as the gross and net items, list of fees, invoice address, VAT number or the reason for exemption and the seller's address including email address.

The biller is not Tredict, but you as a person or your company/association.



The invoice is sent in the seller's name as a PDF.

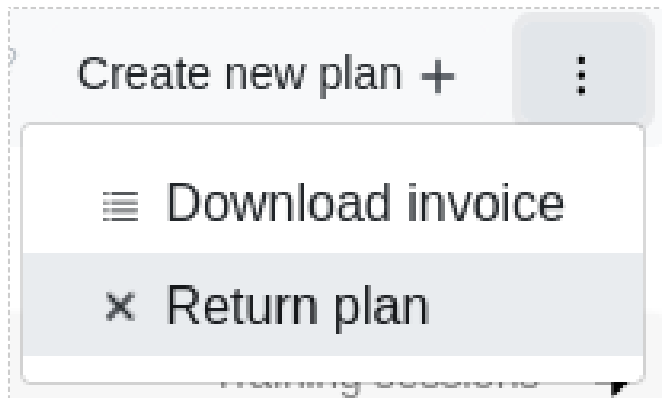
34.5.4 Return of a training plan

Cancellation

If the buyer returns the training plan within the 2-week trial period, the reserved but not yet collected payment will be cancelled. In this case, no invoice has yet been generated and nothing needs to be declared to the tax authorities.

Refund and refund voucher

A refund will be made if the reserved payment has already been collected. This is the case at the end of the 2-week trial period. A refund can only be initiated by you from the PayPal interface. If a refund has been initiated, Tredict will automatically send a refund voucher to the buyer.



Return of a plan by the buyer.

34.6 Fees

Tredict does not charge any fees on the sale of training plans.

You can use the Tredict training plan distribution platform free of charge. Only the PayPal.com transaction fees apply. These are deducted from the gross price and go to PayPal.

[PayPal transaction fees](https://www.paypal.com/en/webapps/mpp/paypal-fees) [https://www.paypal.com/en/webapps/mpp/paypal-fees]

However, normal Tredict write access is required to create the training plans, as is necessary for all calendar write operations.